



SENSORS PRODUCT SELECTION GUIDE

OPTOELECTRONICS

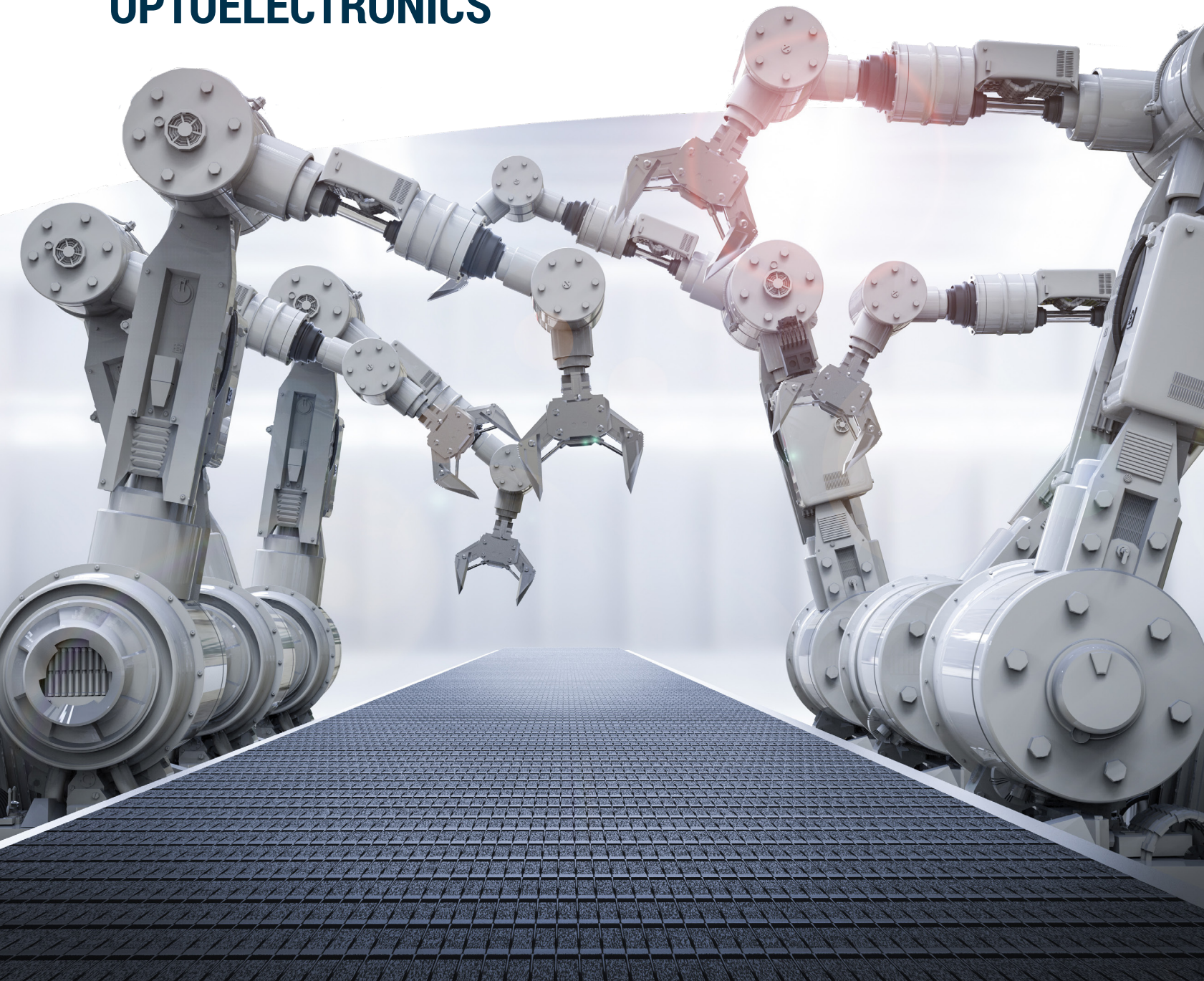


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ABOUT TT ELECTRONICS

TT Electronics is a global provider of engineered electronics for performance critical applications.

**We harness our leading expertise
to engineer electronics that
put our customers ahead.**

TT solves technology challenges for a sustainable world. TT benefits from enduring megatrends in structurally high-growth markets including healthcare, aerospace, defence, electrification and automation. TT invests in R&D to create designed-in products where reliability is mission critical. Products designed and manufactured include sensors, power management and connectivity solutions. TT has design and manufacturing facilities in the UK, North America, Sweden and Asia. For more information about TT Electronics, visit www.ttelectronics.com



OUR LOCATIONS



North America

- ≡ Akron, US
- Boston, US
- ≡ Cleveland, US
- Dallas, US
- ≡ Juarez, MX
- Los Angeles, US
- ≡ Loveland, US
- ≡ Mexicali, MX
- Minneapolis, US
- Kansas City, US
- ≡ Philadelphia, US

UK & Europe

- ≡ Abercynon, UK
- Barnstaple, UK
- Bedlington, UK
- ≡ Cardiff, UK
- ≡ Eastleigh, UK
- ≡ Fairford, UK
- ≡ Hartlepool, UK
- * Kista, Sweden
- ≡ Lutterworth, UK
- Sheffield, UK
- ≡ Tunis, Tunisia
- Woking, UK

Asia Pacific & RoW

- ≡ Dongguan, China
- Hong Kong
- Kuantan, Malaysia
- * Shenzhen, China
- Singapore
- ≡ Suzhou, China

* R&D | ● R&D and Operational | ≡ Operational | □ Sales and Engineering

OPTOELECTRONICS

Optek Technology

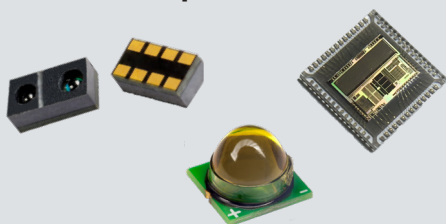
We supply a comprehensive range of high reliability assemblies and advanced sensor technology manufactured in Juarez, Mexico through our OPTEK Technology product line, designed to improve the precision, speed and reliability of your performance-critical applications.

Our customised, commercial Off-the-Shelf (COTS) include discrete semiconductors, microelectronics, sensors and optoelectronics and are supported by a wealth of technical expertise and application experience in industrial, aerospace and defence and medical markets.

Applications

Key Features

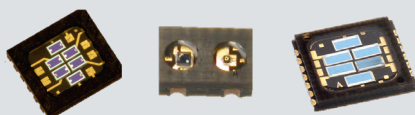
Advanced Components



- Factory automation and robotics
- Data detection
- Optical encoders
- Video surveillance

- Analog, digital and logic outputs
- Easy installation
- Miniature packages
- Surface mount devices
- Wide temperature range

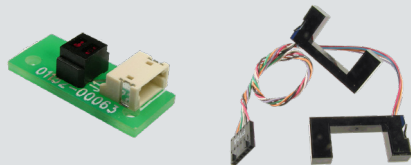
Hybrids



- Machine automation
- Patient monitoring
- Optical Encoders
- Particle Counters
- Tissue oxygenation

- Large operating temperature range
- Tight tolerances, small size for high-precision equipment
- Low cost customization
- Compact SMD package

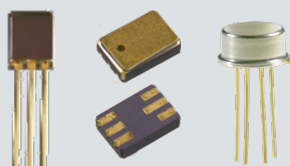
Custom Assemblies



- Factory automation
- Printers, copiers, gaming
- Security
- Medical equipment
- Fluid sensing

- Turn-key solution
- Design flexibility
- Non-contact sensing
- High-voltage isolation
- Application-specific

High-Reliability Sensors and Switches



- Aircraft and satellites
- Guided space vehicles
- UAVs and unmanned systems
- Power generation
- Vision systems

- Hermetically sealed
- 100% testing and inspection
- TX, TXV, B, S, & ESA screening
- ITAR registered with MLA
- US QML certified

DISCRETES

Discretes

Hermetic Infrared Emitting Diode



Model Number	OP123	OP124	OP130	OP130W	OP131	OP132
Package	Pill Pack	Pill Pack	TO-46 Dome Lens	TO-46 Flat Window	TO-46 Dome Lens	TO-46 Dome Lens
Lead Spacing	N/A	N/A	0.100"	0.100"	0.100"	0.100"
Wavelength (nm)	935	935	935	935	935	935
Beam Angle	24	24	18	50	18	18
Output Power	0.4 / NA	1 / NA	1.0 / NA	1.0 / NA	3.0 / NA	4.0 / NA
Operating Temperature	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C



Model Number	OP133	OP133W	OP215A	OP216A	OP231	OP232
Package	TO-46 Dome Lens	TO-46 Flat Window	Coaxial	Coaxial w/ tab	TO-46 Dome Lens	TO-46 Dome Lens
Lead Spacing	0.100"	0.100"	0.15"	0.15"	0.100"	0.100"
Wavelength (nm)	935	935	890	890	890	890
Beam Angle	18	50	24	24	18	18
Output Power	5.0 / NA	5.0 / NA	1.2	1.2	1.5 / NA	2.0 / 6.0
Operating Temperature	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C



Model Number	OP232W	OP233	OP233W	OP234	OP234W	OP235
Package	TO-46 Flat Window	TO-46 Dome Lens	TO-46 Flat Window	TO-46 Dome Lens	TO-46 Flat Window	TO-46 Dome Lens
Lead Spacing	0.100"	0.100"	0.100"	0.100"	0.100"	0.100"
Wavelength (nm)	890	890	890	890	890	890
Beam Angle	50	18	50	18	50	18
Output Power	3.5 / 7.0	3.0 / NA	5.0 / NA	5.0 / NA	5.0 / NA	6.0 / NA
Operating Temperature	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C



Model Number	OP235W
Package	TO-46 Flat Window
Lead Spacing	0.100"
Wavelength (nm)	890
Beam Angle	50
Output Power	6.0 / NA
Operating Temperature	-65°C ~ 125°C

Plastic Infrared Emitting Diode



Model Number	OP140A	OP140B	OP140C	OP140D	OP145C	OP165A
Package	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.100" thick inc. Lens	T-1 [3mm]
Lead Spacing	0.100"	0.100"	0.100"	0.100"	0.100"	.050"
Wavelength (nm)	935	935	935	935	935	935
Beam Angle (Degrees)	40	40	40	40	40	18
Output Power	0.40 / NA	0.30 / 0.55	0.20 / 0.40	0.10 / NA	0.20 / 0.40	1.95 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP165B	OP165C	OP165D	OP165W	OP166A	OP166B
Package	T-1 [3mm]	T-1 [3mm]	T-1 [3mm]	T-1 [3mm] Flat Window	T-1 [3mm]	T-1 [3mm]
Lead Spacing	.050"	.050"	.050"	.050"	0.100"	0.100"
Wavelength (nm)	935	935	935	935	935	935
Beam Angle (Degrees)	18	18	18	90	18	18
Output Power	1.40 / 2.20	0.85 / 1.60	0.28 / NA	0.50 / NA	1.95 / NA	1.40 / 2.20
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP168FA	OP168FB	OP240A	OP240B	OP245A	OP245B
Package	Endlooker	Endlooker	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.100" Thick inc. Lens	Sidelooker 0.100" Thick exc. Lens
Lead Spacing	0.100"	0.100"	0.100"	0.100"	0.100"	0.100"
Wavelength (nm)	935	935	890	890	890	890
Beam Angle (Degrees)	104	104	40	40	40	40
Output Power	0.48 / NA	0.43 / 0.73	0.60 / NA	0.40 / 1.20	0.60 / NA	0.40 / 1.20
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP245PS	OP265A	OP265B	OP265FAA	OP265FAB	OP265WPS
Package	Sidelooker 0.100" Thick	T-1 [3mm]	T-1 [3mm]	T-1 [3mm]	T-1 [3mm]	T-1 [3mm] Flat Window
Lead Spacing	0.100"	.050"	.050"	.050"	.050"	.050"
Wavelength (nm)	850	890	890	850	850	850
Beam Angle (Degrees)	36	18	18	18	18	120
Output Power	0.12 / 0.80	2.70 / NA	1.65 / 4.70	5.5 / NA	7.5 / 12.5	.055 / .55
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



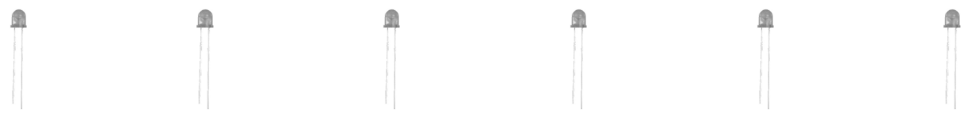
Model Number	OP266A	OP266B	OP266D	OP266W	OP266AA	OP266AC	OP266AD
Package	T-1 [3mm]	T-1 [3mm]	T-1 [3mm]	T-1 [3mm] Flat Window	T-1 [3mm]	T-1 [3mm]	T-1 [3mm]
Lead Spacing	.100"	.100"	.100"	.100"	.100"	.100"	.100"
Wavelength (nm)	890	890	890	890	850	850	850
Beam Angle (Degrees)	18	18	18	90	18	18	18
Output Power	2.70 / NA	1.65 / 4.70	0.54 / NA	1.00/NA	5.5 / NA	11.5 / 16.5	15.5 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP268FA	OP268FB	OP269A	OP290A	OP290B	OP290C
Package	Endlooker	Endlooker	Endlooker Lensed	T-1 3/4	T-1 3/4	T-1 3/4
Lead Spacing	.100"	.100"	.100"	.100"	.100"	.100"
Wavelength (nm)	890	890	890	890	890	890
Beam Angle (Degrees)	104	104	18	50	50	50
Output Power	0.64 / NA	0.45 / 0.99	0.34 / NA	210 / NA	180 / 300	150 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP291A	OP292A	OP293A	OP293B	OP294	OP295A
OP295B	T-1 3/4	T-1 3/4	Plastic TO-18, wide angle	Plastic TO-18, wide angle	T-1 3/4	T-1 3/4
Lead Spacing	.100"	.100"	.100"	.100"	.100"	.100"
Wavelength (nm)	890	890	890	890	890	890
Beam Angle (Degrees)	50	50	60	60	50	20
Output Power	16.0 / NA	2.7 / NA	16.0 / NA	13.0 / 26.0	0.50 / 1.50	44.0 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP295B	OP296A	OP296B	OP297A	OP297FAB	OP298A
Package	T-1 3/4	T-1 3/4	T-1 3/4	T-1 3/4	T-1 3/4	Plastic TO-18
Lead Spacing	.100"	.100"	.100"	.100"	.100"	.100"
Wavelength (nm)	890	890	890	890	875	890
Beam Angle (Degrees)	20	20	20	20	20	25
Output Power	33.0 / 77.0	3.6 / NA	2.6 / 6.6	0.70 / NA	2.4 / --	3.0 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP298AA	OP298B	OP298C	OP299
Package	Plastic TO-18	Plastic TO-18	Plastic TO-18	T-1 3/4
Lead Spacing	.100"	.100"	.100"	.100"
Wavelength (nm)	875	890	890	890
Beam Angle (Degrees)	25	25	25	20
Output Power	3.5 / --	2.4 / 4.8	1.8 / NA	0.15 / 0.45
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C

NPN Silicon Phototransistor



Model Number	OP593A	OP593B	OP598A	OP598B	OP598C	OP505A
Package	Plastic TO-18, wide angle	Plastic TO-18, wide angle	Plastic TO-18	Plastic TO-18	Plastic TO-18	T-1 [3mm]
Lead Spacing	.100"	.100"	.100"	.100"	.100"	.050"
Wavelength (nm)	630 ~1100	630 ~1100	630 ~1100	630 ~1100	630 ~1100	25
Beam Angle (Degrees)	130	130	25	25	25	
IC(O)N	3 / 4	2 / 4	7 / 10	5 / 10	2.5 / 10	4.3 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C




Model Number	OP505B	OP505C	OP505W	OP506A	OP506B	OP506W
Package	T-1 [3mm]	T-1 [3mm]	T-1 [3mm] Flat Window	T-1 [3mm]	T-1 [3mm]	T-1 [3mm] Flat Window
Lead Spacing	.050"	.050"	.050"	.100"	.100"	.100"
Viewing Angle (Degrees)	25	25	90	20	20	90
IC(O)N Min/Max (mA)	2.15 / 5.95	1.10 / 3	0.10 / NA	4.3 / NA	2.15 / 5.95	-40°C ~ 100°C
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	




Model Number	OP508FA	OP509A	OP509B	OP515B	OP516A	OP516C
Package	Endlooker	Endlooker Lensed	Endlooker Lensed	Coaxial	Coaxial w/tab	Coaxial w/ tab
Lead Spacing	.100"	.100"	.100"	0.15"	0.15"	0.15"
Viewing Angle (Degrees)	120	50	50	N/A	N/A	N/A
IC(O)N Min/Max (mA)	2.70 / NA	5.70 / NA	1.40 / NA	3.0 / NA	6.0 / NA	1.0 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C




Model Number	OP535A	OP535B	OP550A	OP550B	OP550C	OP555A
Package	T-1 [3mm]	T-1 [3mm]	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.100" thick inc. Lens
Lead Spacing	0.050"	0.050"	.100"	.100"	.100"	.100"
Viewing Angle (Degrees)	20	20	40	40	40	60
IC(O)N Min/Max (mA)	10.5 / NA	3.5 / NA	2.55 / NA	1.30 / 4.70	0.25 / NA	2.55 / NA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP555B	OP560A	OP560C	OP599A	OP599C	OP600A
Package	Sidelooker 0.100" thick inc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.060" Thick exc. Lens	T-1 3/4	T-1 3/4	Pill Pack Low Lens
Lead Spacing	.100"	.100"	.100"	.100"	.100"	N/A
Viewing Angle (Degrees)	60	40	40	20	20	35
IC(O)N Min/Max (mA)	1.30 / NA	6.6 / NA	1.1 / NA	1.20 / 3.85	0.20 / NA	1.2 / 1.8
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-65°C ~ 125°C



Model Number	OP600B	OP600C	OP643SL	OP644SL	OP750A	OP750B
Package	Pill Pack Low Lens	Pill Pack Low Lens	Pill Pack Low Lens	Pill Pack Low Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens
Lead Spacing	N/A	N/A	N/A	N/A	.100"	.100"
Viewing Angle (Degrees)	35	35	35	35	40	40
IC(O)N Min/Max (mA)	0.6 / 1.8	0.3 / 1.8	4.0 / 8.0	7.0 / 22.0	2.25 / 7.0	1.5 / 4.2
Operating Temperature	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OP800A	OP800B	OP800C
Package	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens
Lead Spacing	.100" Dia.	.100" Dia.	.100" Dia.
Viewing Angle (Degrees)	25	25	25
IC(O)N Min/Max (mA)	3.60 / NA	1.80 / 5.4	0.90 / 3.60
Operating Temperature	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C

PIN Silicon Photodiodes



Model Number	OP900SL	OP905	OP906	OP913SL	OP913WSL	OP950
Package	Pill Pack Low Lens	T-1 [3mm]	T-1 [3mm]	TO-5, Lensed	TO-5, Flat Window	Sidelooker 0.0620" Thick exc. Lens
Lead Spacing	N/A	.050"	.100"	.200"	.200"	.100"
Viewing Angle (Degrees)	35	34	40	20	80	95
Operating Temperature	-65°C ~ 125°C	-40°C ~ 100°C	-40°C ~ 100°C	-65°C ~ 125°C	-65°C ~ 125°C	-40°C ~ 100°C



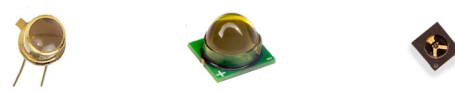
Model Number	OP954	OP955	OP993	OP999
Package	Sidelooker 0.100" thick	Sidelooker 0.100" thick inc. Lens	Plastic TO-18	T-1 3/4
Lead Spacing	.100"	.100"	.100"	.100"
Viewing Angle (Degrees)	128	95	118	18
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C

NPN Phototransistor



Model Number	OP800WSL	OP801WSL	OP802WSL	OP804SL	OP805SL	OP830SL	OP830WSL
Package	TO-18 Flat Lens	TO-18 Flat Lens	TO-18 Flat Lens	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Flat Lens	TO-46 Flat Window
Lead Spacing	.100" Dia.	.100" Dia.	.100" Dia.	.100" Dia.	.100" Dia.	.100" Dia.	.100" Dia.
Viewing Angle (Degrees)	75	75	75	25	25	25	75
Operating Temperature	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-65°C ~ 125°C	-55°C ~ 125°C

Infrared Light Emitting Diodes









Model Number	OP205CL	OP207CL	OPR2800T
Package	TO-46 D	SMD 9.9mm x 9.9mm	Surface Mount Chip Carrier
Lead Spacing	0.100"	9.9mm	N/A
Wavelength (nm)	875	855	875
Beam Angle (Degrees)	10	4.5	100
Output Power	12mW @ IF= 50mA	10mW @ IF= 50mA	0.2mW/cm2 @ IF= 20mA
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-55°C ~ 125°C







Point Source Hermetic Infrared Emitting Diode















Model Number	OP230WPS
Package	TO-46 Flat Window
Lead Spacing	.100"
Wavelength (nm)	850
Beam Angle (Degrees)	90
Output Power	0.5 / NA
Operating Temperature	-40°C ~ 125°C

Photologic Sensors







						
Model Number	OPL530	OPL530-OC	OPL531A	OPL531-OCA	OPL535A	OPL535B
Package	Sideloooker 0.0620" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.1" Thick inc. Lens	Sideloooker 0.1" Thick inc. Lens
Lead Spacing	N/A	.075"	.075"	.075"	.075"	.075"
Wavelength (nm)	935	N/A	N/A	N/A	935	935
Beam Angle (Degrees)	Narrow	N/A	N/A	N/A	N/A	N/A
Viewing Angle (Degrees)	Narrow	N/A	N/A	N/A	Narrow	Narrow
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C





						
Model Number	OPL536A	OPL550	OPL550A	OPL550-OCA	OPL551	OPL551-OC
Package	Sideloooker 0.1" Thick inc. Lens	Sideloooker 0.0620" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens
Lead Spacing	.075"	.075"	.075"	.075"	.075"	.075"
Wavelength (nm)	935	935	N/A	N/A	N/A	N/A
Beam Angle (Degrees)	N/A	N/A	N/A	N/A	N/A	N/A
Viewing Angle (Degrees)	Narrow	Narrow	N/A	N/A	N/A	N/A
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C

						
Model Number	OPL551-OCA	OPL560	OPL560A	OPL560-OCA	OPL561	OPL561-OC
Package	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.0620" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens
Lead Spacing	.075"	.075"	.075"	.075"	.075"	.075"
Wavelength (nm)	N/A	935	N/A	N/A	N/A	N/A
Beam Angle (Degrees)	N/A	N/A	N/A	N/A	N/A	N/A
Viewing Angle (Degrees)	N/A	Narrow	N/A	N/A	N/A	N/A
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C




						
Model Number	OPL561-OCA	OPL562	OPL562-OC	OPL562-OCA	OPL563	OPL583
Package	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens	Sideloooker 0.060" Thick exc. Lens
Lead Spacing	.075"	.075"	.075"	.075"	.075"	0.05"
Wavelength (nm)	N/A	N/A	N/A	N/A	N/A	935
Beam Angle (Degrees)	N/A	N/A	N/A	N/A	N/A	N/A
Viewing Angle (Degrees)	N/A	N/A	N/A	N/A	N/A	Wide
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C

Photologic Hermetic Sensors





						
Model Number	OPL800	OPL800-OC	OPL801	OPL801-OC	OPL810	OPL811
Package	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens
Lead Spacing	.050"	.100" Dia.	.100" Dia.	.100" Dia.	.100" Dia.	.100" Dia.
Spectral Response (nm)	800	800	800	800	800	800
Viewing Angle (Degrees)	14	14	14	14	14	14
Operating Temperature	-55° C to +110° C	-55° C to +110° C	-55° C to +110° C	-55° C to +110° C	-55° C to +105° C	-55° C to +105° C

				
Model Number	OPL811-OC	OPL813-OC	OPL820	OPL820-OC
Package	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens
Lead Spacing	.100" Dia.	.100" Dia.	.100" Dia.	.100" Dia.
Spectral Response (nm)	800	800	800	N/A
Beam Angle (Degrees)	N/A	N/A	N/A	N/A
Viewing Angle (Degrees)	14	70	14	14
Operating Temperature	-55° C to +105° C	-55° C to +105° C	-55° C to +100° C	-40° C ~ 100° C


Optical Emitter and Sensor Pair

			
Model Number	OPB100-EZ	OPB100-SZ	OPB100Z
Package	Snap Housing / Wires	Snap Housing / Wires	Module Pair
Wavelength (nm)	890	N/A	880
Beam Angle (Degrees)	25	N/A	N/A
Viewing Angle (Degrees)	N/A	25	N/A
Output Power	6/5	N/A	N/A
Operating Temperature	-40° C to +80° C	-40° C to +80° C	-40° C to +80° C


Six-Element SMD Photodiode Array

				
Model Number	OPR2100	OPR2100HST	OPR2100T	OPR2101
Package	Surface Mount Chip Carrier	Surface Mount Chip Carrier	Surface Mount Chip Carrier	Surface Mount Chip Carrier
Lead Spacing	N/A	N/A	N/A	N/A
Bandwidth (kHz)	55	55	200	200
Operating Temperature	55° C to +125° C	-55° C ~ 125° C	-55° C ~ 125° C	-55° C ~ 125° C


Miniature SMD Reflective Sensor

	
Model Number	OPR5005TR
Package	Surface Mount Chip Carrier
Wavelength (nm)	890
Beam Angle (Degrees)	100
Operating Temperature	-55° C to +125° C

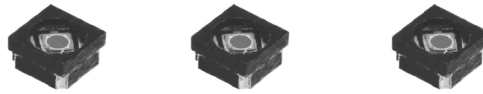
Miniature Surface Mount LED

	
Model Number	OPR5200
Package	Surface Mount Chip Carrier
Wavelength (nm)	890
Viewing Angle (Degrees)	90
Operating Temperature	-55° C ~ 125° C

Miniature Surface Mount Phototransistor

	
Model Number	OPR5500
Package	Surface Mount Chip Carrier
Viewing Angle (Degrees)	120
Operating Temperature	-55° C ~ 125° C

Surface Mount PIN Photodiode



Model Number	OPR5910	OPR5910T	OPR5913
Package	Surface Mount Chip Carrier	Surface Mount Chip Carrier	Surface Mount Chip Carrier
Receiver Type	Photodiode	Photodiode	Photodiode
Responsivity Typ/Max	0.45	0.45	Min. 0.4
Reverse Voltage	65	65	10
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C

Surface Mount Quad Photodiode



Model Number	OPR5911	OPR5925
Package	Surface Mount Chip Carrier	Surface Mount Chip Carrier
Receiver Type	Photodiode Array	Photodiode Array
Responsivity Typ/Max	0.45	0.45
Number of Elements	4	4
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C

LED and Photosensor Pair



Model Number	OPS666	OPS667	OPS691	OPS692	OPS693	OPS698
Package	T-1 [3mm]	T-1 [3mm]	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.0620" Thick exc. Lens	Sidelooker 0.100" thick inc. Lens
Lead Spacing	0.1"	0.1"	.100"	.100"	.100"	.100"
Wavelength (nm)	935	935	935	935	935	935
Beam Angle (Degrees)	18	18	40	40	40	40
Viewing Angle (Degrees)	25	25	60	60	60	60
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C

Incremental Encoder Sensors



Model Number	FS210	FS310
Packaging	SMD OptoQFN 5mm x 5mm	SMD OptoQFN 5mm x 5mm
Material	Silicon	Silicon
Photo Detector Type	User Configurable: Analog or Digital	User Configurable: Analog or Digital
Color	Clear	Clear
Number of Elements	Programmable Photodiode Array	Programmable Photodiode Array
Receiver Type	CMOS mixed Signal PhotoASIC	CMOS mixed Signal PhotoASIC

OPTOISOLATORS

Optoisolators

Optically Coupled Isolator



Model Number	OPI110	OPI110A	OPI110B	OPI110C	OPI120	OPI120-032	OPI123	OPI1264
Package	Axial-Cylindrical	Axial-Cylindrical	Axial-Cylindrical	Axial-Cylindrical	Axial Channel	Axial Channel	Axial Channel	Axial-Cylindrical
Sensor Type	Transistor	Transistor	Transistor	Transistor	Transistor w/Base	Transistor w/Base	Darlington	Transistor
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	55°C ~ 100°C	55°C ~ 100°C	-55°C to 100°C	-40°C ~ 85°C
CTR Min	12.5% @ 10mA	25% @ 10mA	50% @ 10mA	100% @ 10mA	20% @ 10mA		50% @ 10mA	12.5% @ 10mA
Isolation Voltage Min (kV)	15kVDC	15kVDC	15kVDC	15kVDC	15kVDC		15kVDC	15kVDC



Model Number	OPI1264A	OPI1264B	OPI1264C	OPI150	OPI153	OPI155	OPI7002	OPI7010
Package	Axial-Cylindrical	Axial-Cylindrical	Axial-Cylindrical	Axial-Cylindrical	Axial-Cylindrical	Axial-Cylindrical	4-DIP	4-DIP
Sensor Type	Transistor	Transistor	Transistor	Transistor w/Base	Darlington	TIA-OC	Transistor	Transistor
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C
CTR Min	25% @ 10mA	50% @ 10mA	100% @ 10mA	10% @ 16mA	25% @ 30mA	80% @ 10mA	20% @ 10mA	100% @ 10mA
Isolation Voltage Min (kV)	15kVDC	15kVDC	15kVDC	50kVDC	50kVDC	50kVDC	6kVDC	6kVDC

Photologic Optically Coupled Isolator



Model Number	OPI126	OPI128
Package	Axial-Cylindrical	Axial-Cylindrical
Sensor Type	Open Collector	Inv-Open Collector
Isolation Voltage Min (kV)	15kVDC	15kVDC

High Voltage Isolator



Model Number	OPI1266	OPI1268	OPI1268S
Package	Side Channel	Side Channel	Side Channel
Sensor Type	Open Collector	Open Collector	Open Collector
Operating Temperature	-40°C ~ 70°C	-40°C ~ 100°C	-50°C ~ 100°C
Isolation Voltage Min	16kVDC	16kVDC	20kVDC

Axial Fiber Optic Isolators



Model Number	OPI1270-018	OPI1270-026	OPI1270-032	OPI127-032
Package	Axial - 4 Leads	Axial - 4 Leads	Axial - 4 Leads	Axial Channel
Sensor Type	Transistor	Transistor	Transistor	Inv-Totem Pole
Operating Temperature	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-55°C ~ 100°C
Light Current IC(ON) Min	0.36	0.36	0.36	0.36

Fiber Optic Isolators - Photologic Sensor



Model Number	OPI1290-032	OPI1290-066	OPI1290-080
Package	Non-standard, 5 Lead	Non-standard, 5 Lead	Non-standard, 5 Lead
Operating Temperature	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C
Prop Delay	5µs, 5µs (Typ)	5µs, 5µs (Typ)	5µs, 5µs (Typ)
Isolation Voltage Min	15kVDC	>15kVDC	>15kVDC

Fiber Optic Isolators - Phototransistor



Model Number	OPI1280-018	OPI1280-026	OPI1280-032	OPI1280-066
Package	Flexible-Link	Flexible-Link	Flexible-Link	Flexible-Link
Sensor Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Operating Temperature	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-55°C ~ 100°C

HALL EFFECT SENSORS

Hall Effect Sensors

Hall Effect Sensors



Model Number	OH090U	OH180U	OH360U	OHB900	OHN3020U	OHN3040U
Package	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92	Slotted Switch	Side Sensing TO-92	Side Sensing TO-92
Output Type	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Logic	Uni-Polar Non Latching	Uni-Polar Non Latching
Operating Point Gauss (Min/Typ/Max)	0/90/180	70 / 180 / 290	235 / 300 / 465	NA	70/230/350	70/150/220
Release Point Gauss (Min/Typ/Max)	-100/65/100	0 / 140 / 230	120 / 235 / 325	NA	50 / 180 / NA	50 / 115 / NA
Hysteresis Gauss (Min/Typ/Max)	10/25/100	20 / 40 / 120	30 / 65 / 200	NA	20 / 50 / NA	20 / 35 / NA
V _{cc} (Volts) Min/Max	4.5 / 24.0	4.5 / 24.0	4.5 / 24.0	4.5 / 25.0	4.5 / 24.0	4.5 / 24.0



Model Number	OHN3120U	OHN3140U	OHS3020U	OHS3030U	OHS3040U	OHS3075U
Package	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92
Output Type	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Bi-Polar Latching
Operating Point Gauss (Min/Typ/Max)	70 / NA / 425	45 / NA / 260	NA / 230 / 350	NA / 205 / 250	NA / 150 / 200	50 / 100 / 250
Release Point Gauss (Min/Typ/Max)	50 / NA / 405	25 / NA / 240	50/180/330	0 / 160 / NA	50/115/180	-250 / -100 / -5
Hysteresis Gauss (Min/Typ/Max)	20 / NA / NA	20 / NA / NA	20 / 50 / NA	20 / 45 / NA	20 / 35 / NA	100 / 200 / 500
V _{cc} (Volts) Min/Max	4.5 / 24.0	4.5 / 24.0	4.5 / 24.0	4.5 / 24.0	4.5 / 24.0	4.5 / 24.0



Model Number	OHS3120U	OHS3131U	OHS3140U	OHS3150U	OHS3175U	OHS3177U
Package	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92	Side Sensing TO-92
Output Type	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Linear Ratiometric	Bi-Polar Latching	Bi-Polar Latching
Operating Point Gauss (Min/Typ/Max)	35 / NA / 450	-75/NA/135	45 / NA / 270	NA	10 / NA / 260	25 / NA / 200
Release Point Gauss (Min/Typ/Max)	25 / NA / 430	-135 / NA / 125	25 / NA / 250	NA	-260/NA/-10	-200 / NA/ -25
Hysteresis Gauss (Min/Typ/Max)	20 / NA / NA	10 / NA / NA	20 / NA / NA	NA	50/NA/NA	50/NA/NA
V _{cc} (Volts) Min/Max	4.5 / 24.0	4.5 / 24.0	4.5 / 24.0	NA	4.5 / 24.0	4.5 / 24.0

FIBER OPTICS

Fiber Optics

Fiber Optic Transmitters



Model Number	OPF1414	OPF1414T	OPF320A	OPF320B	OPF322A	OPF340A
Package	ST-Plastic, PCB Mount	ST-Plastic, Panel Mount	TO-46 Flat Window	TO-46 Flat Window	ST-Metal, PCB/Panel Mount	TO-46 Flat Window
LED Wavelength (nm)	40	40	850	850	850	850
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 125°C	-40°C ~ 125°C	-40°C ~ 100°C	-40°C ~ 125°C
I _F (mA) Typ/Max	100	100	100	100	100	100
Rise/Fall Time (ns)	6.5 max	6.5 max	8	8	6	6
Fiber Size (µm)	50 / 125	50 / 125	50/125 to 200/300	50/125 to 200/300	50 / 125	50/125 to 200/300



Model Number	OPF345A	OPF370A	OPF372A	OPF372B	OPF693-2	OPF694-2
Package	TO-46 Flat Window	TO-18 w/Clear Cap	ST-Metal, PCB/Panel Mount	ST-Metal, PCB/Panel Mount	ST-LP-Metal, PCB/Panel Mount	ST-Metal, PCB/Panel Mount
LED Wavelength (nm)	850	850	850	850	850	850
Operating Temperature	-40°C ~ 125°C	-40°C ~ 100°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C
I _F (mA) Typ/Max	100	100	100	100	100	100
Rise/Fall Time (ns)	4.5	8	6	6	4.5	4.5
Fiber Size (µm)	50/125 to 200/300	50/125 to 200/300	50/125 to 200/300	50/125 to 200/300	50/125 to 200/300	50/125 or 62.5/125

Fiber Optic Detectors



Model Number	OPF420	OPF422	OPF430	OPF470	OPF472	OPF480	OPF482	OPF794
Package	TO-46 Flat Window	ST-Metal, PCB/ Panel Mount	TO-46 Flat Window	TO-18 Green Cap	ST-Metal, PCB/ Panel Mount	TO-18 Green Cap	ST-Metal, PCB/ Panel Mount	ST-LP-Metal, PCB/ Panel Mount
Receiver Type	Photodiode	Photodiode	Photodiode	Photodiode	Photodiode	Photodiode	Photodiode	Photodiode
Operating Temperature	-55°C ~ 125°C	-40°C ~ 100°C	-55°C ~ 125°C	-40°C ~ 100°C	-40°C ~ 85°C	-40°C ~ 100°C	40°C ~ 85°C	40°C ~ 85°C

Fiber Optic Receivers



Model Number	OPF2412	OPF2412T	OPF500	OPF505	OPF507	OPF520	OPF522
Package	ST-Plastic, PCB Mount	ST-Plastic, PCB Mount	TO-18 Green Cap	TO-46 Flat Window	ST-LP-Metal, PCB/ Panel Mount	TO-18 Green Cap	ST-LP- Metal, PCB/Panel Mount
Supply Voltage (V)	0.7 to 7.0 V	0.7 to 7.0 V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	0.7 to 7.0 V	0.7 to 7.0 V
Receiver Type	Logic, Open Collector	Logic, Open Collector	Logic, B10K Pullup	Logic, B10K Pullup	Logic, B10K Pullup	Logic, Open Collector	Logic, Open Collector
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C

Vertical Cavity Surface Emitting Laser



Model Number	OPV330	OPV332	OPV380	OPV382	OPV300	OPV302
Package	T-1	T-1 dome lens	Lateral package	Lateral package	TO-46 Bead Lens	TO-46 package
Wavelength (nm)	850	850	850	850	850	850
Operating Temperature	0°C to 70°C	0°C ~ 85°C	0°C to 85°C	0°C to 85°C	0°C ~ 70°C	0°C ~ 85°C
IF (mA) Max	12	12	12	12	12	12
Laser Class	3b	3B	3b	3b	1M	3b



Model Number	OPV310	OPV310Y	OPV314	OPV314AT	OPV314Y	OPV314YAT
Package	TO-46 Bead Lens	ST-Metal, PCB/Panel Mount	ST-Metal, PCB/Panel Mount	ST-Metal, PCB/Panel Mount	Dome Lens Pill Package	T-1 Flat Lens
Wavelength (nm)	850	850	850	850	850	850
Operating Temperature	0°C ~ 70°C	0°C to 70°C	0°C ~ 85°C	0°C ~ 85°C	0°C to 70°C	0°C ~ 85°C
IF (mA) Max	12	12	12	12	12	12
Laser Class	1M	1M	1M	1M	3B	1M



Model Number	OPV314YBT	OPV315YBT	OPV322
Package	T-1 Dome Lens	ST metal	Dome Lens Lateral Package
Wavelength (nm)	850	850	850
Operating Temperature	0°C ~ 85°C	0°C ~ 85°C	0°C ~ 85°C
IF (mA) Max	12	12	12
Laser Class	1M	1M	3B

REFLECTIVE SENSORS

Reflective Sensors

Reflective Object Sensors - Non Focused



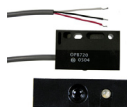
Model Number	OPB606A	OPB606B	OPB606C	OPB607A	OPB607C	OPB608A
Package	Cube, miniature	Cube, miniature	Cube, miniature	Cube, miniature	Cube, miniature	Cube, miniature
Package Termination	Through Hole	Through Hole	Through Hole	Through Hole	Through Hole	Through Hole
Output Type	Phototransistor	Phototransistor	Phototransistor	Photodarlington	Photodarlington	Rbe Phototransistor
Wavelength (nm)	935	935	935	935	935	890
Test Distance	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)
Supply Voltage (V)	3V - 24V	3V - 24V	3V - 24V	3V - 14V	3V - 14V	3V - 24V
I _f (mA) Typ/Max	20 / 50	20 / 50	20 / 50	20 / 50	20 / 50	7 / 12 or 20 / 50
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



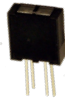
Model Number	OPB608B	OPB608R	OPB608V	OPB706A	OPB706B	OPB706C
Package	Cube, miniature	Cube, miniature	Cube, miniature	Cube	Cube	Cube
Package Termination	Through Hole	Through Hole	Through Hole	Through Hole	Through Hole	Through Hole
Output Type	Rbe Phototransistor	Rbe Phototransistor	Rbe Phototransistor	Phototransistor	Phototransistor	Phototransistor
Wavelength (nm)	890	660	850	935	935	935
Test Distance	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.050" (1.27mm)
Supply Voltage (V)	3V - 24V	3V - 24V	3V - 24V	3V - 22V	3V - 22V	3V - 22V
I _f (mA) Typ/Max	20 / 50	20 / 50	20 / 50	20 / 50	20 / 50	20 / 50
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	0°C ~ 70°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB707A	OPB707C	OPB710	OPB710F	OPB711	OPB712
Package	Cube	Cube	TO-46, reflective	TO-46, reflective	Flat, reflective	Flat, reflective
Package Termination	Through Hole	Through Hole	Through Hole	Through Hole	Through Hole	Through Hole
Output Type	Photodarlington	Photodarlington	Phototransistor	Phototransistor	Phototransistor	Photodarlington
Wavelength (nm)	935	935	935	935	890	890
Test Distance	0.050" (1.27mm)	0.050" (1.27mm)	0.250" (6.35mm)	0.250" (6.35mm)	0.080" (2.03mm)	0.080" (2.03mm)
Supply Voltage (V)	3V - 14V	3V - 14V	3V - 24V	3V - 24V	3V - 22V	3V - 14V
I _f (mA) Typ/Max	20 / 50	20 / 50	20 / 50	20 / 50	20 / 50	20 / 50
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	0°C ~ 70°C	0°C ~ 70°C	-40°C ~ 85°C	-40°C ~ 85°C

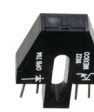


Model Number	OPB720B-06Z	OPB720B-12Z	OPB720B-30VZ	OPB730	OPB730F	OPB732
Package	Switch, reflective	Switch, reflective	Switch, reflective	TO-46, reflective	TO-46, reflective	Switch, reflective
Package Termination	39" [99cm] Cable	39" [99cm] Cable	39" [99cm] Cable	Through Hole	Through Hole	Through Hole
Output Type	Photologic,BOC	Photologic,BOC	Photologic,BOC	Photodarlington	Photodarlington	Phototransistor
Wavelength (nm)	890	890	890	935	935	850
Test Distance	6" [15.2 cm]	12" [30.5cm]	30" [76.2cm]	0.250" (6.35mm)	0.250" (6.35mm)	3.0" (76mm)
Supply Voltage (V)	4V ~ 7V	4V ~ 7V	4V ~ 7V	3V - 14V	3V - 14V	3V - 14V
I _f (mA) Typ/Max				20 / 50	20 / 50	
Operating Temperature	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C	-40°C ~ 85°C



Model Number	OPB732WZ	OPB733TR	OPR5005
Package	Switch, reflective	Surface mount, reflective	Surface Mount, Chip Carrier
Package Termination	24" / 26 AWG Wire	Surface Mount	Surface Mount Chip Carrier
Output Type	Phototransistor	Phototransistor	Phototransistor
Wavelength (nm)	850	890	890
Test Distance	3.0" (76.2mm)	0.5" (12.7mm)	0.05 to 0.20mm
Supply Voltage (V)	3V - 24V	3V - 24V	3V - 24V
I _f (mA) Typ/Max		20 / 50	20 / 50
Operating Temperature	-40°C ~ 85°C	-25°C ~ 85°C	-55°C ~ 125°C

Reflective Object Sensors - Focused



Model Number	OPB703	OPB703WZ	OPB704	OPB704GWZ	OPB705	OPB705WZ
Package	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective
Package Termination	Through Hole	24" / 26 AWG Wire	Through Hole	24" / 26 AWG Wire	Through hole	24" to 26" AWG wire
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Wavelength (nm)	890	890	890	890	890	890
Test Distance	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)
Supply Voltage (V)	3V - 24V	3V - 24V	3V - 24V	3V - 24V	3V - 24V	3V - 24V
I _f (mA) Typ/Max	40 / 40	40 / 40	40 / 40	40 / 40	40 / 40	40 / 40
Operating Temperature	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C



Model Number	OPB708	OPB70AWZ	OPB70DWZ	OPB70EWZ	OPB70FWZ	OPB740
Package	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective
Package Termination	Through Hole	24" / 26 AWG Wire	24" / 26 AWG Wire	24" / 26 AWG Wire	24" / 26 AWG Wire	Through Hole
Output Type	Phototransistor	Photodarlington	Phototransistor	Rbe Phototransistor	Phototransistor	Phototransistor
Wavelength (nm)	935	890	640	640	640	890
Test Distance	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)
Supply Voltage (V)	3V - 24V	3V - 14V	3V - 24V	3V - 22V	3V - 24V	3V - 24V
I _f (mA) Typ/Max	40 / 40	40 / 40	40 / 40	40 / 40	40 / 40	20 / 75
Operating Temperature	-40°C to 85°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 85°C



Model Number	OPB740WZ	OPB741WZ	OPB742	OPB742WZ	OPB743	OPB743WZ
Package	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective
Package Termination	4" / 26 AWG Wire	4" / 26 AWG Wire	Through Hole	4" / 26 AWG Wire	Through Hole	4" / 26 AWG Wire
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Wavelength (nm)	890	890	890	890	890	890
Test Distance	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)
Supply Voltage (V)	3V - 24V	3V - 24V	3V - 24V	3V - 24V	3V - 24V	3V - 24V
I _f (mA) Typ/Max	40 / 40	40 / 40	40 / 40	40 / 40	40 / 40	40 / 40
Operating Temperature	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C

Reflective Object Sensors - Focused



Model Number	OPB744	OPB744WZ	OPB745	OPB745WZ	OPB748WZ	OPB750N
Package	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective
Package Termination	Through Hole	4" / 26 AWG Wire	Through Hole	4" / 26 AWG Wire	24" / 26 AWG Wire	Through Hole
Output Type	Phototransistor	Phototransistor	Photodarlington	Photodarlington	Phototransistor	Rbe Phototransistor
Wavelength (nm)	890	890	890	890	645	890
Test Distance	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.150" (3.81mm)	0.08" / 0.15" / 0.30"	0.08" / 0.15" / 0.22"
Supply Voltage (V)	3V - 24V	3V - 24V	3V - 14V	3V - 14V	3V - 22V	3V - 22V
I _F (mA) Typ/Max	40 / 40	40 / 40	40 / 40	40 / 40	40 / 40	50 / 50
Operating Temperature	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C to 85°C



Model Number	OPB750T	OPB755TAZ	OPB755TZ	OPB760N	OPB760T	OPB761N
Package	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective
Package Termination	Through Hole	24" / 26 AWG Wire	12" / 26 AWG Wire	Through Hole	Through Hole	Through Hole
Output Type	Rbe Phototransistor	Rbe Phototransistor	Rbe Phototransistor	Photologic, BTP	Photologic, BTP	Photologic, BOC
Wavelength (nm)	890	890	890	890	890	890
Test Distance	0.08" / 0.15" / 0.22"	0.08" / 0.15" / 0.22"	0.08" / 0.15" / 0.22"	0.08" / 0.22"	0.08" / 0.22"	0.08" / 0.22"
Supply Voltage (V)	3V - 22V	3V - 22V	3V - 22V	3V - 22V	4.75V ~ 5.25V	4.75V ~ 5.25V
I _F (mA) Typ/Max	50	50	50	4.75 / 5.25	4.75 / 5.25	4.75 / 5.25
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C



Model Number	OPB763T	OPB770TZ	OPB771TZ	OPB773TZ
Package	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective
Package Termination	Through Hole	12" / 26 AWG Wire	12" / 26 AWG Wire	12" / 26 AWG Wire
Output Type	Photologic, IOC	Photologic, BTP	Photologic, BOC	Photologic, IOC
Wavelength (nm)	890	890	890	890
Test Distance	0.08" / 0.22"	0.08" / 0.22"	0.08" / 0.22"	0.08" / 0.22"
Supply Voltage (V)	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V
I _F (mA) Typ/Max	4.75 / 5.25	4.75 / 5.25	4.75 / 5.25	4.75 / 5.25
Operating Temperature	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C

Reflective Switch



Model Number	OPB700Z	OPB701ALZ	OPB701Z	OPB702	OPB702D
Package	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective	Switch, reflective
Package Termination	4" / 26 AWG Wire	18" / 26 AWG Wire	4" / 26 AWG Wire	Through Hole	Through Hole
Output Type	Transistor	Photodarlington	Photodarlington	Transistor	Photodarlington
Wavelength (nm)	890	890	890	890	890
Test Distance	0.200" (5.08mm)	0.200" (5.08mm)	0.200" (5.08mm)	0.150" (3.81mm)	0.150" (3.81mm)
Supply Voltage (V)	3V - 22V	3V - 14V	3V - 14V	3V - 24V	3V - 14V
I _F (mA) Typ/Max	40 / 100	40 / 100	40 / 100	20 / 50	20 / 50
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 85°C	-40°C ~ 85°C

Object Reflective



Model Number	OPB715Z	OPB716Z	OPB717Z	OPB718Z	OPB720A-06Z	OPB720-12Z
Package	Snap Mount	Snap Mount	Snap Mount	Snap Mount	Sealed Hole Mount	Sealed Hole Mount
Package Termination	18" / 26 AWG Wire	18" / 26 AWG Wire	18" / 26 AWG Wire	18" / 26 AWG Wire	39" [99cm] Cable	39" [99cm] Cable
Output Type	Totem-Pole	Open-Collector	Inv-Totem-Pole	Inv-Open-Collector	Open-Collector	Open-Collector
Wavelength (nm)	890	890	890	890	850	850
Test Distance	0.50"	0.50"	0.50"	0.50"	6" [15.2 cm]	12" [30.5cm]
Supply Voltage (V)	4.75 / 5.25	4.75 / 5.25	4.75 / 5.25	4.75 / 5.25	10V ~30V	10V ~30V
I _f (mA) Typ/Max or Min/Max	30 / 50	30 / 50	30 / 50	30 / 50	8 / 20	8 / 20
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	0°C ~ 50°C	0°C ~ 50°C

Reflective Sensor, Line Reader



Model Number	OPB739RWZ
Package	Sealed Hole Mount
Package Termination	24" / 26 AWG Wire
Output Type	Phototransistor
Wavelength (nm)	650
Test Distance	0.030" [0.76mm]
Supply Voltage (V)	3V - 30V
I _f (mA) Typ/Max or Min/Max	28 / 30
Operating Temperature	-40°C ~ 85°C

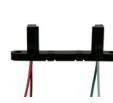
Reflective Optical Sensor Module



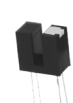
Model Number	OPB9001A	OPB9001AC	OPB9001B	OPB9001C
Package	PCB assembly	PCB assembly	PCB assembly	PCB assembly
Package Termination	4-pin male connector	4-pin male connector	4-pin male connector	PCB Assembly
Output Type	NPN - Open Collector	NPN - Open Collector	NPN - Open Collector	NPN - Open Collector
Wavelength (nm)	850	850	850	850
Test Distance	6mm	6mm	6mm	6mm
Supply Voltage (V)	4.5V ~ 32V	4.5V ~ 32V	4.5V ~ 24V	3.3V ~ 5.5V
I _f (mA) Typ/Max or Min/Max	28 / 40	28 / 40	28 / 40	28 / 150
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C

SLOTTED SWITCHES

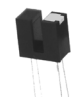
Slotted Switches



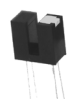
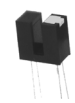
Model Number	OPB120B	OPB200	OPB315L	OPB315WZ	OPB355T	OPB360L11
Package	L Package	N Package	T Package	T Package	T Package	L Package
Output Type	Photologic	Phototransistor	Phototransistor	Phototransistor	Photodiode	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Wires	Through-Hole	Through-Hole
Wavelength (nm)	890	890	850	850	890	890
Supply Voltage (V)	4.75-5.25	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.080" / 0.255"	0.200" / 0.320"	0.900" / 0.460"	0.900" / 0.460"	0.123" / 0.345"	0.123" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.04" / 0.01"	None	0.03"R / 0.03"R	0.03"R / 0.03"R	0.01" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ +70°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



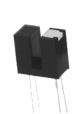
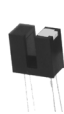
Model Number	OPB360L51	OPB360L55	OPB360N51	OPB360T51	OPB360T55	OPB365L51
Package	L Package	L Package	N Package	T Package	T Package	L Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB365N11	OPB365N51	OPB365N55	OPB365P55	OPB365T55	OPB370L55
Package	N Package	N Package	N Package	P Package	T Package	L Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



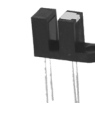
Model Number	OPB370N51	OPB370N55	OPB370T11	OPB370T51	OPB370T55	OPB375L11
Package	N Package	N Package	T Package	T Package	T Package	L Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



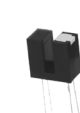
Model Number	OPB375N51	OPB375T11	OPB375T55	OPB380L51Z	OPB380L55Z	OPB380N11Z
Package	N Package	T Package	T Package	L Package	L Package	N Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.01" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB380P51Z	OPB380P55Z	OPB380T11Z	OPB380T51Z	OPB380T55Z	OPB390L11Z
Package	P Package	P Package	T Package	T Package	T Package	L Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB390L51Z	OPB390L55Z	OPB390P11Z	OPB390P51Z	OPB390P55Z	OPB390T11Z
Package	L Package	L Package	P Package	P Package	P Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



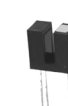
Model Number	OPB390T51Z	OPB390T55Z	OPB420AZ	OPB420BZ	OPB460N11	OPB460T11
Package	T Package	T Package	90° Corner Package	90° Corner Package	N Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Rbe Phototransistor	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V-24V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	None	None	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	N/A	N/A	0.01" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB461L11	OPB461T11	OPB463N11	OPB463T11	OPB470N11	OPB471L11
Package	L Package	T Package	N Package	T Package	N Package	L Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB471N11	OPB472N11	OPB473N11	OPB480L11Z	OPB480T11Z	OPB481L11Z
Package	N Package	N Package	N Package	L Package	T Package	I Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB481T11Z	OPB482P11Z	OPB483L11Z	OPB483P11Z	OPB490P11Z	OPB490T11Z
Package	T Package	P Package	L Package	P Package	P Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



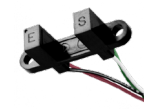
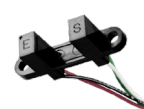
Model Number	OPB491L11Z	OPB491T11Z	OPB492L11Z	OPB492T11Z	OPB493T11Z	OPB610
Package	L Package	T Package	L Package	T Package	T Package	N Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Rbe Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	3V - 24V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.150" / 0.240"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.01" / 0.01"	0.06" / 0.06"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 100°C



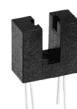
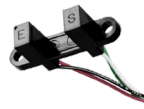
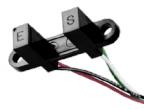
Model Number	OPB615	OPB616	OPB618	OPB620	OPB621	OPB625
Package	N Package	N Package	N Package	N Package	N Package	N Package
Output Type	Photologic	Photologic	Photologic	Rbe Phototransistor	Photodiode	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	3V-22V	3V-24V	3V-60V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.150" / 0.240"	0.150" / 0.240"	0.150" / 0.240"	0.190" / 0.285"	0.190" / 0.285"	0.190" / 0.285"
Aperture Width Emitter/Sensor (Inches)	None	None	None	0.06" / 0.06"	0.06" / 0.06"	None
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OPB626	OPB627	OPB628	OPB660N	OPB665N	OPB666N
Package	N Package	N Package	N Package	N Package	N Package	N Package
Output Type	Photologic	Photologic	Photologic	Rbe Phototransistor	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	3V - 24V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.190" / 0.285"	0.190" / 0.285"	0.190" / 0.285"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	None	None	None	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C



Model Number	OPB667N	OPB800L51	OPB800L55	OPB800W51Z	OPB800W55Z	OPB801L55
Package	N Package	T Package	T Package	T Package	T Package	T Package
Output Type	Photologic	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Wires	Wires	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.375" / 0.350"	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 100°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 85°C



Model Number	OPB801W55Z	OPB802L55	OPB802W55Z	OPB804	OPB806	OPB810L51
Package	T Package	T Package	T Package	N Package	T Package	L Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Through-Hole	Wires	Through-Hole	Leads	Through-Hole
Wavelength (nm)	890	890	890	935	935	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"	0.155" / 0.330"	0.125" / 0.375"	0.375" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.06" / 0.06"	None	0.05" / 0.01"
Operating Temperature	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB810W51Z	OPB810W55Z	OPB811L55	OPB811W55Z	OPB812L55	OPB812W55Z
Package	T Package	T Package	T Package	T Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Through-Hole	Wires	Through-Hole	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"	0.375" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 80°C



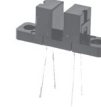
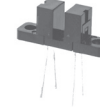
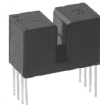
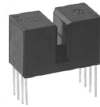
Model Number	OPB815L	OPB815WZ	OPB816Z	OPB817Z	OPB818	OPB819Z
Package	T Package	T Package	T Package	T Package	N Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Wires	Wires	Wires	Through-Hole	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.375" / 0.430"	0.375" / 0.430"	0.200" / 0.610"	0.200" / 0.860"	0.200" / 0.250"	1.26" / 1.38"
Aperture Width Emitter/Sensor (Inches)	None	None	0.05" / 0.01"	0.05" / 0.01"	0.06" / 0.06"	0.06" / 0.06"
Operating Temperature	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 85°C



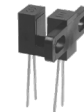
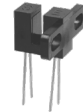
Model Number	OPB820S10	OPB820S3	OPB820S5	OPB821S10Z	OPB821S3Z	OPB821S5Z
Package	P Package	P Package	P Package	P Package	P Package	P Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.080" / 0.255"	0.080" / 0.255"	0.080" / 0.255"	0.080" / 0.255"	0.080" / 0.255"	0.080" / 0.255"
Aperture Width Emitter/Sensor (Inches)	0.04" / 0.01"	0.04" / 0.003"	0.04" / 0.005"	0.04" / 0.01"	0.04" / 0.003"	0.04" / 0.005"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB821TX	OPB821Z	OPB822S	OPB822SD	OPB825	OPB825A
Package	P Package	P Package	Dual Channel	Dual Channel	N Package	P Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Wires	Through-Hole	Wires	Wires	Wires
Wavelength (nm)	890	890	935	935	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.080" / 0.255"	0.080" / 0.255"	0.09" / 0.030"	0.09" / 0.030"	0.080" / 0.255"	0.080" / 0.255"
Aperture Width Emitter/Sensor (Inches)	0.04" / 0.04"	0.04" / 0.04"	None / 0.01"	0.01" / 0.01"	NA / NA	NA / NA
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



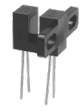
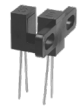
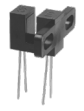
Model Number	OPB826S	OPB826SD	OPB827A	OPB828C	OPB828D	OPB829AZ
Package	Dual Channel	Dual Channel	T Package	T Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.100" / 0.420"	0.100" / 0.420"	0.120" / 0.315"	0.120" / 0.315"	0.120" / 0.315"	0.120" / 0.315"
Aperture Width Emitter/Sensor (Inches)	NA / 0.04"	0.04" / 0.04"	none	none / 0.06"	none / 0.01"	none
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 80°C



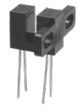
Model Number	OPB829CZ	OPB829DZ	OPB830L11	OPB830L51	OPB830L55	OPB830W11Z
Package	T Package	T Package	N Package	N Package	N Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Through-Hole	Through-Hole	Through-Hole	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"
Aperture Width Emitter/Sensor (Inches)	none/0.06"	none/0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"
Operating Temperature	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 80°C



Model Number	OPB830W51Z	OPB830W55Z	OPB831W51Z	OPB831W55Z	OPB832W51Z	OPB832W55Z
Package	T Package	T Package	T Package	T Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C



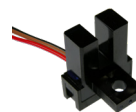
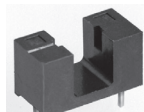
Model Number	OPB835L11	OPB840L11	OPB840L51	OPB840L55	OPB840W11Z	OPB840W51Z
Package	N Package	N Package	N Package	N Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 80°C



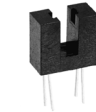
Model Number	OPB840W55Z	OPB841L55	OPB841W51Z	OPB841W55Z	OPB842W51Z	OPB842W55Z
Package	T Package	N Package	T Package	T Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Through-Hole	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 80°C



Model Number	OPB847	OPB847TX	OPB848	OPB852A1	OPB852A2	OPB853A1
Package	N Package	N Package	N Package	T Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Photodarlington
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 50V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.100" / 0.250"	0.100" / 0.250"	0.100" / 0.250"	0.120" / 0.315"	0.120" / 0.315"	0.120" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.025" / 0.025"	0.025" / 0.025"	0.025" / 0.025"	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-65°C ~ 125°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB853A3	OPB854A3	OPB855	OPB857Z	OPB859	OPB860N51
Package	T Package	T Package	N Package	Slotted Switch	T Package	N Package
Output Type	Photodarlington	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Wires	Through-Hole	Through-Hole
Wavelength (nm)	890	890	935	890	890	880
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 24V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.120" / 0.315"	0.100" / 0.250"	0.205" / 0.220"	0.150" / 0.355"	0.125" / 0.345"	0.120" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.06" / 0.06"	0.06" / 0.06"	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 80°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB860N55	OPB860T11	OPB861N55	OPB861T55	OPB862T51	OPB865N11
Package	N Package	T Package	N Package	T Package	T Package	N Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB865N51	OPB865T11	OPB865T51	OPB865T55	OPB866P55	OPB866T51
Package	N Package	T Package	T Package	T Package	P Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB866T55	OPB867T55	OPB870N11	OPB870N51	OPB870N55	OPB870P55
Package	T Package	T Package	N Package	N Package	N Package	P Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB870T51	OPB870T51TX	OPB871N51	OPB871N55	OPB871T55	OPB872T55
Package	T Package	T Package	N Package	N Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 50V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 85°C	-65°C ~ 125°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB875N51	OPB876N55	OPB876T55	OPB877N55	OPB877T55	OPB880L51Z
Package	N Package	N Package	T Package	N Package	T Package	L Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB880N11Z	OPB880N55Z	OPB880P51Z	OPB880P55Z	OPB880T11Z	OPB880T51Z
Package	N Package	N Package	P Package	P Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB880T55Z	OPB881L51Z	OPB881L55Z	OPB881T51Z	OPB881T55Z	OPB882T51Z
Package	T Package	L Package	L Package	T Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



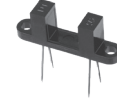
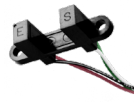
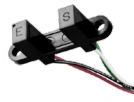
Model Number	OPB882T55Z	OPB885Z	OPB890L11Z	OPB890P11Z	OPB890P51Z	OPB890P55Z
Package	T Package	P Package	L Package	P Package	P Package	P Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.375" / 0.595"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.05"	0.01" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



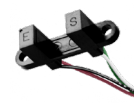
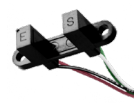
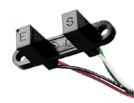
Model Number	OPB890T11Z	OPB890T51Z	OPB890T55Z	OPB891P55Z	OPB891T51Z	OPB891T55Z
Package	T Package	T Package	T Package	P Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor	Phototransistor
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V	3V - 30V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C



Model Number	OPB892L51Z	OPB892T55Z	OPB900L55	OPB900W51Z	OPB900W55Z	OPB901L55
Package	L Package	T Package	T Package	T Package	T Package	T Package
Output Type	Phototransistor	Phototransistor	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Through-Hole	Wires	Wires	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	3V - 30V	3V - 30V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.315"	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



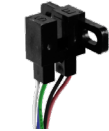
Model Number	OPB901W55Z	OPB902W55Z	OPB903L55	OPB903W55Z	OPB910L55	OPB910W55Z
Package	T Package	T Package	T Package	T Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Through-Hole	Wires	Through-Hole	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V
Slot Width/Depth (Inches)	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB911L55	OPB911W55Z	OPB912W55Z	OPB913W55Z	OPB916BOCZ	OPB916BZ
Package	T Package	T Package	T Package	T Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	880	880
Supply Voltage (V)	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"	0.375" / 0.350"	0.200" / 0.635"	0.200" / 0.635"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 80°C	-40°C ~ 80°C



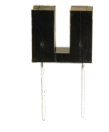
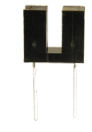
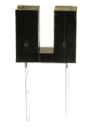
Model Number	OPB917BOCZ	OPB917BZ	OPB920DZ	OPB930L51	OPB930L55	OPB930W51Z
Package	T Package	T Package	90° Corner Package	T Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Through-Hole	Through-Hole	Wires
Wavelength (nm)	880	880	890	880	880	880
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V
Slot Width/Depth (Inches)	0.200" / 0.885"	0.200" / 0.885"	None	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.01"		0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"
Operating Temperature	-40°C ~ 80°C	-40°C ~ 80°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



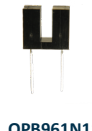
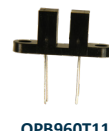
Model Number	OPB930W55Z	OPB931W51Z	OPB931W55Z	OPB932W51Z	OPB932W55Z	OPB933W51Z
Package	T Package	T Package	T Package	T Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	880	880	880	880	880	880
Supply Voltage (V)	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V
Slot Width/Depth (Inches)	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



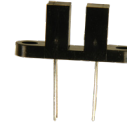
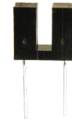
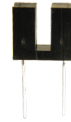
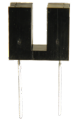
Model Number	OPB933W55Z	OPB940W51Z	OPB940W55Z	OPB941W51Z	OPB941W55Z	OPB942W55Z
Package	T Package	T Package	T Package	T Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	880	880	880	880	880	880
Supply Voltage (V)	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V	4.75V ~ 5.25V
Slot Width/Depth (Inches)	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"	0.125" / 0.315"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



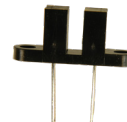
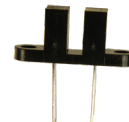
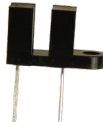
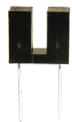
Model Number	OPB943W51Z	OPB950Z	OPB960L51	OPB960N11	OPB960N51	OPB960N55
Package	T Package	Dual Channel	L Package	N Package	N Package	N Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Connector	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	880	890	890	890	890	890
Supply Voltage (V)	4.75V ~ 5.25V	4.75V ~ 5.25V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.315"	0.200" / 0.350"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 85°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



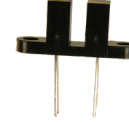
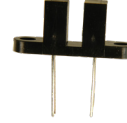
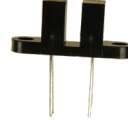
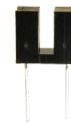
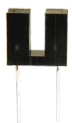
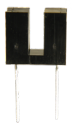
Model Number	OPB960P51	OPB960T11	OPB960T51	OPB960T55	OPB961N11	OPB961N51
Package	P Package	T Package	T Package	T Package	N Package	N Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



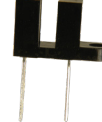
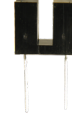
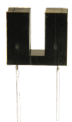
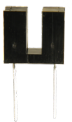
Model Number	OPB961N55	OPB961T51	OPB962N51	OPB962N55	OPB962T51	OPB962T55
Package	N Package	T Package	N Package	N Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB963N11	OPB963N51	OPB963P51	OPB963T11	OPB963T51	OPB963T55
Package	N Package	N Package	P Package	T Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 85°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB970N11	OPB970N51	OPB970N55	OPB970T11	OPB970T51	OPB970T55
Package	N Package	N Package	N Package	T Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB971N11	OPB971N51	OPB971T11	OPB972L51	OPB972N51	OPB972P51
Package	N Package	N Package	T Package	L Package	N Package	P Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB972T51	OPB972T55	OPB973L51	OPB973N11	OPB973N51	OPB973T51
Package	T Package	T Package	L Package	N Package	N Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole	Through-Hole
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



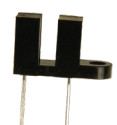
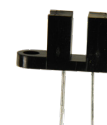
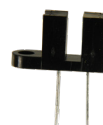
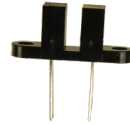
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Package	T Package	L Package	L Package	L Package	P Package	P Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Through-Hole	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



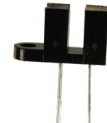
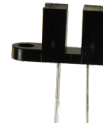
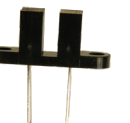
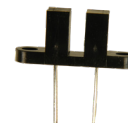
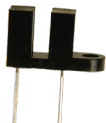
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Package	P Package	T Package	T Package	T Package	L Package	L Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



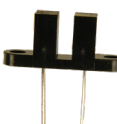
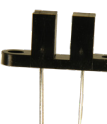
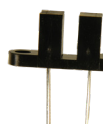
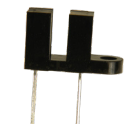
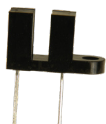
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Package	L Package	P Package	T Package	T Package	T Package	P Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.05"	0.01" / 0.01"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



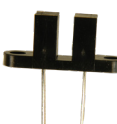
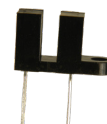
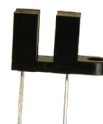
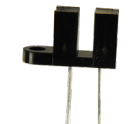
Model Number	OPB982P51Z	OPB982T51Z	OPB982T55Z	OPB983L11Z	OPB983L51Z	OPB983P11Z
Package	P Package	T Package	T Package	L Package	L Package	P Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



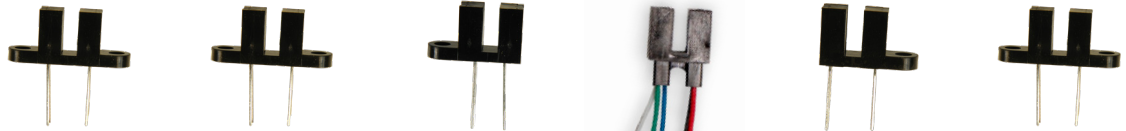
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Package	P Package	P Package	T Package	L Package	L Package	L Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



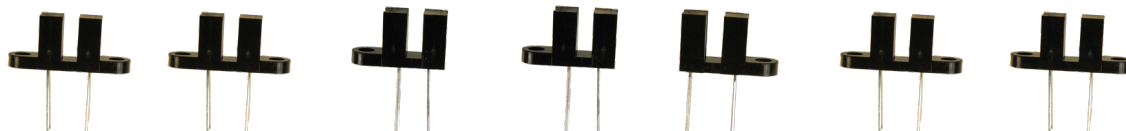
Model Number	OPB990P11Z	OPB990P51Z	OPB990P55Z	OPB990T11Z	OPB990T51Z	OPB990T55Z
Package	P Package	P Package	P Package	T Package	T Package	L Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB991L11Z	OPB991L51Z	OPB991L55Z	OPB991P11Z	OPB991P51Z	OPB991T11Z
Package	L Package	L Package	L Package	P Package	P Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.01" / 0.01"	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB991T51Z	OPB991T55Z	OPB992L51Z	OPB992N55Z	OPB992P51Z	OPB992T11Z
Package	T Package	T Package	L Package	N Package	P Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.01" / 0.01"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C



Model Number	OPB992T51Z	OPB992T55Z	OPB993L11Z	OPB993L55Z	OPB993P51Z	OPB993T51Z	OPB993T55Z
Package	T Package	T Package	L Package	L Package	P Package	T Package	T Package
Output Type	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic	Photologic
Termination	Wires	Wires	Wires	Wires	Wires	Wires	Wires
Wavelength (nm)	890	890	890	890	890	890	890
Supply Voltage (V)	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V	4.5V ~ 16V
Slot Width/Depth (Inches)	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"	0.125" / 0.345"
Aperture Width Emitter/Sensor (Inches)	0.05" / 0.01"	0.05" / 0.05"	0.01" / 0.01"	0.05" / 0.05"	0.05" / 0.01"	0.05" / 0.01"	0.05" / 0.05"
Operating Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C

Flag Switches



Model Number	OPB680	OPB680-20	OPB690Z	OPB695AZ	OPB696AZ	OPB850-1Z	OPB850A
Output Type	Rbe Phototransistor	Rbe Phototransistor	Rbe Phototransistor	Photologic	Photologic	Rbe Phototransistor	Phototransistor
Termination	Through-Hole	Through-Hole	Connector	Connector	Connector	Wires	Wires
Wavelength (nm)	890	890	890	890	890	880	940
Supply Voltage (V)	3V-22V	3V-22V	3V-22V	4.5V ~ 8V	4.5V ~ 8V	3V-22V	3V - 24V
Slot Width/Depth (Inches)	None	None	None	None	None	None	None
Operating Temperature	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-40°C ~ 100°C	-20°C ~ 75°C	-20°C ~ 75°C

VISIBLE LEDs

Visible LEDs

Visible LEDs - 3mm Round Visible LEDs



Model Number	OVLAW4CB7	OVLBB4C7	OVLBG4C7	OVLBR4C7	OVLBY4C7
Package	3 mm Round	3 mm Round	3 mm Round	3 mm Round	3 mm Round
IV at IF=mA/Typ	20/6,200 mcd	20/1,800 mcd	20/8,400 mcd	20/3,700 mcd	20/3,700 mcd
VF (Typ)	3.2	3.2	3.2	2	2
Beam Angle (Degrees)	40°	45°	45°	45°	45°
Lens Color	Clear	Clear	Clear	Clear	Clear
Dominant λD	6250°K to 8900°K	470 nm	525 nm	623 nm	589 nm
Color	White	Blue	Green	Red	Yellow
Material	InGaN	InGaN	InGaN	AllnGaP	AllnGaP

Visible LEDs - 5mm Round Visible LEDs



Model Number	OVLAW1CB9	OVLFB3C7	OVLFG3C7	OVLFR3C7	OVLFY3C7	OVLGB0C6B9	OVLGC0C6B9	OVLGS0C8B9	OVLGY0C9B9
Package	5mm Round	5mm Round	5mm Round	5mm Round	5mm Round	5mm Round	5mm Round	5mm Round	5mm Round
IV at IF=mA/Typ	20/35,000 mcd	20/5,200mcd	20/16,000mcd	20/7,400 mcd	20/7,400mcd	20/7,200 mcd	20/23,000 mcd	20/14,000 mcd	20/14,000 mcd
VF (Typ)	3.2	3.4	3.4	2.0	2.0	3.2	3.2	2	2
Beam Angle (Degrees)	15°	30°	30°	30°	30°	15°	15°	8°	8°
Lens Color	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Dominant λD	5000°K to 9000°K	470 nm	525 nm	623 nm	589 nm	470 nm	505 nm	623 nm	589 nm
Color	White	Blue	Green	Red	Yellow	Blue	Blue - Green	Red	Yellow
Material	InGaN	InGaN	InGaN	AllnGaP	AllnGaP	InGaN	InGaN	AllnGaP	AllnGaP

Visible LEDs - 5mm Cylindrical Visible LEDs



Model Number	OVLB8C7	OVLG8C7	OVLR8C7	OVLRY8C7
Package	5mm Cylinder	5mm Cylinder	5mm Cylinder	5mm Cylinder
IV at IF=mA/Typ	20/440 mcd	20/2,400 mcd	20/900 mcd	20/900 mcd
VF (Typ)	3.2	3.2	2	2
Beam Angle (Degrees)	85°	85°	100°	100°
Lens Color	Clear	Clear	Clear	Clear
Dominant λD	470 nm	525 nm	623 nm	589 nm
Color	Blue	Green	Red	Yellow
Material	InGaN	InGaN	AllnGaP	AllnGaP

High Power - 3.5mm Surface Mount



Model Number	OV55MABCR4	OV55MBBCR4	OV55MBCR4	OV55MRBCR4	OV55MWBCR4	OV55MWWBCR4
Package	3.5mm mini half-watt	3.5mm mini half-watt	3.5mm mini half-watt	3.5mm mini half-watt	3.5mm mini half-watt	3.5mm mini half-watt
Flux/IV at IF=mA/Typ	140/7150 mcd	150/8.2 lm	150/22 lm	140/7150 mcd	150/50lm	150/30 lm
VF (Typ)	2.2	3.4	3.4	2.2	3.4	3.6
Viewing Angle (Degrees)	120°	120°	120°	120°	120°	120°
Lens Color	Clear	Clear	Clear	Clear	Clear	Clear
Dominant λD	615 nm	465 nm	525 nm	625 nm	4500K to 10000K	2850K to 3800K
Color	Amber	Blue	Green	Red	White	Warm White
Material	AllInGaP	InGaN	InGaN	AllInGaP	InGaN	InGaN

Package Type - PLCC Visible LEDs



Model Number	OVSA1ABC2R8	OVSA1ABLCR8	OVSA1BBC2R8	OVSA1GBC2R8	OVSA1SBC2R8	OVSA1SBLCR8
Package	PLCC4	PLCC4 domed	PLCC4	PLCC4	PLCC4	PLCC4 domed
IV at IF=mA/Typ	50/1,500 mcd	50/5,000 mcd	30/650 mcd	30/3,200mcd	50/1,600mcd	50/3,700 mcd
VF (Typ)	2.4	2.5	3.6	3.6	2.4	2.5
Viewing Angle (Degrees)	120°	60°	120°	120°	120°	60°
Lens Color	Clear		Clear	Clear	Clear	
Dominant λD	591 nm	591 nm	470 nm	527 nm	624 nm	624 nm
Color	Amber	Amber	Blue	Green	Red	Red
Material	AllInGaP	AllInGaP	InGaN	InGaN	AllInGaP	AllInGaP



Model Number	OVSARGB4R8	OVSTRGBB1CR8
Package	PLCC4	PLCC6
IV at IF=mA/Typ	20/635mcd, 1000mcd, 335mcd	50/700mcd, 1800mcd, 400mcd
VF (Typ)	R=2.0 G=3.2 B=3.2	R=2.0 G=3.2 B=3.2
Viewing Angle (Degrees)	120°	120°
Lens Color	Diffused	Diffused
Dominant λD	622nm, 530nm, 470nm	622nm,530nm,470nm
Color	Red, Green, Blue	Red, Green, Blue
Material	AllInGaP, InGaN, InGaN	AllInGaP, InGaN, InGaN

Package Type - Super Flux 4-Pin Visible LEDs



Model Number	OVFSRAC8	OVFSW6C8
Package	7.6mm	7.6mm
Flux at IF=mA/Typ	70/8,000 mlm	30/7,000 mlm
VF (Typ)	2.5	3.6
Viewing Angle (Degrees)	100°	60°
Lens Color	Clear	Clear
Dominant λD	628 nm	5000°K to 10000° K
Color	Red	White
Material	AllnGaP	InGaN

Package Type - Surface Mount Visible LEDs



Model Number	OVSRRGBCC3	OVSRRGBCC3TM
Package	Side Mount	Side Mount
IV at IF=mA/Typ	20/105mcd, 330mcd, 200mcd	20/105mcd, 330mcd, 200mcd
VF (Typ)	R:2.0 G&B:3.3	R:2.0 G&B:3.3
Viewing Angle (Degrees)	150°	150°
Lens Color	White Diffused	White Diffused
Dominant λD	R:625 G:530 B:475	R:625 G:530 B:475
Color	RGB	RGB
Material	R:AllnGaP G&B:InGaN	R:AllnGaP G&B:InGaN

Signage and Channel Lettering



Model Number	OVM12F3B7	OVM12F3G7	OVM12F3R7	OVM12F3W7	OVM12F3Y7	OVQ12S30B7
Package	Module Strip / Waterproof Sealed	Module Strip / Waterproof Sealed	Module Strip / Waterproof Sealed	Module Strip / Waterproof Sealed	Module Strip / Waterproof Sealed	Flexible LED Light Strip
E at IF=mA/Typ	6 lux@0.5m	14 lux@0.5m	20 lux@0.5m	16 lux@0.5m	18 lux@0.5m	20 lux@0.5m
VF (Typ)	12V	12V	12V	12V	12V	12V
Viewing Angle (Degrees)	120°	120°	120°	120°	120°	120°
Lens Color	Clear	Clear	Clear	Clear	Clear	Clear
Dominant λD	470 +/- 5nm	525 +/- 5nm	623 +/- 3 nm	5000 to 7000 K	590 +/- 3nm	470nm
Color	Blue	Green	Red	White	Yellow	Blue
Material	InGaN	InGaN	AllnGaP	InGaN	AllnGaP	InGaN

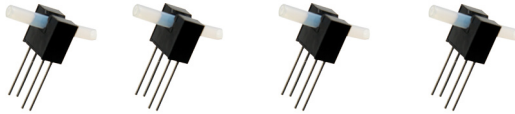


Model Number	OVQ12S30G7	OVQ12S30R7	OVQ12S30W7	OVQ12S30Y7
Package	Flexible LED Light Strip	Flexible LED Light Strip	Flexible LED Light Strip	Flexible LED Light Strip
E at IF=mA/Typ	50 lux@0.5m	32 lux @ 0.5m	68 lux@0.5m	32 lux@0.5m
VF (Typ)	12V	12V	12V	12V
Viewing Angle (Degrees)	120°	120°	120°	120°
Lens Color	Clear	Clear	Clear	Clear
Dominant λD	525nm	625nm	5500°K	590nm
Color	Green	Red	White	Yellow
Material	InGaN	AllnGaP	InGaN	AllnGaP

FLUID SENSORS

Fluid Sensors

Self-Calibration Board with Fluid Sensor



Model Number	OCB350L062Z	OCB350L125Z	OCB350L187Z	OCB350L250Z
Output	Analog & Logic	Analog & Logic	Analog & Logic	Analog & Logic
Termination	Mating Cable included	Mating Cable included	Mating Cable included	Mating Cable included
Wavelength (nm)	890	890	890	890
Supply Voltage (V)	4.75V-5.25V	4.75V-5.25V	4.75V-5.25V	4.75V-5.25V
Arc Slot Diameter	1/16"	1/8"	3/16"	1/4"
Operating Temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C	0°C to +70°C

Self-Calibration Board for Through-Hole Devices



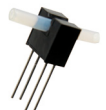
Model Number	OCB100AZ
Output	Analog & Logic
Termination	Mating Cable included
Wavelength (nm)	N/A
Supply Voltage (V)	4.5V - 5.5V
Slot Width/Depth (Inches)	None
Operating Temperature	-0°C to +70°C

Self-Calibration Board for Wired Devices



Model Number	OCB100CZ
Output	Analog & Logic
Termination	Mating Cable included
Wavelength (nm)	N/A
Supply Voltage (V)	4.5V - 5.5V
Slot Width/Depth (Inches)	None
Operating Temperature	-0°C to +70°C

Slotted Switch, N Package



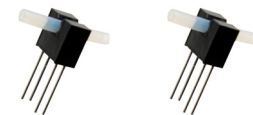
Model Number	OPB350
Output	Phototransistor
Termination	Through-Hole
Wavelength (nm)	890
Supply Voltage (V)	3V-22V
Arc Slot Diameter	1/8"
Operating Temperature	-40°C to +85°C

Fluid Sensor for 1/16" Tube



Model Number	OPB350L062	OPB350W062Z
Output	Rbe Phototransistor	Rbe Phototransistor
Termination	Through-Hole	Wires
Wavelength (nm)	890	890
Supply Voltage (V)	3V-22V	3V-22V
Arc Slot Diameter	1/16"	1/16"
Operating Temperature	-40°C to +85°C	-40°C to +85°C

Fluid Sensor for 3/16" Tube



Model Number	OPB350L187	OPB350W187Z
Output	Rbe Phototransistor	Rbe Phototransistor
Termination	Through-Hole	Wires
Wavelength (nm)	890	890
Supply Voltage (V)	3V-22V	3V-22V
Arc Slot Diameter	3/16"	3/16"
Operating Temperature	-40°C to +85°C	-40°C to +85°C

Fluid Sensor for 1/8" Tube



Model Number	OPB350L125	OPB350W125Z
Output	Rbe Phototransistor	Rbe Phototransistor
Termination	Through-Hole	Wires
Wavelength (nm)	890	890
Supply Voltage (V)	3V-22V	3V-22V
Arc Slot Diameter	1/8"	1/8"
Operating Temperature	-40°C to +85°C	-40°C to +85°C

Fluid Sensor for 1/4" Tube

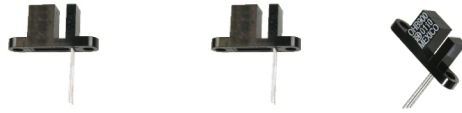


Model Number	OPB350L250	OPB350W250Z
Output	Rbe Phototransistor	Rbe Phototransistor
Termination	Through-Hole	Wires
Wavelength (nm)	890	890
Supply Voltage (V)	3V-22V	3V-22V
Arc Slot Diameter	1/4"	1/4"
Operating Temperature	-40°C to +85°C	-40°C to +85°C

HIGH-RELIABILITY SENSORS

HIGH-RELIABILITY SENSORS

Hall Effect Sensors



Model Number	OHB3040	OHB3040S	OHB900
Package	Slotted Switch	Slotted Switch	Slotted Switch
Output Type	Logic	Logic	Logic
Supply Current I _{cc} (typ/max)	4mA / 7 mA	4mA / 7 mA	4mA / 7 mA
Supply Voltage V _{cc} (Typ/Max)	4.5V/24V	4.5V/24V	4.5V/24V
Output Rise Time (Typ/Max)	0.21/1 us	0.21/1 us	0.21/1 us
Output Fall Time (Typ/Max)	0.1/1 us	0.1/1 us	0.1/1 us



Model Number	OMH090B	OMH090S	OMH3040	OMH3040B	OMH3040S	OMH3075
Package	Side Sensing Ceramic	Side Sensing Ceramic	Side Sensing Ceramic	Side Sensing Ceramic	Side Sensing Ceramic	Bi-Polar Latching
Output Type	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching
Operating Point Gauss (Min/Typ/Max)	50 / 90 / 180	50 / 90 / 180	70 / 150 / 200	70 / 150 / 200	70 / 150 / 200	50 / 150 / 250
Release Point Gauss (Min/Typ/Max)	30 / 65 / 160	30 / 65 / 160	50 / 115 / 180	50 / 115 / 180	50 / 115 / 180	-250 / -150 / -50
Hysteresis Gauss (Min/Typ/Max)	10 / 30 / 60	10 / 30 / 60	10 / 35 / 60	10 / 35 / 60	10 / 35 / 60	100 / 250 / 500
V _{cc} (Volts) Min/Max	4.5 / 24	4.5 / 24	4.5 / 24	4.5 / 24	4.5 / 24.0	4.5 / 24.0



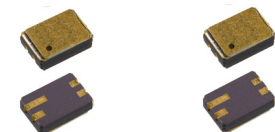
Model Number	OMH3075B	OMH3075S	OMH3150	OMH3150S
Package	Bi-Polar Latching	Bi-Polar Latching	Ratiometric	Ratiometric
Output Type	Uni-Polar Non Latching	Uni-Polar Non Latching	Uni-Polar Non Latching	Bi-Polar Latching
Operating Point Gauss (Min/Typ/Max)	50 / 150 / 250	50 / 150 / 250	2.5 mV/G	2.5 mV/G
Release Point Gauss (Min/Typ/Max)	-250 / -150 / -50	-250 / -150 / -50	NA	NA
Hysteresis Gauss (Min/Typ/Max)	100 / 250 / 500	100 / 250 / 500	2.5 mV/G	2.5 mV/G
V _{cc} (Volts) Min/Max	4.5 / 24.0	4.5 / 24.0	4.5 / 6.0	4.5 / 6.0

Surface Mount NPN Transistor



Model Number	2N2222AUA	2N2222AUB
Package	SMC 4-Pin Ceramic	SMC 3-Pin Ceramic
Rise Time Typ (ns)	35 / 300	35 / 300
Operating Temperature	-65°C ~ 200°C (TJ)	-65°C ~ 200°C (TJ)
V _{CE} , V _{CC} , or V _C (Max)	50	50
Forward-Current Transfer Ratio (min/max) HFE	50 / 325	50 / 325

Surface Mount PNP Transistor



Model Number	2N2907AUA	2N2907AUB
Package	SMC 4-Pin Ceramic	SMC 3-Pin Ceramic
Rise Time Typ (ns)	45 / 300	45 / 300
Operating Temperature	-65°C ~ 200°C (TJ)	-65°C ~ 200°C (TJ)
V _{CE} , V _{CC} , or V _C (Max)	60	60
Forward-Current Transfer Ratio (min/max) HFE	75 / 450	75 / 450

Surface Mount NPN/ PNP Complementary Transistor



Model Number	2N4854U
Package	SMC 6-Pin Ceramic
Rise/Fall Time (Max)	45 / 300
VCE, VCC, or VC (Max)	40
Forward-Current Transfer Ratio (min/max) HFE	50 / 300

Surface Mount Dual NPN Transistor



Model Number	2N5794U
Package	SMC 6-Pin Ceramic
Rise/Fall Time (Max)	45 / 310
VCE, VCC, or VC (Max)	40
Forward-Current Transfer Ratio (min/max) HFE	35 / 300

Surface Mount Dual PNP Transistor



Model Number	2N5796U
Package	SMC 6-Pin Ceramic
Rise/Fall Time (Max)	50 / 140
VCE, VCC, or VC (Max)	60
Forward-Current Transfer Ratio (min/max) HFE	75 / 300

N-Channel Enhancement Mode MOS Transistor



Model Number	HCT700M	HCT700MTX
Package	SMC 3 - Pin Ceramic	SMC 3-Pin Ceramic
Operating Temperature	-55°C ~ 150°C	-55°C ~ 150°C
t(On/Off) (ns) Max	10 / 10	10 / 10
Gfs (ms) Min	100	100
ID (ON) (mA) Min	75	75
VGS(TH) (Volts) Min/Max	0.8 / 3.0	0.8 / 3.0
VDSS (Volts) Min	60	60

High-Reliability GaAIAs Infrared Emitting Diode



Model Number	OP223	OP224	OP224S	OP224TX	OP224TXV
Package	Pill Pack Dome Lens	Pill Pack Dome Lens	Pill Pack Lensed	Pill Pack Dome Lens	Pill Pack Dome Lens
Wavelength (nm)	890	890	890	890	890
Beam Angle (Degrees)	24	24	24	24	24
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C
IF Typ/Max (mA)	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100

High-Reliability Hermetic Infrared Emitting Diode



Model Number	OP235TX	OP236TX	OP236TXV
Package	TO-46 Dome Lens	TO-46 Dome Lens	TO-46 Dome Lens
Lead Spacing	0.100"	0.100"	0.100"
Wavelength (nm)	890	890	890
Beam Angle (Degrees)	18	18	18
Output Power	1.5 / NA	3.5 / NA	3.5 / NA
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C
IF Typ/Max	50 / 100	50 / 100	50 / 100

High-Reliability Photologic Hermetic Sensor



Model Number	OPL800TXV
Package	TO - 18 Dome Lens
Lead Spacing	.100" Dia.
Operating Temperature	-55°C ~ 125°C
VCE, VCC, or VF Typ/Max (V)	4.5 / 10
Input / Output Power (mW/cm2)	0.05 / 0.6

High-Reliability NPN Silicon Phototransistor



Model Number	OP604TXV	OP604S	OP804TX	OP804TXV	OP805TX	OP805TXV
Packaging	Pill Pack Low Lens	Pill Pack Low Lens	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens	TO-18 Dome Lens
Lead Spacing	N/A	N/A	.100" Dia	.100" Dia	.100" Dia	.100" Dia
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-65°C ~ 125°C	-55°C ~ 125°C
Viewing Angle (Degrees)	35	35	25	25	25	25
Input Power (mW/cm2)	20	20	5	5	5	5
Ic(on) light current (mA) Min/Max	7.0 / NA	7.0 / NA	7.0 / NA	7.0 / 22.0	15.0 / NA	15.0/NA
Vce (Volts) Typ/Max	5 / 50	5 / 50	5 / 30	5 / 30	5 / 30	5 / 30

Optically Coupled Isolator



Model Number	3C91C	3C92C	3C92CTX	3N243	3N244	3N245
Package	TO-72	TO-72	TO-72	TO-72	TO-72	TO-72
Sensor Type	Transistor	Transistor	Transistor	Transistor	Transistor	Transistor
Rise / Fall	9µs, 6µs (Max)	9µs, 6µs (Max)	9µs, 6µs (Max)	10µs, 10µs (Max)	10µs, 10µs (Max)	10µs, 10µs (Max)
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C
CTR Min	30% @ 10mA	30% @ 10mA	30% @ 10mA	15% @ 10mA	30% @ 10mA	60% @ 10mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC



Model Number	3N245TX	3N262	4N22	4N22A	4N23	4N23A
Package	TO-72	TO-72	TO-78	TO-78	TO-78	TO-78
Sensor Type	Transistor	Transistor	Transistor w/Base	Transistor w/Base	Transistor w/Base	Transistor w/Base
Rise / Fall	10µs, 10µs (Max)	20µs, 10µs (Max)	15µs, 15µs	15µs, 15µs	15µs, 15µs	15µs, 15µs
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	65°C ~ 125°C	65°C ~ 125°C	65°C ~ 125°C	65°C ~ 125°C
CTR Min	60% @ 10mA	10% @ 1mA	25% @ 10mA	25% @ 10mA	60% @ 10mA	100% @ 10mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC



Model Number	4N24	4N24A	4N48	4N49	4N49A	JAN4N24
Package	TO-78	TO-78	6-Pin Ceramic LCC	TO-78	TO-78	TO-78
Sensor Type	Transistor w/Base	Transistor w/Base	Transistor w/Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base
Rise / Fall	20µs, 20µs	20µs, 20µs	20µs, 20µs	25µs, 25µs	25µs, 25µs	20µs, 20µs
Operating Temperature	65°C ~ 125°C	65°C ~ 125°C	55°C ~ 100°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C
CTR Min	100% @ 10mA	100% @ 10mA	100% @ 1mA	100% @ 1mA	100% @ 1mA	100% @ 1mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC



Model Number	JAN4N24A	JAN4N49	JAN4N49A	JANTX4N22	JANTX4N22A	JANTX4N23A
Package	TO-78	TO-78	TO-78	TO-78	TO-78	TO-78
Sensor Type	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base
Rise / Fall	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C
CTR Min	100% @ 1mA	200% @ 1mA	200% @ 1mA	25% @ 10mA	25% @ 10mA	60% @ 10mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC



Model Number	JANTX4N24	JANTX4N24A	JANTX4N47	JANTX4N48	JANTX4N48A	JANTX4N49
Package	TO-78	TO-78	TO-78	TO-78	TO-78	TO-78
Sensor Type	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base
Rise / Fall	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C
CTR Min	100% @ 1mA	100% @ 10mA	50% @ 1mA	100% @ 1mA	100% @ 1mA	200% @ 1mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC



Model Number	JANTX4N49A	JANTXV4N22	JANTXV4N23	JANTXV4N23A	JANTXV4N47	JANTXV4N48
Package	TO-78	TO-78	TO-78	TO-78	TO-78	TO-78
Sensor Type	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base
Rise / Fall	20µs, 20µs	20µs, 20µs (Max)	20µs, 20µs (Max)	20µs, 20µs (Max)	20µs, 20µs (Max)	-55°C ~ 125°C
Operating Temperature	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	20µs, 20µs (Max)
CTR Min	200% @ 1mA	25% @ 10mA	60% @ 10mA	60% @ 10mA	50% @ 1mA	100% @ 1mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC



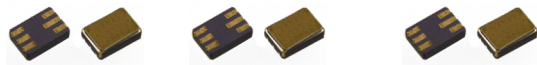
Model Number	JANTXV4N49
Package	TO-78
Sensor Type	Transistor w/ Base
Rise / Fall	-55°C ~ 125°C
Operating Temperature	20µs, 20µs (Max)
CTR Min	200% @ 1mA
Isolation Voltage Min (kV)	1kVDC

Surface Mount Optically Coupled Isolator



Model Number	4N24U	4N47U	4N49U	4N49UTX	JANTX4N24U	JANTX4N49U	JANTX4N49U
Package	6-Pin Ceramic LCC	6-Pin Ceramic LCC	6-Pin Ceramic LCC	6-Pin Ceramic LCC	6-Pin Ceramic LCC	6-Pin Ceramic LCC	TO-72
Sensor Type	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base	Transistor w/ Base
Rise / Fall	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs	20µs, 20µs
Operating Temperature	-65°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C	-55°C ~ 125°C
CTR Min	100% @ 10mA	50% @ 2mA	200% @ 2mA	200% @ 2mA	100% @ 10mA	200% @ 2mA	200% @ 2mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC	1kVDC

RAD Capable Optoisolator



Model Number	HCC1000	HCC1001	HCC1002
Package	TO-78-6 Metal Can	6-CLCC	4-CLCC
Sensor Type	Transistor w/ Base	Transistor w/ Base	Transistor
Rise / Fall	20µs, 20µs (Max)	20µs, 20µs (Max)	20µs, 20µs (Max)
Operating Temperature	-55°C ~ 150°C	-55°C ~ 150°C	-55°C ~ 150°C
CTR Min	100% @ 10mA	100% @ 10mA	100% @ 10mA
Isolation Voltage Min (kV)	1kVDC	1kVDC	1kVDC

Reflective Switch



Model Number	OPB700TX	OPB700TXV
Package	Switch, reflective	Switch, reflective
Package Termination	24" / 26 AWG Wire	24" / 26 AWG Wire
Output Type	Transistor	Transistor
Wavelength (nm)	890	890
Test Distance	0.200" (5.08mm)	0.200" (5.08mm)
Supply Voltage (V)	3V - 24V	3V - 24V
I _F (mA) Typ/Max	40 / 50	40 / 50
Operating Temperature	-65°C ~ 125°C	-65°C ~ 125°C

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