

Fiber Optics

Fiber optic detectors, receivers and transmitters from TT Electronics provide highly reliable electronic signal transmission over extended distances, as well as over their full signal capacity. Fiber optic detectors convert optical signals back into electrical impulses used at the receiving end of the fiber optic data links. The receivers are used to accept these signals. Fiber optic transmitters are then used to convert an electrical input into an optical output from a laser diode or LED. These products are also available with a full range of customisation options to support specific requirements.

Fiber Optic Detector



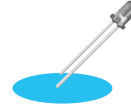
Model Number	OPF482
Package	ST-Tall
Responsivity (mA/mW) Typ	0.45
tr/ta (Typ)(ns)	2
Reverse Voltage (Max)	100

Fiber Optic Transmitters



Model Number	OPF372A
Package	ST-Tall
Wavelength (nm)	850
Coupled Power (dbm/μW) Min	-16/25
I _f (mA) Typ/Max	100
tr/ta (Typ)(ns)	6.0/10.0

Vertical Cavity Surface Emitting Laser in T-1 Package



Model Number	OPV332
Package	T-1 Dome Lens
Wavelength (nm)	850
Total Output Power (mW 50/125) Min	1.5
I _f (mA) Typ/Max	7.0/12
Rise/Fall Time (ps)(Typ)	110/110
Beam Angle (Degrees) (Typ)	4°
Lead Length Min	0.55"
Laser Class	3B

Fiber Optic Transmitters



Model Number	OPF370A
Package	TO-18 Clear Cap
LED Wavelength (nm)	850
Output Power (μW) Min	25
I _f (mA) Typ/Max	100
Rise/Fall Time (ns)	8.0/10.0
Fiber Size (μm)	50/125
Lead Length	0.50"

Fiber Optic Receivers



Model Number	OPF520	OPF522	OPF2412
Package	TO-18 Green Cap	ST-Short	Cube/DIP ST-Panel
Data Rate (Max)	5 Mbps	5 MBd	5 Mbps
Receiver Type	Open Collector Schmitt	Open Collector Schmitt	Open Collector Schmitt
Input Sensitivity (dbm)/(μW)	-40/0.1	-40/0.1	-40/0.1
Responsivity (mV/μW) Min/Max	-	-	-
Peak Input Power (dbm/μW)	-9.2/120	-9.2/120	-9.2/120
Output Type	Digital	Digital	TTL or CMOS
Fiber Size (μm)	100/140	N/A	N/A

VLEDs

VLEDs from TT Electronics are designed to meet or exceed the light output of other industry models. A unique product design features the integrating sphere, which detects the exact color (dominant wavelength or color temperature for white light), the peak wavelength, brightness (total luminous flux), and other parameters at a specified current level (IF). The VLEDs range is available as assemblies, signage and channel lettering, designer kits, flexible strips, surface mount, and module strings. They are also offered with a choice of single color, white, and RGB, as well as in a variety of package types. High power and through-hole mounted versions are also available.

Mini Half-Watt SMD 3.5 mm (120° Viewing Angle)



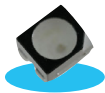
Model Number	OVS5MRBCR4	OVS5MGBCR4	OVS5MBBCR4
Package	3.5 mm mini half-watt	3.5 mm mini half-watt	3.5 mm mini half-watt
Material	AllnGaP	InGaN	InGaN
Color	Red	Green	Blue
Dominant λ D	625 nm	525 nm	465 nm
Lens Color	Clear	Clear	Clear
I_v at I_f =mA/Typ	140/7150 mcd	150/22 lm	150/6 lm
Viewing Angle (Degrees)	120°	120°	120°
V_f (Typ)	2.2	3.4	3.4

Full-Color 1204 SMD (150° Viewing Angle)



Model Number	OVSRRGBCC3	OVSRRGBCC3TM
Package	Side Mount	Top Mount
Material	R:AllnGaP G&B:InGaN	R:AllnGaP G&B:InGaN
Color	RGB	RGB
Dominant λ D	R:625 G:530 B:475	R:625 G:530 B:475
Lens Color	Clear	Clear
I_v at I_f =mA/Typ	R:105 G:330 B:110	R:105 G:330 B:110
Viewing Angle (Degrees)	150°	150°
V_f (Typ)	R:2.0 G&B:3.3	R:2.0 G&B:3.3

Full Color PLCC4 LED



Model Number	OVSARGB4R8
Package	PLCC4
Material	AllnGaP, InGaN, InGaN
Color	RGB
Dominant λ D	622nm, 530 nm, 470 nm
Lens Color	Diffused
I_v at I_f =mA/Typ	635 mcd, 1000 mcd, 335 mcd
Viewing Angle (Degrees)	120°
V_f (Typ)	R=2.3 G=3.6 B=3.6

Flexible LED Light Strip 30 LEDs per strip



Model Number	OVQ12S30W7
Package	Flexible LED Light Strip
Material	InGaN
Color	White
Dominant λ D	5500°K
Lens Color	Clear
I_v at I_f =mA/Typ	68 lux@0.5m
Viewing Angle (Degrees)	120°
V_f (Typ)	12V