

## FL-3620 / PT-3610 SERIES

**(RoHS Compliant)**

### 8-Pin Ethernet Single-Mode Optical Transmitter / Receiver

#### FEATURES

- \* Distance up to 20 km at signal rates of 1 to 20 MBd
- \* 1310 nm wavelength emission
- \* Single-mode fiber operation
- \* Wave solder and aqueous wash process compatible
- \* Panel mount ST connectors (FL-3620 / PT-3610)
- \* Panel mount FC connectors (FL-3620F / PT-3610F)
- \* Industrial standard 8-pin configuration
- \* RoHS Compliant



#### APPLICATION

- \* Single-mode extensions to Ethernet (10-Base-F) links
- \* Single-mode connection

#### DESCRIPTION

FL-3620 / PT-3610 series is specified designed for the Ethernet single-mode transmitter / receiver application.

FL-3620 / FL-3620F ELECTRICAL AND OPTICAL CHARACTERISTICS (T <sub>C</sub> =25 °C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I <sub>th</sub>	Threshold Current	CW	---	12	20	mA
V <sub>OP</sub>	Operating Voltage	I <sub>op</sub> =40mA, SM fiber	---	1.2	1.5	V
P <sub>f</sub>	Fiber Coupled Power		-20	---	-10	dBm
λ	Peak Wavelength		1280	1310	1340	nm
Δλ	Spectrum Width		---	---	5	nm

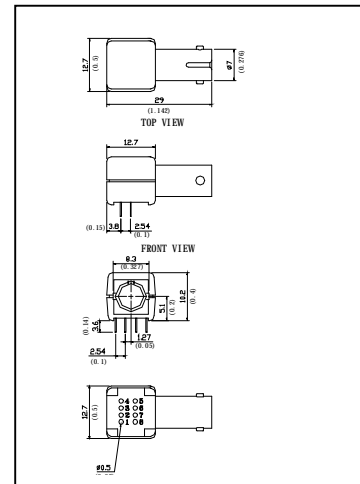
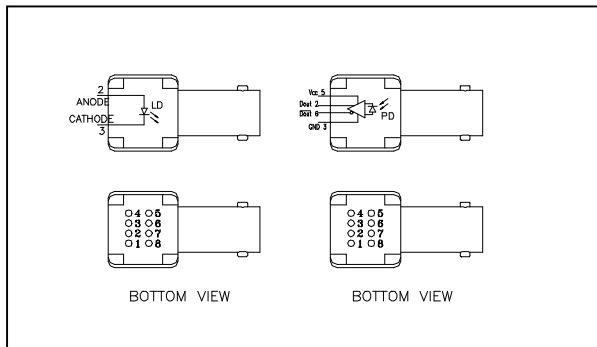
PT-3610 / FL-3610F ELECTRICAL AND OPTICAL CHARACTERISTICS (T <sub>C</sub> =25 °C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Sen	Sensitivity	1 to 20 MBd, SM fiber			-34	dBm
P <sub>in, sat</sub>	Saturation		-5	0	---	dBm
V <sub>CC</sub>	Supply Voltage		4.75	5	5.25	V
I <sub>CC</sub>	Supply Current		20	25	35	mA

Recommended Operating Conditions						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
T <sub>opr</sub>	Operating Temperature		0		70	°C
T <sub>stg</sub>	Storage Temperature		-40		85	°C

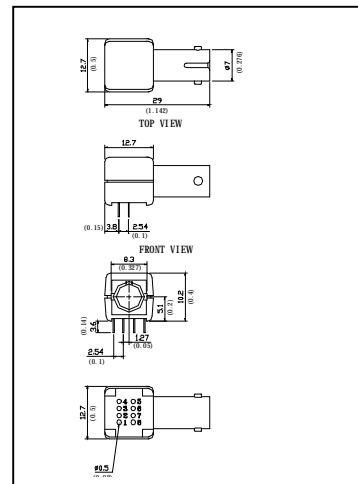
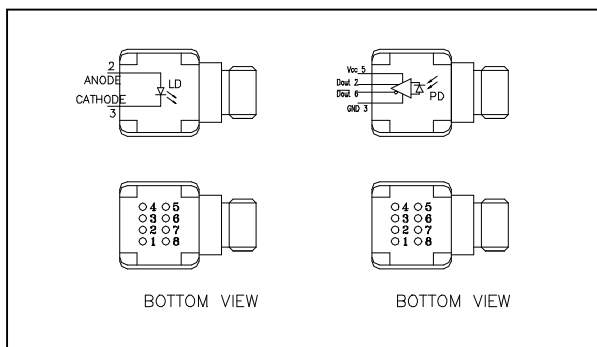
## PINOUT DESCRIPTION

## MECHANICAL DIMENSION (mm)

### 1) FL-3620 / PT-3610 (Panel mount ST connectors)



### 2) FL-3620F / PT-3610F (Panel mount FC connectors)



## PIN ASSIGNMENT

### FL-3620 / FL-3620F

PIN	Function
2	LD Anode
3	LD Cathode
1, 4, 5, 6, 7, 8	No Connect

### PT-3610 / PT-3610F

PIN	Function
2	Dout
3	GND
5	Vcc
6	Dout Bar
1, 4, 7, 8	No Connect

**Note:** Specifications subject to change without notice.

## ORDER INFORMATION

Transmitter	Receiver	Distance (km)	Fiber	Data Rate (MBd)	Connector
FL-3620 / FL-3620F	PT-3610 / PT-3610F	20	SM	1 to 20	ST / FC
FL-3640 / FL-3640F	PT-3610 / PT-3610F	40	SM	1 to 20	ST / FC
FL-5660 / FL-5660F	PT-3610 / PT-3610F	60	SM	1 to 20	ST / FC
FL-5680 / FL-5680F	PT-3610 / PT-3610F	80	SM	1 to 20	ST / FC

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Revision History

Version	Subject	Release Date
1.0	Initial datasheet	2002/6/1
2.0	Combine FL-3620/PT-3610 & FL-3620G/PT-3610G in one data sheet	2007/12/1