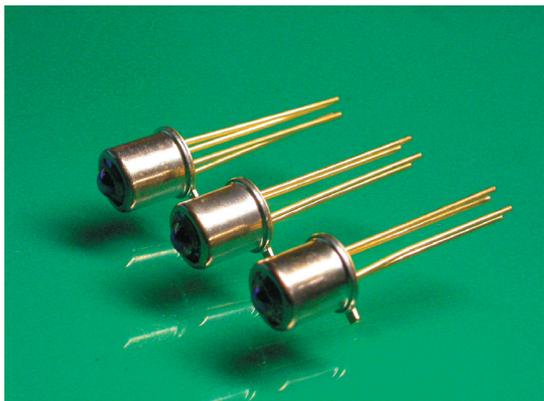


## T-149-622A-G3-B-01



## Features

- InGaAs/InP PIN Photodiode with transimpedance amplifier
- High sensitivity with AGC
- Differential ended output
- 3.3 supply voltage
- -40 to 85°C operating temperature
- Integrated 4-pin TO-46 with ball lens cap package
- 622Mbps SONET/SDH/ATM receivers
- Bi-Directional optical module/transceiver
- RoHS compliance available

## Absolute Maximum Rating (Tc=25°C)

Parameter	Symbol	Min	Max	Unit
Supply Voltage	V <sub>cc</sub>	-	6.5	V
Operating Temperature	T <sub>opr</sub>	-40	+85	°C
Storage Temperature	T <sub>stg</sub>	-40	+85	°C

## DC Electrical Characteristics( Tc=25°C )

Parameter	Symbol	Min	Typical	Max	Unit
Power Supply	V <sub>cc</sub>	3.0	3.3	3.6	V
Differential Output offset Voltage	V <sub>d</sub>	-	+/-5	-	V
Supply Current (Vcc=3.3V)	I <sub>cc</sub>	-	21	30	mA

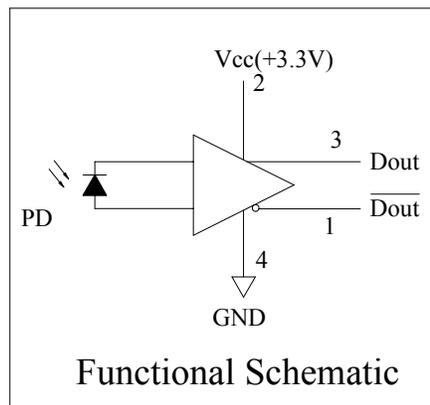
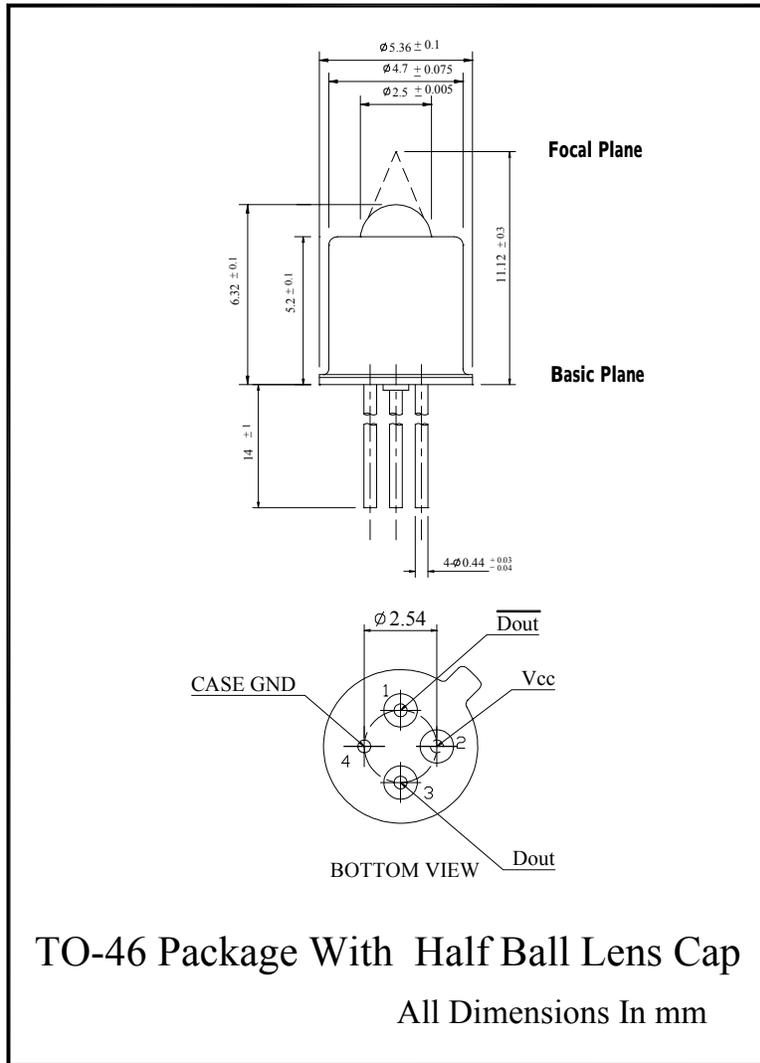
Operating at V<sub>cc</sub> =3.3V, T<sub>c</sub> = 25°C, 9/125μm SM fiber

## AC/Optical and Electrical Characteristics( Tc=25°C )

Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Detection Range	-	1475	1490	1505	nm	-
Wavelength Isolation @ 1310nm+/-50nm&1550nm+/-10nm	-	26	-	-	dB	-
Gain @ 10 Mbps Differential	G	6	7	-	V/mW	Measure differentially AC coupled, RL=50Ω
Bandwidth (to -3dB point)	BW	404	470	-	MHz	-
Saturation Power	P <sub>sat</sub>	-3	0	-	dBm	BER <10 <sup>-10</sup> @ 622Mbps, PRBS 2 <sup>23</sup> -1 Er = 10 dB
Sensitivity	Sens	-	-33	-31	dBm	BER <10 <sup>-10</sup> @ 622Mbps, PRBS 2 <sup>23</sup> -1 Er = 10 dB
Output Resistance	R <sub>out</sub>	48	50	52	Ω	-

T-149-622A-G3-B-01

Package Diagram



T-149-622A-G3-B-01

Ordering Information

Available Options:

- T-149-622A-G3-B-01
- T-149-622A-G3-B-01-G5
- T-149-622A-G3-B-01-GR

<b>T</b>	<b>-</b>	<b>149</b>	<b>-</b>	<b>622</b>	<b>-</b>	<b>A</b>	<b>-</b>	<b>G</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>B</b>	<b>-</b>	<b>01</b>	<b>-</b>	<b>XX</b>
Family		Detection Range		Data Rate		Pinout		Header Type		Supply Voltage		Cap Type		Customer Specifics		RoHS compliance
T=PIN TIA		149=1475nm-1505nm		622=622Mbps		A=A-type		G=TO-46		3=3.3V		B=Ball Lens		Special spec.		Blank = RoHS non-compliant product G5 = RoHS 5/6-compliant product (lead exemption) GR = Full RoHS compliant product (no exemption)

Warnings

**Handling Precautions:** This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

**Laser Safety:** Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

Legal Notice

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