



Features

- Avalanche photodiode with high-performance trans impedance amplifier
- Single 3.3V power supply
- -40 ~85 °C operating temperature for I-temperature application
- Integrated 5-pin TO-46 Ball lens cap package
- 10G EPON ONU / XGPON ONU application

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	V _{cc}	-	3.46	V
Operating Temperature	T _{opr}	-40	85	°C
Storage Temperature	T _{stg}	-40	85	°C

NOTE: Stress level higher than specified value would degrade device performance or reliability significantly

Optical and Electrical Characteristics (T_c=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Power Supply	V _{cc}	2.97	3.30	3.46	V	No loads
Differential Output Voltage	V _{out}	-	300	-	mV	-
Supply Current (no load)	I _{cc}	23	-	34	mA	No loads
Breakdown Voltage(I _d =10uA)	V _{BR}	24	30	37	V	I _d =10uA, TIA off
Responsivity	R	0.7	-	-	A/W	-30dBm input power, O band Wavelength M=1
Detection Range	-	1100	-	1650	nm	CW, 1.25G/10G -
Dark current	I _d	-	-	200	nA	V _{apd} =0.9V _{br} , RT
Bandwidth (to -3dB point)	BW	7	-	-	GHz	M=9, -30dBm
Operating Voltage	V _{OP}	-	0.9V _{BR}	-	V	Best Sensitivity
TO ESD	V	500	-	-	-	HBM

Package Diagram

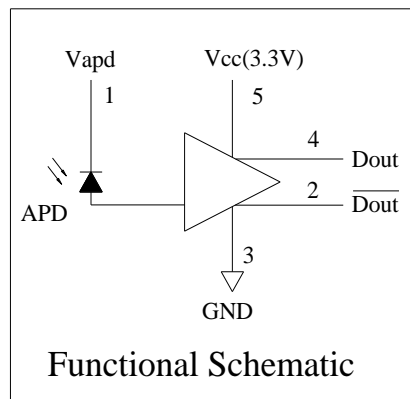
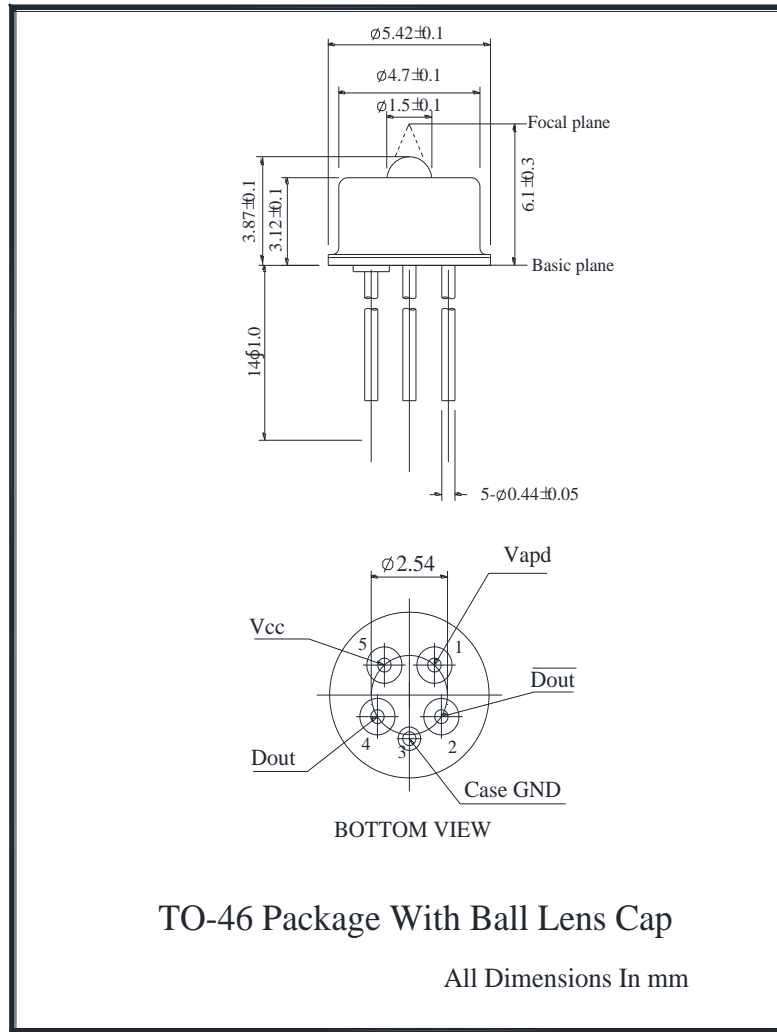


Figure 1 Dimension

Ordering Information

Part No.	Diode Type	Application	Operation Temperature
R-A-TDAB-MWLLA	APD-TIA	Designed for 10G high speed optical network	-40~85°C

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.

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