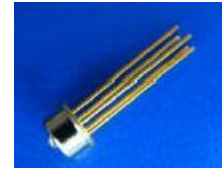




155Mbps InGaAs APD with AGC Pre-Amplifier

APD-A13P5-1MC3

Data Sheet



Features

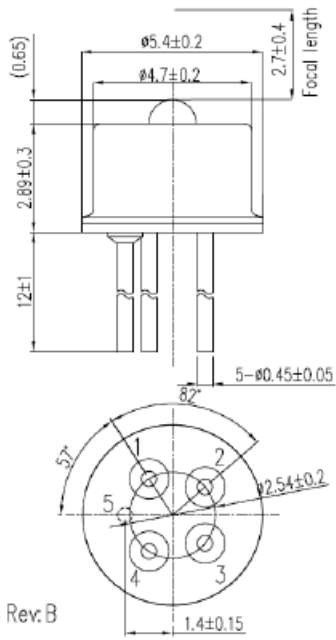
- Industry standard TO-46 package with short cap lens and tab-less
- Optimized for fiber optic application
- Designed for long wavelength 155Mbps applications
- Single power supply +3.3V

Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage temperature	-40	100	°C	
Operating temperature	-40	85	°C	
Lead solder temperature		260	°C	10 seconds

Electro-Optical Characteristics (Typical values are at + 3.3V@25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power supply	V _{CC}	3.0	3.3	3.6	V	
Supply current	I _{CC}			32	mA	No loads
APDTIA breakdown voltage	V _{BR}	34		55	V	I _d = 10uA, V _{CC} =3.3V
Operating voltage	V _{OP}		V _{BR} -3		V	V _{CC} =3.3V
V _{BR} temperature coefficient	γ	0.081	0.11	0.120	V/°C	T=-40 to 25°C
		0.060	0.08	0.099		T=25 to 85°C
Small-signal bandwidth	BW	110			MHz	
Rise/Fall time	tr/tf			4.5	ns	P=-30dBm, V _{apd} =V _{op}
Saturation power	P _{sat}	-7			dBm	λ=1310nm, @155.520Mbps
Single ended output impedance	R _O		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-43	dBm	λ=1310nm, @155.520Mbps, PRBS23, ER=10dB, BER=10 ⁻¹⁰

Outline Dimensions (unit: mm)



Pin Configuration

Pin Number	Function
1	Dout(+)
2	Vcc
3	Vapd
4	Dout(-)
5	Gnd

Note: Specifications are subject to change without notice.