



25Gbps InGaAs APD with Pre-Amplifier

APD-A13P6-25GA3

Data Sheet



Features

- Industry standard TO-46 package with aspherical lens
- Optimized for fiber optic application
- Supports up to 25.78125Gbps applications
- Designed for long wavelength applications
- Single power supply +3.3V

Specifications

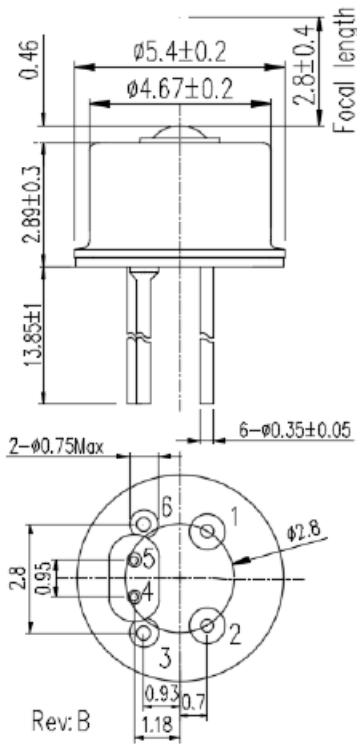
Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage temperature	-40	100	°C	
Operating temperature	-40	85	°C	
Damage power	-3		dBm	
Lead solder temperature		260	°C	10 seconds

Electro-Optical Characteristics (T _A =25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power supply	V _{CC}	3.0	3.3	3.5	V	
Supply current	I _{CC}		29	37	mA	No loads
APDTIA breakdown voltage	V _{BR}	20		37	V	I _d = 10uA
Operating voltage	V _{OP}		V _{BR} -3.5		V	
V _{BR} temperature coefficient	γ		0.02		V/°C	
Differential responsivity	R _d		30		mV/uW	λ=1310nm, R _{load} =100ohm, P=-20dBm ⁽¹⁾
Small-signal bandwidth	BW		17		GHz	P=-20dBm ⁽¹⁾
Low frequency cut off	LF		5	100	kHz	
Rise/Fall time (20%~80%)	tr/tf		18		ps	λ=1310nm, P=-20dBm ⁽¹⁾
Saturation power	P _{sat}	-4			dBm	λ=1310nm, @25.78125Gbps, PRBS31, ER=5dB, BER=5E-5, V _{op} =(V _{BR} -3.5V)
Single ended output impedance	R _O		50		ohm	
Wavelength	λ	1260		1600	nm	
Sensitivity				-22.5	dBm	λ=1310nm, @25.78125Gbps, PRBS31, ER=5dB, BER=5E-5, V _{op} =(V _{BR} -3.5V)

Notes:

- (1) The spec and test data are subjected to ROSM level (flexible circuit attached) measurement.

Outline Dimensions (unit: mm)



Pin Configuration

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

Note: Specifications are subject to change without notice.