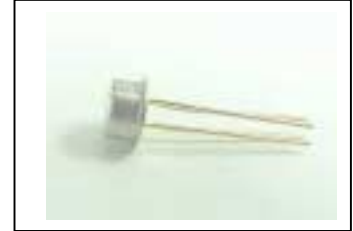


TMC-1C46-003

622Mbps, InGaAs PIN plus Pre-amplifier

FEATURES:

- Industry standard TO-46 package with flat window.
- Small-form package for optical alignment allowance.
- Suitable for long wavelength 622 Mbps SDH/SONET applications.
- Packaged with opposite data output pin assignment.



ELECTRO-OPTICAL CHARACTERISTICS:

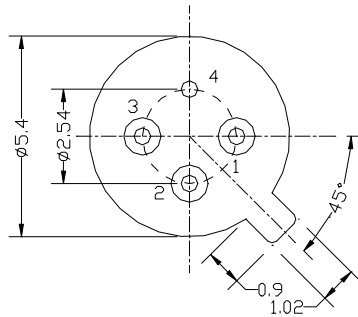
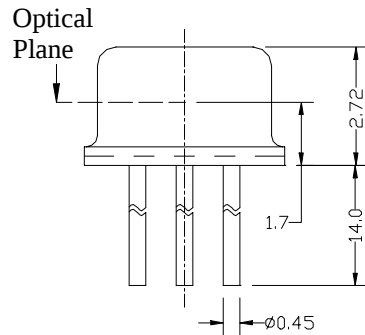
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V _{CC}	3.0		5.5	V	
Supply Current	I _{CC}		21	40	mA	no loads
Differential Responsivity	R _d	5	7	8	mV/μW	R _{load} = 100 ohm, P = -20 dBm @ 50 MHz, 1310nm
Single Ended Responsivity	R _s	2.5	3.5	4	mV/μW	R _{load} = 50 ohm, P = -20 dBm @ 50 MHz, 1310nm
Optical Overload		-8			dBm	
Small-Signal Bandwidth	BW	404	470		MHz	
Low-Frequency Cut off	LF		20		kHz	
Single Ended Output Impedance	R _O	48	50	52	ohm	
RMS Input Referred Noise			70	90	nW	
Maximum Differential Output Voltage			260	450	mV p-p	P = -8 dBm
Power Supply Rejection Ratio	PSRR		45		dB	
Wavelength	λ	1270		1380	nm	
Sensitivity			-31	-28	dBm	Input optical signal λ = 1310nm, Data rate = 622Mbps, BER = 10 ⁻⁹

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

OUTLINE DIMENSIONS:

UNIT: mm

**Pinout**

1. Dout
2. Vcc
3. Dout
4. Gnd

Notice:

1. The orientation of header tab is for reference only, the mechanical location might be changed upon the replaceable materials while the optical design is kept the same.
2. Regular delivery is *tabless*.