

TMC-1C46-000

622Mbps, InGaAs PIN plus Pre-amplifier

FEATURES:

- Industry standard TO-46 package with cap lens.
- Optimized for fiber optic application.
- Suitable for long wavelength 622Mbps SDH/SONET applications.
- Supports 3.3V and 5.0V applications.



ELECTRO-OPTICAL CHARACTERISTICS: (Typical values are at Vcc = 3.3V)

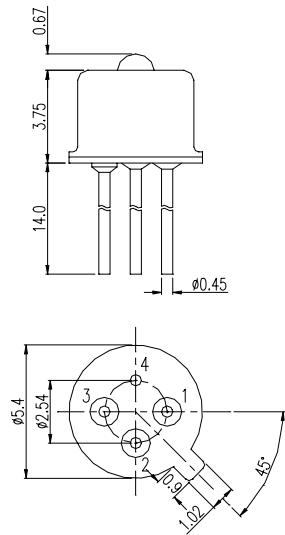
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V _{CC}	3.0		5.5	V	
Supply Current	I _{CC}		21	40	mA	no loads
Differential Responsivity	R _d	5	7		mV/μW	R _{load} = 100 ohm, P = -20 dBm @ 50 MHz, 1310nm
Single Ended Responsivity	R _s	2.5	3.5		mV/μW	R _{load} = 50 ohm, P = -20 dBm @ 50 MHz, 1310nm
Saturation Power		-8			dBm	
Small-Signal Bandwidth	BW	404			MHz	
Low-Frequency Cut off	LF		20		kHz	
Single Ended Output Impedance	R _O	48	50	52	ohm	
Maximum Differential Output Voltage			260	450	mV p-p	P = -8 dBm
Wavelength	λ	1270		1380	nm	
Sensitivity			-32	-29	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. $\overline{\text{Dout}}$
 - 3. Vcc
 - 4. Gnd