TMC-8D43

2 GHz GaAs PIN plus Pre-amplifier

FEATURES:

- Industry standard TO-46 package with cap lens.
- Optimized for fiber optic application.
- Suitable for 2.5 Gbps applications.

ELECTRO-OPTICAL CHARACTERISTICS:

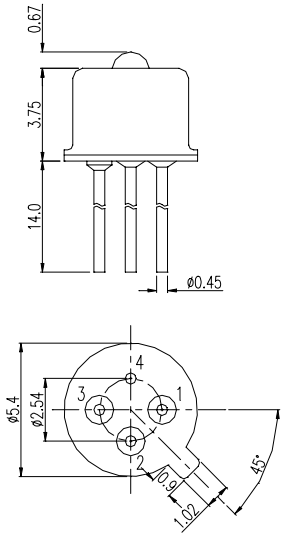
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V_{CC}	3.0		5.5	V	
Supply Current	I_{CC}		26	50	mA	no loads
Differential Responsivity	Rd	0.7	0.9	1.1	mV/μW	R_{load} = 100 ohm, P = -15 dBm @ 50 MHz, 850 nm
Single Ended Responsivity	Rs	0.35	0.45	0.55	mV/μW	R_{load} = 50 ohm, P = -15 dBm @ 50 MHz, 850 nm
Small-Signal Bandwidth	BW	1530	1900	2400	MHz	
Low-Frequency Cut off	LF		44		kHz	
Rise Time/Fall Time	tr/tf		300	400	ps	20 % ~ 80 %
Single Ended Output Impedance	R_O	48	50	52	ohm	
RMS Input Referred Noise			800	1200	nW	
Maximum Differential Output Voltage		185	250	415	mV p-p	P = 0 dBm
RMS Output Referred Noise	Vn			1.6	mV	P = 0 dBm
Power Supply Rejection Ratio	PSRR		50		dB	
Wavelength	λ	770		860	nm	

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	100	°C	
Operating Temperature	-20	85	°C	
Lead Solder Temperature		260	°C	10 seconds

OUTLINE DIMENSIONS:

UNIT:mm



Pinout
1.$\overline{\text{Dout}}$
2.Dout
3.Vcc
4.Gnd