

TMC-1C41-018

125 MHz InGaAs PIN plus AGC Pre-amplifier

FEATURES:

- Industry standard TO-46 package with short cap lens.
- Optimized for fiber optic application.
- Suitable for 100/155 Mbps applications.



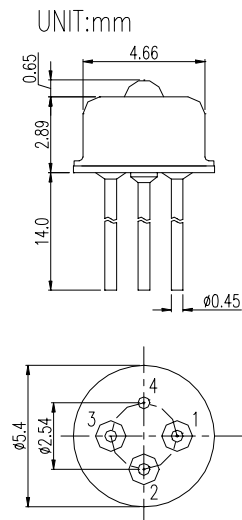
ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V_{CC}	4.5	5	5.5	V	
Supply Current	I_{CC}			40	mA	no loads
DC Output Voltage	V_{ODC}	1.5	2.5	3.5	V	
Differential Output Voltage	V_d			1.2	V	$\lambda = 1300 \text{ nm}$, 0 dBm
Data out Rise Time (10 - 90%)	t_r			4.5	ns	$\lambda = 1300 \text{ nm}$, $P_f = 10\mu\text{W}$
Data out Fall Time (10 - 90%)	t_f			4.5	ns	$\lambda = 1300 \text{ nm}$, $P_f = 10\mu\text{W}$
Output Resistance	R_{out}		50		Ohm	
Bandwidth	BW	115			MHz	$\lambda = 1300 \text{ nm}$, $P_f = 10\mu\text{W}$
Saturation Power	P_{Sat}	-3			dBm	$\lambda = 1300 \text{ nm}$, 155 Mbps
Gain @ 10Mbps Differential	G	0.18		220	mV/uW	$\lambda = 1300 \text{ nm}$, $R_{load} = 100\text{ohm}$
Sensitivity				-36	dBm	$\lambda = 1300 \text{ nm}$, 155 Mbps, BER 10^{-10}

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:



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