

TMC-1C41-201

125 MHz InGaAs PIN plus AGC Pre-amplifier

FEATURES:

- Industry standard TO-46 package with cap lens.
- Optimized for fiber optic application.
- Suitable for 100/155 Mbps applications.
- Supports 3.3V and 5.0V applications.



ELECTRO-OPTICAL CHARACTERISTICS: (Typical values are at $V_{CC} = 3.3V$)

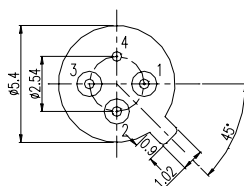
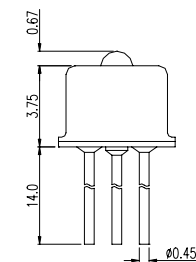
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V_{CC}	3.0		5.5	V	
Supply Current	I_{CC}			35	mA	no loads
Differential Output Voltage	V_d			1	V	$\lambda = 1300 \text{ nm}$, 0 dBm
Data out Rise Time (10 - 90%)	t_r			4.5	ns	$\lambda = 1300 \text{ nm}$, $P_f = 10\mu\text{W}$
Data out Fall Time (10 - 90%)	t_f			4.5	ns	$\lambda = 1300 \text{ nm}$, $P_f = 10\mu\text{W}$
Output Resistance(per side)	R_{out}		50		Ohm	
Bandwidth	BW	115			MHz	$\lambda = 1300 \text{ nm}$, $P_f = 10\mu\text{W}$
Saturation Power	P_{Sat}	-3			dBm	$\lambda = 1300 \text{ nm}$
Gain @ 1Mbps -> Single-End	G_s	0.09		60	mV/uW	$\lambda=1300 \text{ nm}$, $R_{load}=50\text{ohm}$
Gain @ 1Mbps -> Differential	G_d	0.18		120	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:

UNIT:mm



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