

TMC-8D41-201

125 MHz GaAs 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.
- Single Power supply from 3.0 to 5.5 Volt.



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

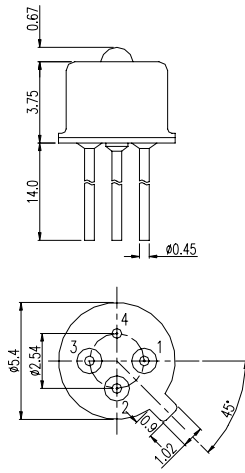
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V_{CC}	3.0		5.5	V	
Supply Current	I_{CC}			35	mA	no loads
Differential Output Voltage	V_d			1	V	$\lambda = 850 \text{ nm}$, 0 dBm
Data out Rise Time (10 - 90%)	t_r			4.5	ns	$\lambda = 850 \text{ nm}$, $P_f = 10\mu W$
Data out Fall Time (10 - 90%)	t_f			4.5	ns	$\lambda = 850 \text{ nm}$, $P_f = 10\mu W$
Output Resistance(Single-End)	R_{out}		50		Ohm	
Bandwidth	BW	115			MHz	$\lambda = 850 \text{ nm}$, $P_f = 10\mu W$
Saturation Power	P_{Sat}	-3			dBm	$\lambda = 850 \text{ nm}$
Gain @ 1Mbps -> Single-End	G_s	0.05		40	mV/uW	$\lambda = 850 \text{ nm}$, $R_{load} = 50\text{ohm}$
Gain @ 1Mbps -> Differential	G_d	0.10		80	mV/uW	$\lambda = 850 \text{ nm}$, $R_{load} = 100\text{ohm}$
Sensitivity				-31	dBm	$\lambda = 850 \text{ nm}$, 155 Mbps, BER 10^{-10}

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	100	$^{\circ}C$	
Operating Temperature	-40	85	$^{\circ}C$	
Lead Solder Temperature		260	$^{\circ}C$	10 seconds

OUTLINE DIMENSIONS:

UNIT:mm



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