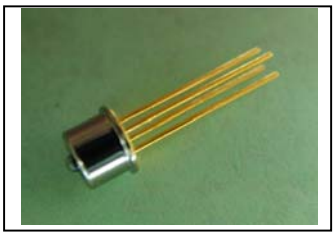
TMC-8D41-201

125 MHz GaAs PIN plus AGC Pre-amplifier



FEATURES:

- Industry standard TO-46 package with cap lens and tab-less.
- Optimized for fiber optic application.
- Suitable for 100/155 Mbps applications.
- Single Power supply from 3.0 to 5.5 Volt.

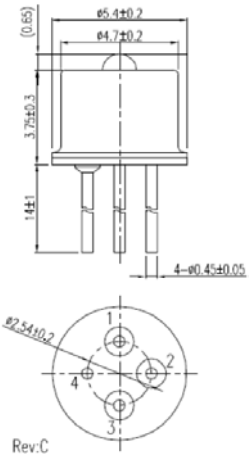
ELECTRO-OPTICAL CHARACTERISTICS: (Typical values are at Vcc = 3.3V)

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	λ = 850 nm, 0 dBm
Data out Rise Time (10 - 90%)	t_r			4.5	ns	λ = 850 nm, P_f = 10uW
Data out Fall Time (10 - 90%)	t_f			4.5	ns	λ = 850 nm, P_f = 10uW
Output Resistance(Single-End)	R_{out}		50		Ohm	
Bandwidth	BW	115			MHz	λ = 850 nm, P_f = 10uW
Saturation Power	P_{Sat}	-3			dBm	λ = 850 nm
Gain @ 1Mbps -> Single-End	Gs	0.05		40	mV/uW	λ=850 nm, R_{load}=50ohm
Gain @ 1Mbps -> Differential	Gd	0.10		80	mV/uW	λ=850 nm,R_{load}=100ohm
Sensitivity				-31	dBm	λ = 850 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