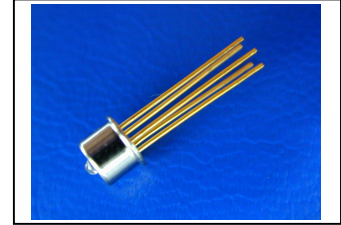


TMC-8D52-751

1.25Gbps GaAs PIN Plus AGC Pre-amplifier

FEATURES:

- Industry standard TO-46 package with long cap lens and tab-less.
- Optimized for fiber optic application.
- Design for short wavelength 1.25Gbps application.
- Photocurrent monitoring available.
- Single power supply +3.3V.



ELECTRO-OPTICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$)

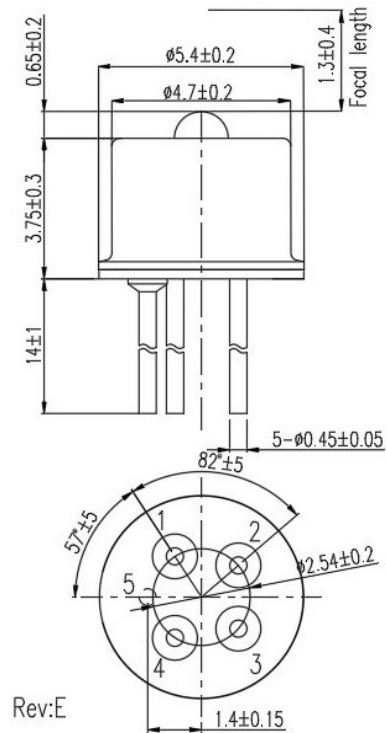
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V_{CC}	3.0	3.3	3.6	V	
Supply Current	I_{CC}		28	35	mA	no loads
Differential Responsivity	R_d	6.0	10	16	mV/ μW	$R_{load} = 100\text{ohm}$, $P = -24\text{dBm}$, $\lambda = 850\text{nm}$
Single Ended Responsivity	R_s	3.0	5.0	8.0	mV/ μW	$R_{load} = 50\text{ohm}$, $P = -24\text{dBm}$, $\lambda = 850\text{nm}$
Small-Signal Bandwidth	BW	730			MHz	$P = -24\text{dBm}$, $\lambda = 850\text{nm}$
Low-Frequency Cut off	LF			115	kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf			400	ps	$P = -24\text{dBm}$, $\lambda = 850\text{nm}$
Saturation Power	P_{Sat}	0			dBm	
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-25	dBm	$\lambda = 850\text{nm}$, @1244.16Mbps , PRBS7, ER=10dB, BER=1E-10

ABSOLUTE MAXIMUM RATINGS:

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

OUTLINE DIMENSIONS:

• Unit: mm

**Pinout:**

Pin no.	Function
1	Dout(+)
2	Vcc
3	Isource
4	Dout(-)
5	Gnd