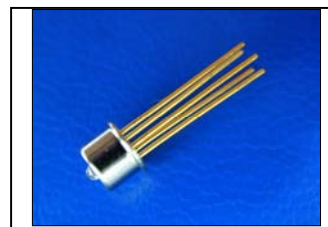


TMC-8D55-701

4.25Gbps GaAs PIN plus AGC Pre-amplifier

FEATURES:

- Industry standard TO-46 package with cap lens and tab-less.
- Optimized for fiber optic application.
- Design for short wavelength 4.25Gbps application.
- Photocurrent monitoring available.
- Single power supply +3.3V.



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

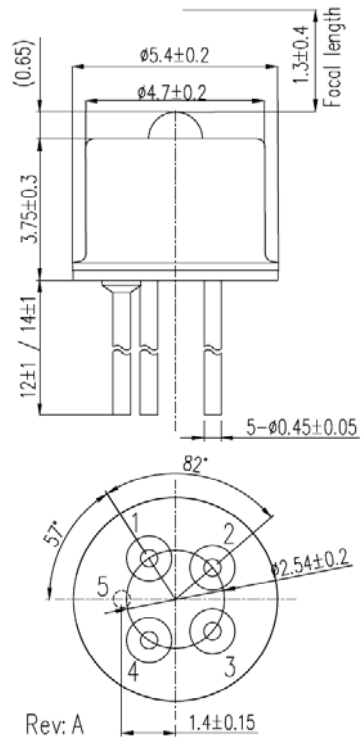
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V_{CC}	3.0	3.3	3.6	V	
Supply Current	I_{CC}	30	34	42	mA	no loads
Differential Responsivity	R_d		1.2		mV/ μW	$R_{load} = 100\text{ohm}$, $P = -15\text{dBm}$, $\lambda = 850\text{nm}$
Single Ended Responsivity	R_s		0.6		mV/ μW	$R_{load} = 50\text{ohm}$, $P = -15\text{dBm}$, $\lambda = 850\text{nm}$
Small-Signal Bandwidth	BW		2.5		GHz	$P = -15\text{dBm}$, $\lambda = 850\text{nm}$
Low-Frequency Cut off	LF		15		kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf		135		ps	$P = -15\text{dBm}$, $\lambda = 850\text{nm}$
Saturation Power	P_{Sat}	0			dBm	
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-21	dBm	$\lambda = 850\text{nm}$, @4.25Gbps, PRBS7, ER=7dB, 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