

TMC-1C57-704

25Gbps InGaAs PIN plus Pre-amplifier

FEATURES:

- Industry standard TO-46 package with aspherical lens.
- Optimized for fiber optic application.
- Supports up to 25.78125Gbps 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	3.3	3.5	V	
Supply Current	I_{CC}		29		mA	No loads
Differential Responsivity	R_s		0.9		mV/ μW	$R_{load} = 100\text{ohm}$, $P = -10\text{dBm}$, $\lambda = 1310\text{nm}$
TIA RSSI	Slope		0.25		mA/mA	TIA RSSI
	Offset		10		nA	
	Linearity Limit			2	mA	
Small-Signal Bandwidth	BW		17		GHz	
Low-Frequency Cut off	LF		100		kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf		21		ps	$P = -10\text{dBm}$, $\lambda = 1310\text{nm}^{(1)}$
Saturation Power	P_{Sat}	2			dBm	$\lambda = 1310\text{nm}$, @25.78125Gbps
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	1260		1360	nm	
Sensitivity				-14.0	dBm	$\lambda = 1310\text{nm}$, @25.78125Gbps PRBS31, ER=4.3dB, BER=5E-5

Notes:

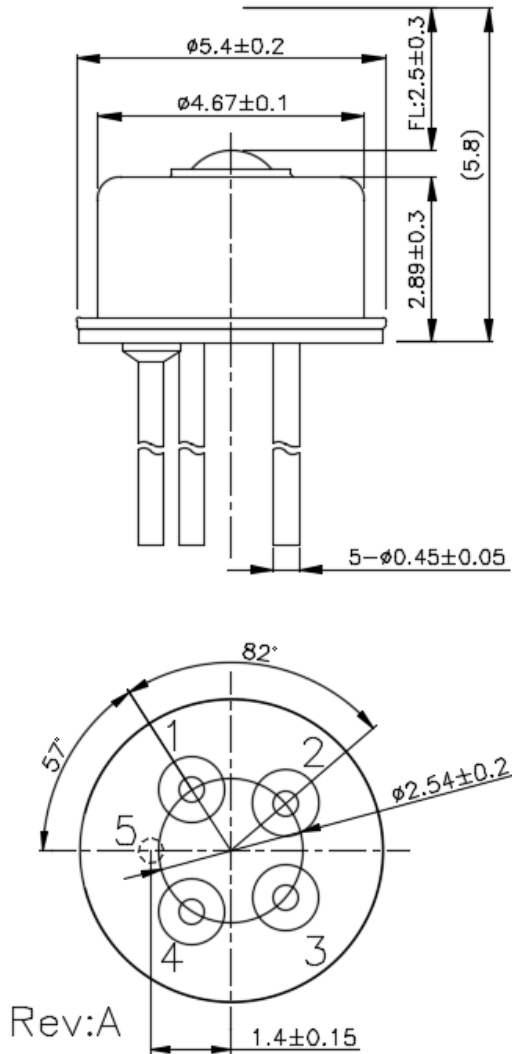
1. The spec. and test data are subjected to ROSM level (flexible circuit attached) measurement.

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.	TMC-1C57-704
	Function
1	Dout(+)
2	Vcc
3	Isource
4	Dout(-)
5	Gnd