

TMC-8D31-000

GaAs PIN photodiode TO-46 metal can

FEATURES:

- Industry standard TO-46 package with cap lens.
- Optimized for fiber optic application.
- High coupling efficiency to multi-mode fibers directly.
- Low dark current and low capacitance.



ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Responsivity ⁽¹⁾	R	0.50	0.60		A/W	$V_R=5V$, $\lambda=850nm$
Dark Current	I_D			2	nA	$V_R=5V$, $T_A=25^{\circ}C$
Breakdown Voltage	V_{BD}	50			V	$I_R=10\mu A$
Bandwidth	BW	1.5			GHz	$V_R=5V$
Capacitance ⁽²⁾	C		1.2	1.5	pF	$V_R=5V$, $f=1 MHz$

Notes:

1. The responsivity is measured with a receptacle package, using an 850 nm VCSEL as the optical light source to the 50/125 or 62.5/125 μm multi-mode fibers.
2. Sensitive area is typical 120 μm in diameter.

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	125	$^{\circ}C$	
Operating Temperature	-40	85	$^{\circ}C$	
Lead Solder Temperature		260	$^{\circ}C$	10 seconds

Fig. 1 Typical Dark Current and Forward Current

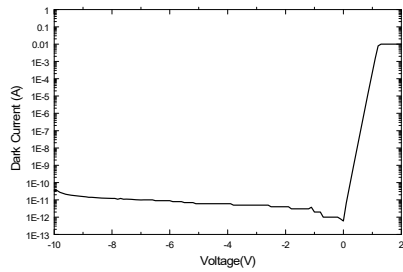


Fig. 2 Typical Photo-Current

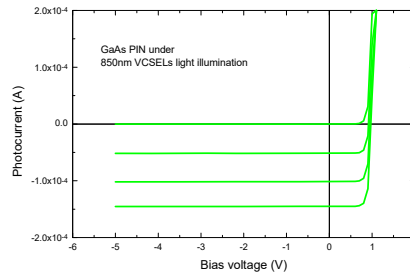


Fig. 3 Typical Breakdown Curve

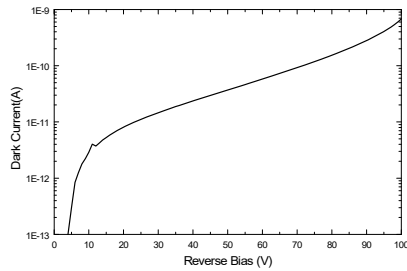
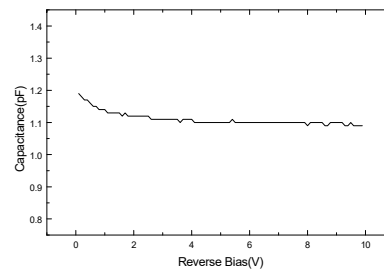
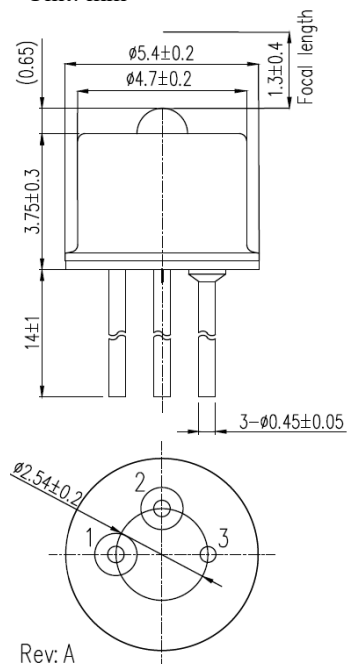


Fig. 4 Typical C-V Curve



OUTLINE DIMENSIONS:

- Unit: mm



Pinout:

Pin no.	Function
1	Anode
2	Cathode
3	Case