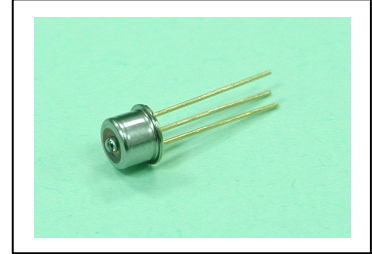


TMC-1C31-000

InGaAs 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	0.8	0.9		A/W	$V_R=5V, \lambda=1300nm$
Dark Current	I_D			2	nA	$V_R=5V, T_A=25^\circ C$
Breakdown Voltage	V_{BD}	20	35		V	$I_R=10\mu A$
Bandwidth	BW	1.5			GHz	$V_R=5V$
Capacitance ⁽²⁾	C		1.5	1.7	pF	$V_R=5V, f=1 MHz$

Notes:

1. The responsivity is measured with a receptacle package, using an 1300 nm LD as the optical light source to the fiber.
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

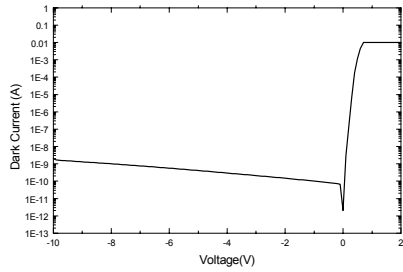


Fig. 2 Typical Photo-Current

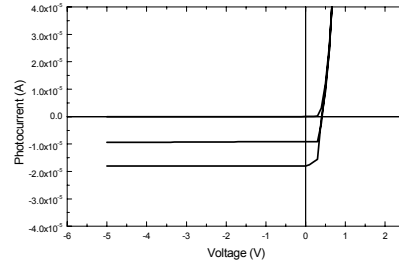


Fig. 3 Typical Breakdown Curve

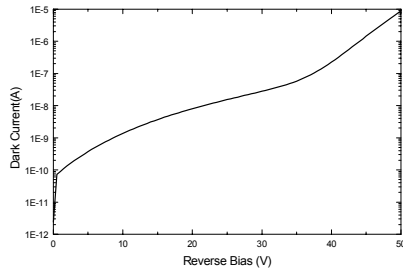
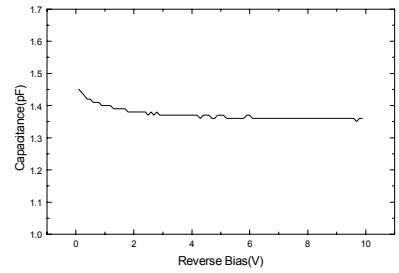
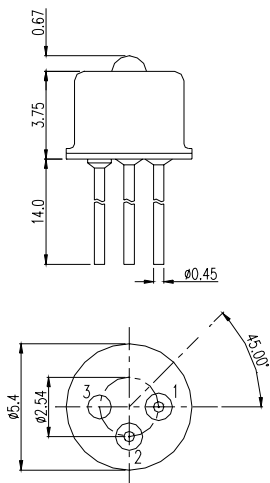


Fig. 4 Typical C-V Curve



OUTLINE DIMENSIONS:

UNIT:mm



Pinout
 1.Anode
 2.Cathode
 3.NC