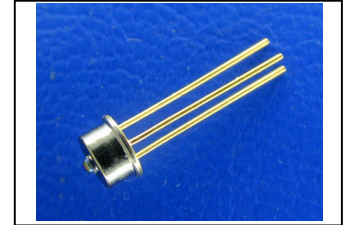


TMC-2C33-002

InGaAs PIN photodiode TO-46 metal can

FEATURES:

- Industry standard TO-46 package with cap lens and tab-less.
- High responsivity at 1310nm and 1550nm.
- Low inter-modulation distortion.
- Suitable for CATV application.



ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Responsivity	R	0.8	0.9		A/W	$V_R=5V$, $\lambda=1310nm$
		0.9	1		A/W	$V_R=5V$, $\lambda=1550nm$
Dark Current	I_D		0.1	1	nA	$V_R=5V$, $T_A=25^\circ C$
Breakdown Voltage	V_{BD}	25	50		V	$I_R=10\mu A$
Second order inter-modulation distortion	IMD2		-75	-70	dBc	$\lambda=1310nm$ (Note 1)
			-75	-70	dBc	$\lambda=1550nm$ (Note 1)
Third order inter-modulation distortion	IMD3		-85	-80	dBc	$\lambda=1310nm$ (Note 1)
			-85	-80	dBc	$\lambda=1550nm$ (Note 1)
Capacitance	C		0.56	0.7	pF	$V_R=5V$, $f=1 MHz$
Bandwidth	BW	2.5	3.2		GHz	$V_R=5V$

Notes:

1. IMD2 measured at $V_R=12V$, $P_{avg}=0dBm$, $OMI=0.7$, $R_{LOAD}=50\Omega$, $f_1+f_2=850 MHz$, $f_1-f_2=50 MHz$. All are measured at $25^\circ C$.

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
Forward current		10	mA	
Reverse voltage		20	V	

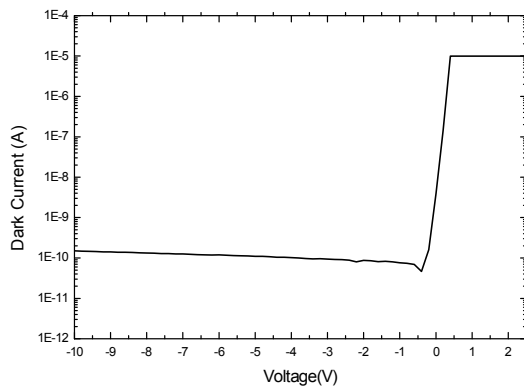


Fig. 1 Typical Dark Current and Forward Current.

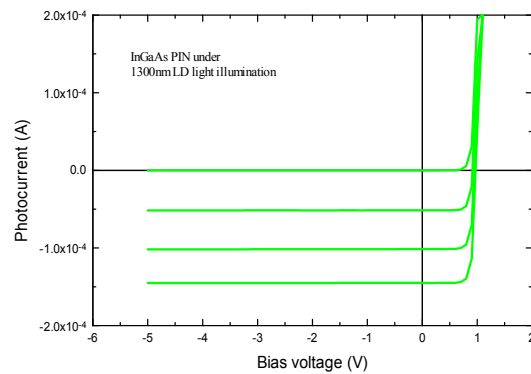


Fig. 2 Typical Photo-Current

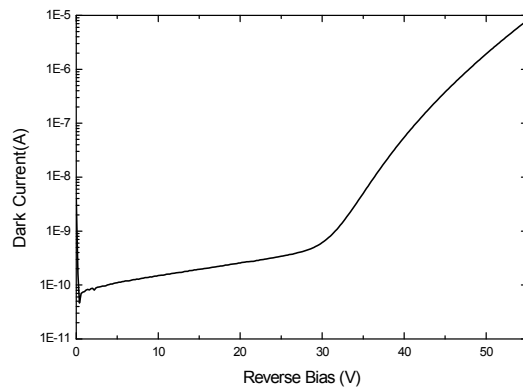


Fig. 3 Typical Breakdown Curve.

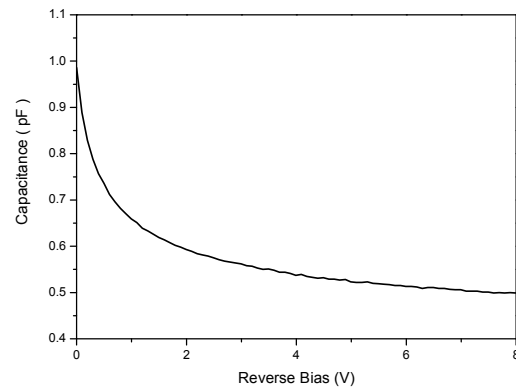
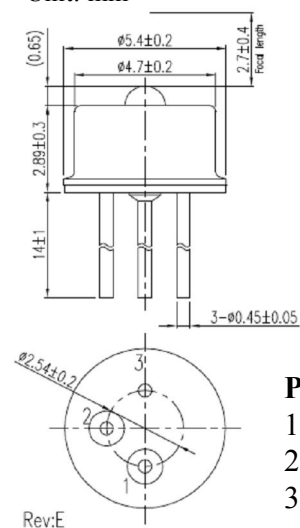


Fig. 4 Typical C-V Curve.

OUTLINE DIAGRAM:

- Unit: mm



Pinout:

1. Anode
2. Cathode
3. Case