

TPD-1C12

InGaAs PIN photodiode chip

FEATURES:

- Optimized for fiber optic application.
- Low dark current and low capacitance.

ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Responsivity	R		0.9		A/W	$V_R=5V, \lambda=1300nm$
Forward Current	I_F	100			μA	$V_F=1V$
Dark Current	I_D		0.2	1	nA	$V_R=5V$
Breakdown Voltage	V_{BD}		55		V	$I_R=10\mu A$
Capacitance	C		0.9	1	pF	$V_R=5V, f=1\text{ MHz}$

Fig. 1 Typical Dark Current and Forward Current

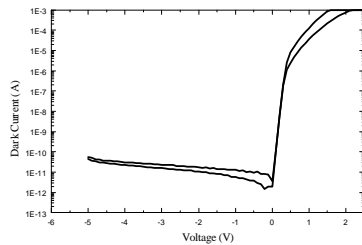


Fig. 2 Typical Photo-Current

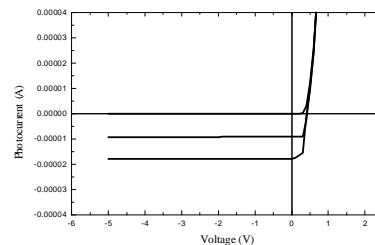


Fig. 3 Typical Breakdown Curve

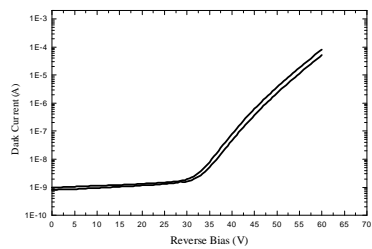
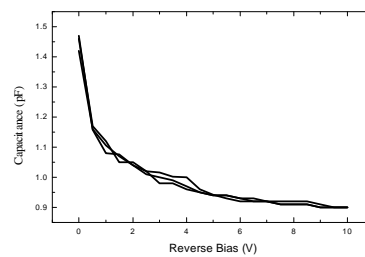


Fig. 4 Typical C-V Curve



OUTLINE DIAGRAM:

- Chip size is typical 250x250 μm square.
- Sensitive area is typical 100 μm in diameter.