

TPD-1C12-002

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	$V_R=5V, \lambda=1300nm$
Dark Current	I_D		0.1	1	nA	$V_R=5V$
Breakdown Voltage	V_{BD}	20	35		V	$I_R=10\mu A$
Capacitance	C		0.45	0.55	pF	$V_R=5V, f=1\text{ MHz}$
Bandwidth	BW	1.5			GHz	$V_R=5V$

Fig. 1 Typical Dark Current and Forward Current

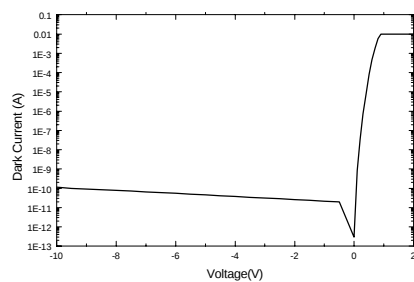


Fig. 2 Typical Photo-Current

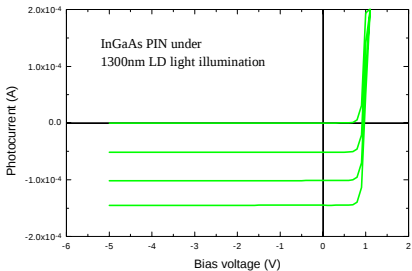


Fig. 3 Typical Breakdown Curve

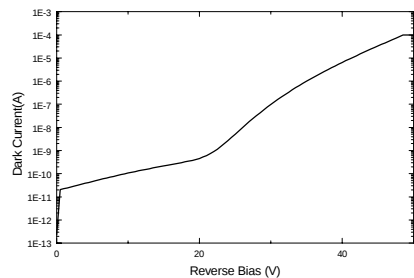
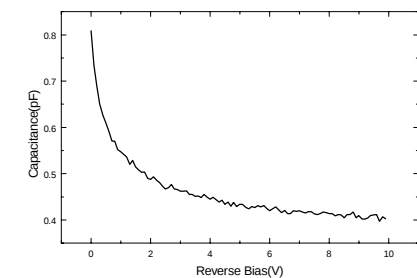
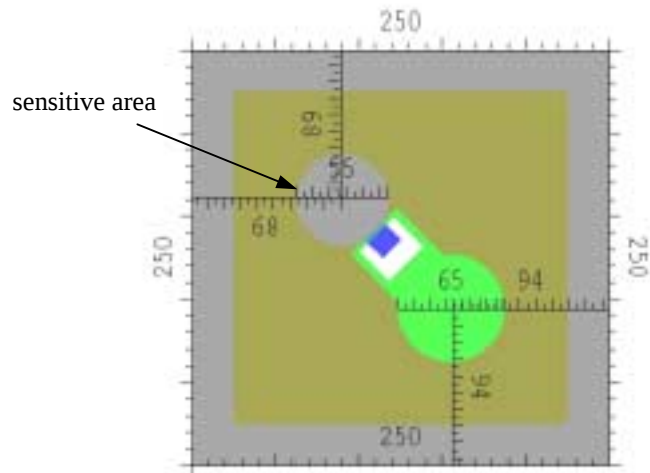


Fig. 4 Typical C-V Curve



OUTLINE DIAGRAM:



- Chip size is typical 250x250 μm .
- Sensitive area is typical 55 μm in diameter.