

# TPD-1C12-011

## 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		0.2	0.3	pF	$V_R=5V, f=1 MHz$
Bandwidth	BW	1.5			GHz	$V_R=5V$

Fig. 1 Typical Dark Current and Forward Current

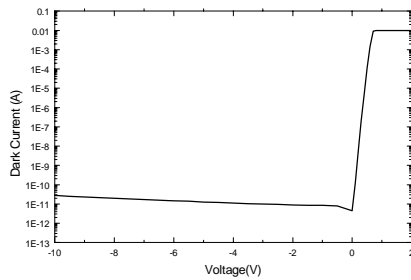


Fig. 2 Typical Photo-Current

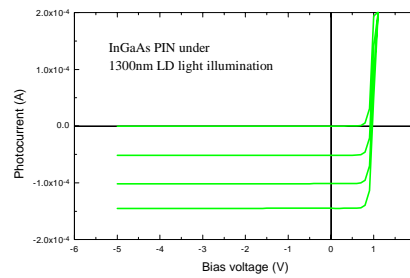


Fig. 3 Typical Breakdown Curve

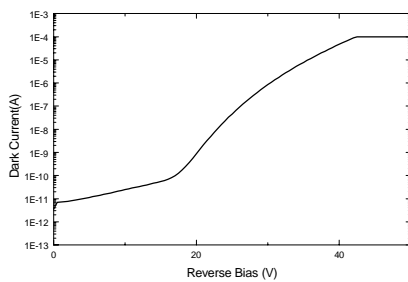
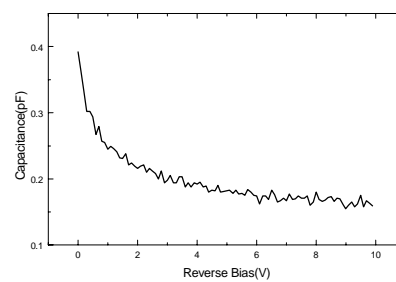
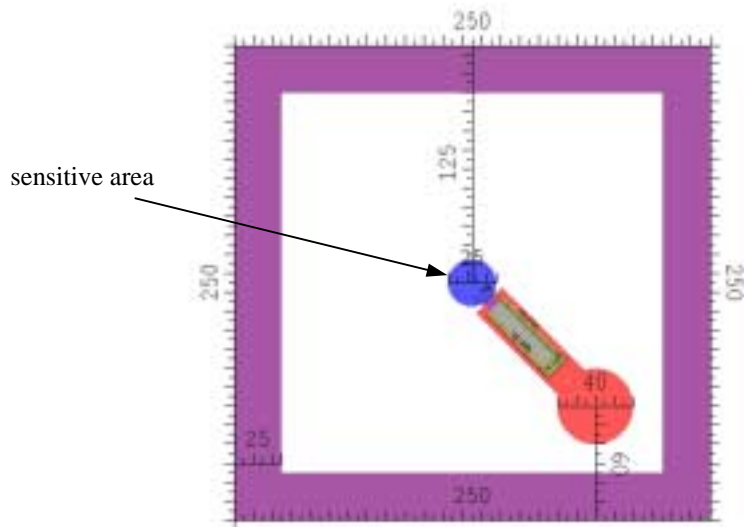


Fig. 4 Typical C-V Curve



## OUTLINE DIAGRAM:



- Chip size is typical 250x250 μm.
- Sensitive area is typical 25 μm in diameter.