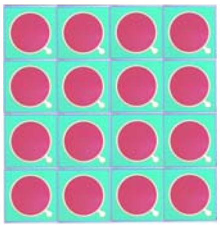
TPD-1C12-015

InGaAs PIN photodiode chip

FEATURES:

- Optical power monitor PD
- Low dark current and low capacitance
- 1mm active window



ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Responsivity	R	0.8	0.95		A/W	V_R=5V, λ=1310nm @ 25C
Dark Current	I_D		2	20	nA	V_R=5V @ 25C
Breakdown Voltage	V_{BD}	20	35		V	I_R=10μA
Capacitance	C		100	200	pF	V_R=0V, f=1 MHz

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage temperature	-40	100	℃	
Operating temperature	-40	85	℃	
Reverse current		2	mA	
Forward current		10	mA	
Reverse voltage		20	V	

TYPICAL EO PERFORMANCE :

Fig. 1 Typical Dark Current and Forward Current

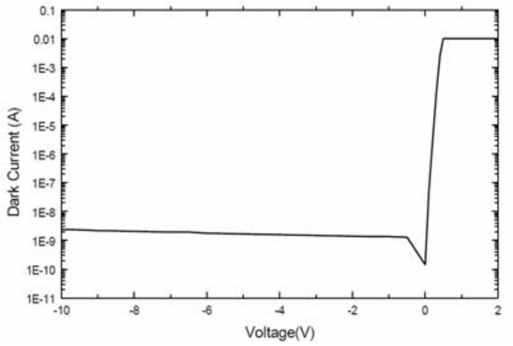


Fig. 2 Typical Photo-Current

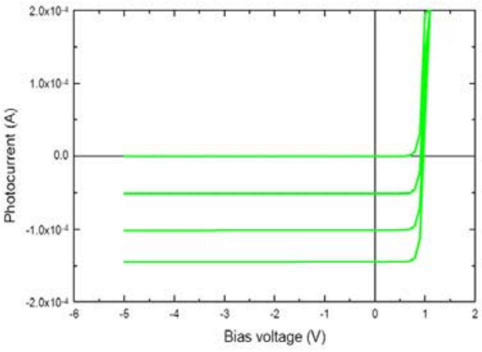


Fig. 3 Typical Breakdown Curve

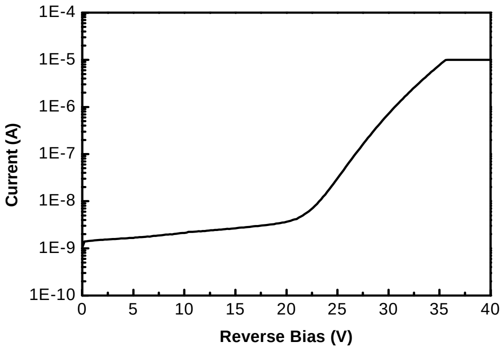
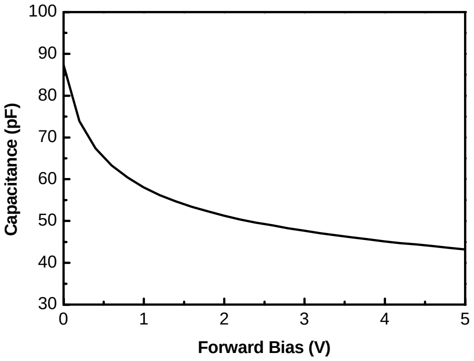
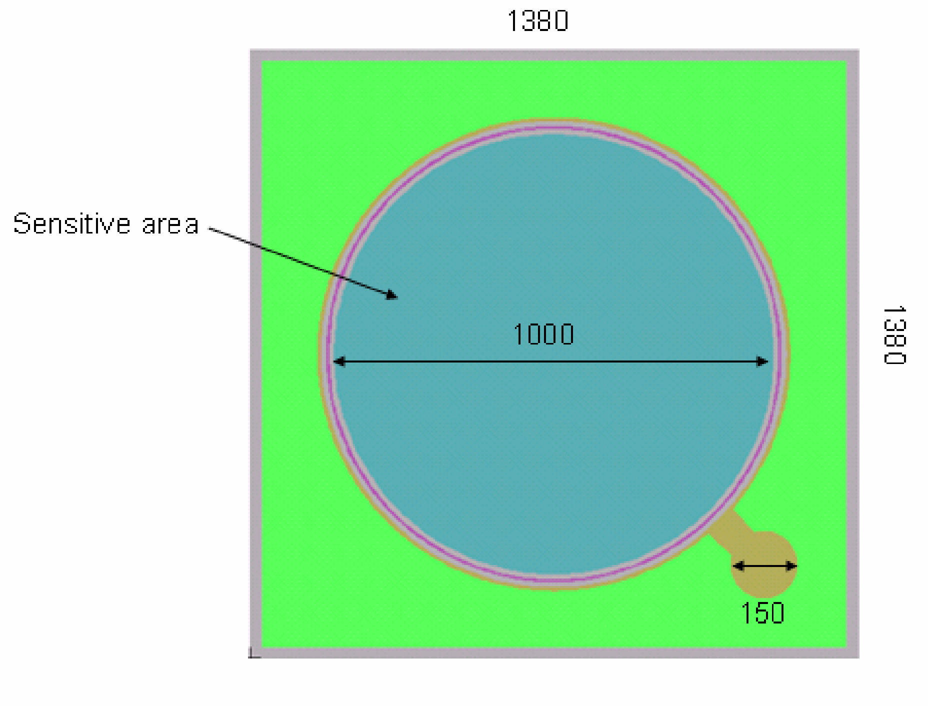


Fig. 4 Typical C-V Curve



OUTLINE DIAGRAM:



- Chip size is typical 1380 μm x 1380 μm.
- Chip thickness is 200 ±30 μm
- Sensitive area is typical 1000 μm in diameter.