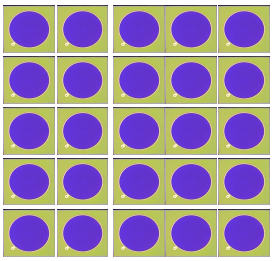
TPD-1C12-007

InGaAs PIN photodiode chip

FEATURES:

- Monitor optic application.
- Low dark current and low capacitance.



ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Responsivity	R	0.8	0.9		A/W	V_R=5V, λ=1310nm
		0.9	1.0			V_R=5V, λ=1550nm
Dark Current	Id		5	30	nA	V_R=5V
Breakdown Voltage	V_{BD}	5	25		V	I_R=1μA
Shunt Resistance	Rsh	15			MΩ	V_R=10mV
Capacitance	C		1000	1300	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	
Optical power		2	mW	

Fig. 1 Typical Photo Current

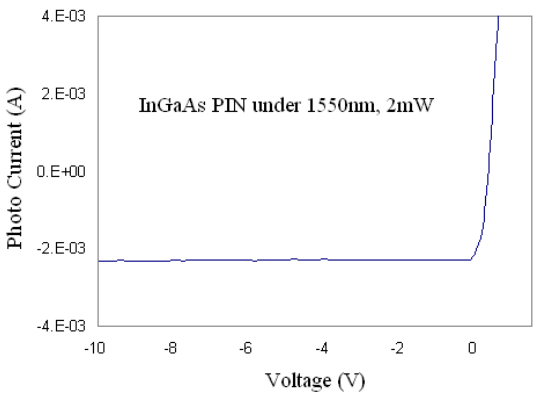


Fig. 2 Typical Reverse I-V Curve

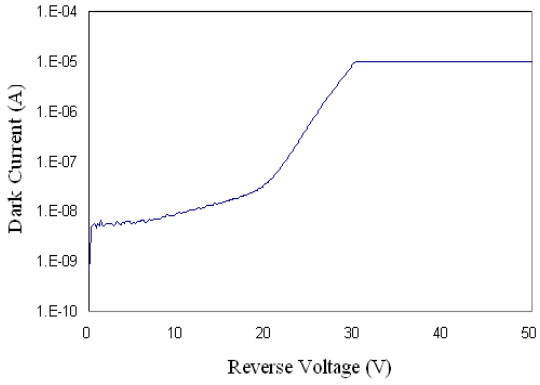
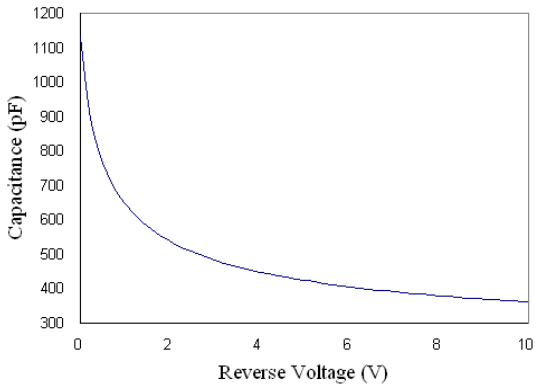
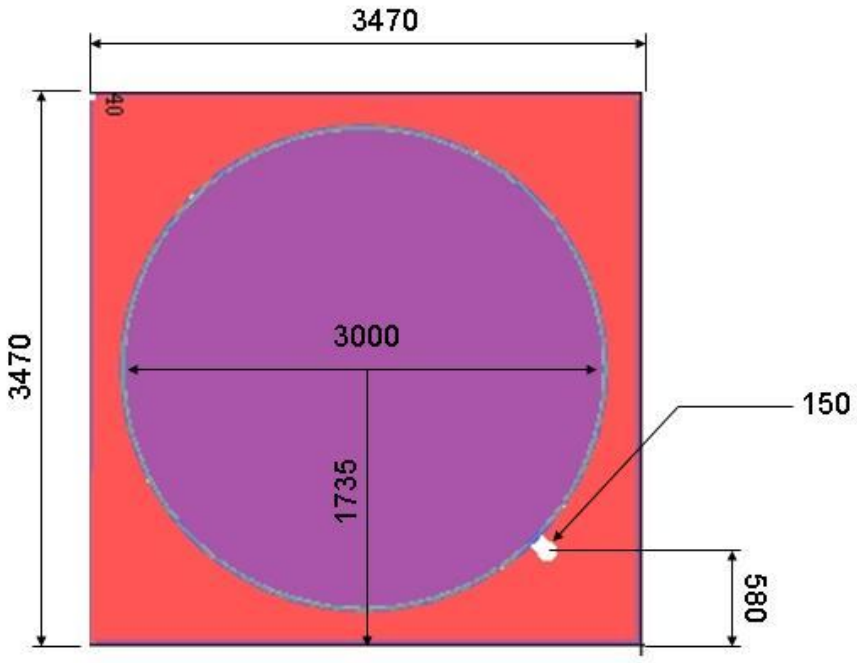


Fig. 3 Typical C-V Curve



OUTLINE DIAGRAM:



- Chip size is typical 3.47mmx3.47mm square.
- Chip thickness is 200±30 μm
- Sensitive area is typical 3mm in diameter.