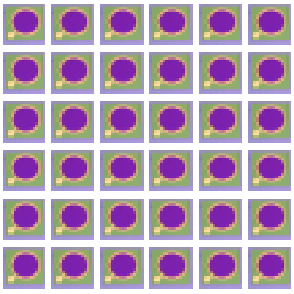
TPD-1C12-018

InGaAs PIN photodiode chip

FEATURES:

- Optimized for monitor application.
- Low dark current and low capacitance.



ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Responsivity	R	0.8	1.0		A/W	V_R=5V, λ=1300nm@ 25C
		0.9	1.1		A/W	V_R=5V, λ=1550nm @ 25C
Dark Current	I_D		0.3	1	nA	V_R=5V@ 25C
Breakdown Voltage	V_{BD}	25	35		V	I_R=1μA
Capacitance	C		6	10	pF	V_R=5V, 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 Dark Current and Forward Current

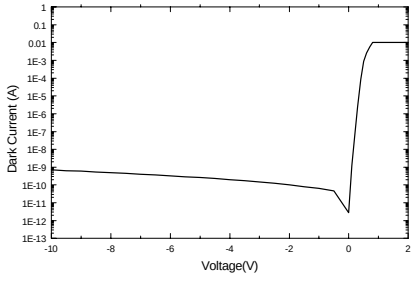


Fig. 2 Typical Photo-Current

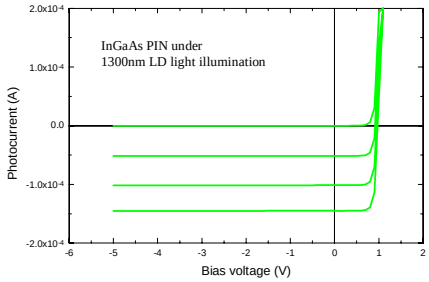


Fig. 3 Typical Breakdown Curve

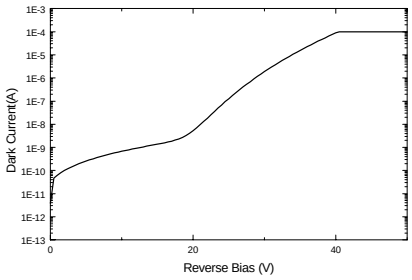
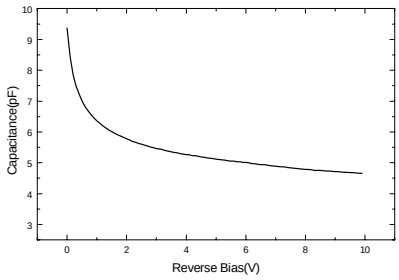
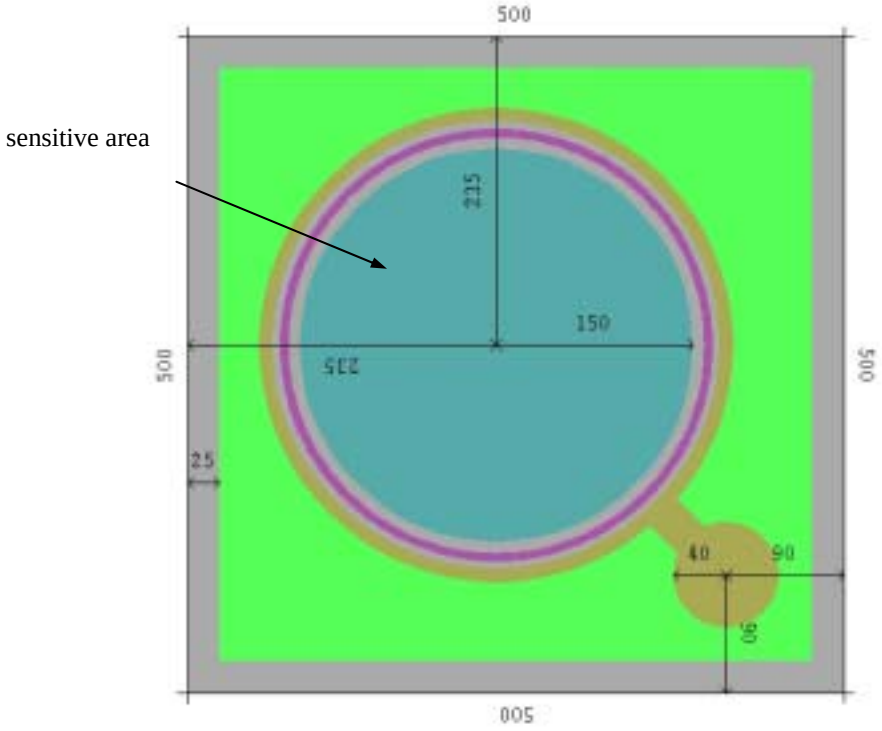


Fig. 4 Typical C-V Curve



OUTLINE DIAGRAM:



- Chip size is typical 500x500±30 μm.
- Chip thickness is 200±30 μm
- Sensitive area is typical 300±5 μm in diameter.
- Shipping packing: Die spacing 450 μm on white tape (packing code C107). Packing on Gel-Pak (Packing code A103) is optional.