

TPD-8D12-001

GaAs 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 ⁽¹⁾	R	0.50	0.55		A/W	V _R = 5V, λ = 850 nm
Dark Current	I _D		1.0	9.0	nA	V _R = 5 V
Breakdown Voltage	V _{BD}	50			V	I _R = 10 μA
Capacitance ⁽²⁾	C	0.4	0.6	0.8	pF	V _R = 1.6 V, f = 1 MHz
Bandwidth	BW	1.9			GHz	V _R =5V

Fig. 1 Typical Dark Current and Forward Current

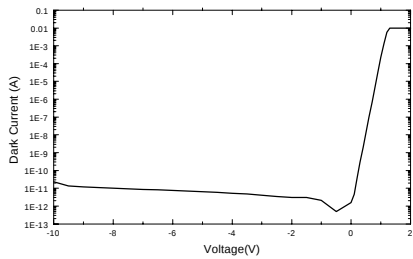


Fig. 2 Typical Photo-Current

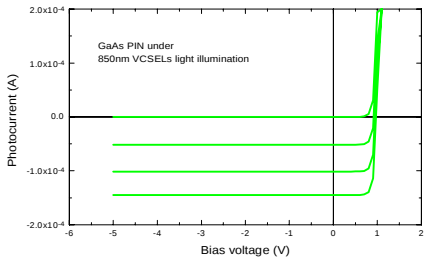


Fig. 3 Typical Breakdown Curve

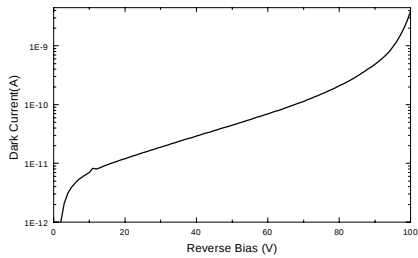
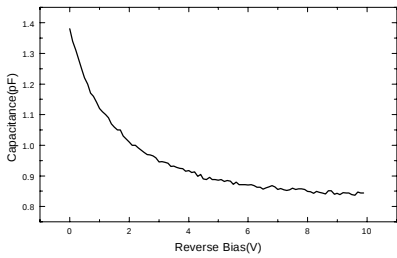
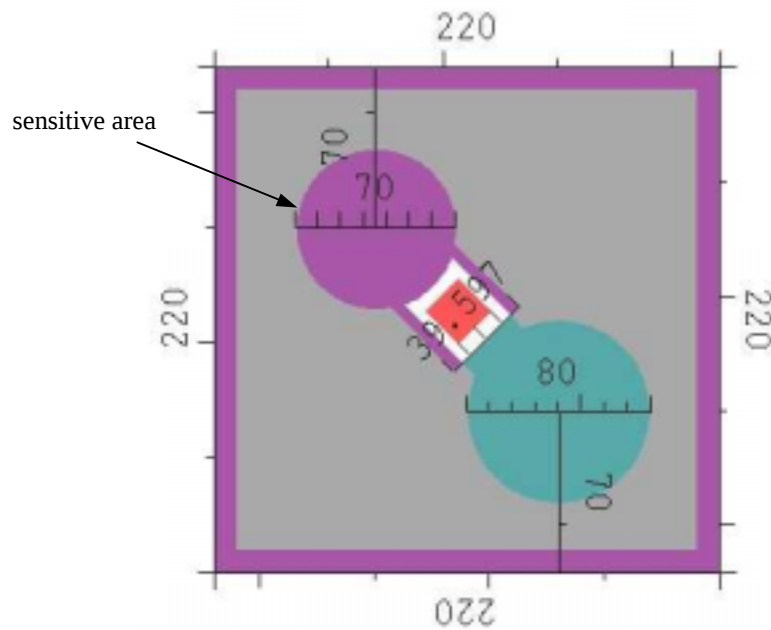


Fig. 4 Typical C-V Curve



OUTLINE DIAGRAM:



- Chip size is typical 220 μm x 220 μm.
- Sensitive area is typical 70 μm in diameter.