

TPD-8D12-002

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	R	0.50	0.55		A/W	$V_R = 5\text{ V}$, $\lambda = 850\text{ nm}$
Dark Current	I_D		0.2	2.0	nA	$V_R = 5\text{ V}$
Breakdown Voltage	V_{BD}	50			V	$I_R = 10\text{ }\mu\text{A}$
Capacitance	C		1.3		pF	$V_R = 5\text{ V}$, $f = 1\text{ MHz}$
Bandwidth	BW	1.9			GHz	$V_R=5\text{ V}$

Fig. 1 Typical Dark Current and Forward Current

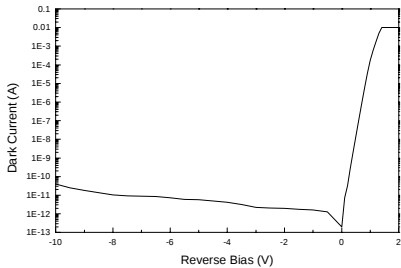


Fig. 2 Typical Photo-Current

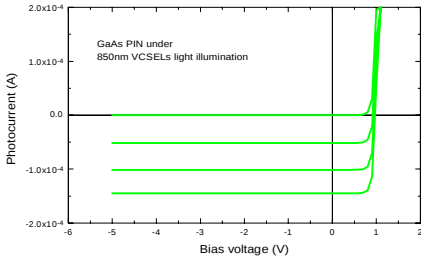


Fig. 3 Typical Breakdown Curve

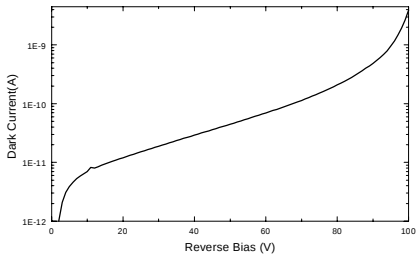
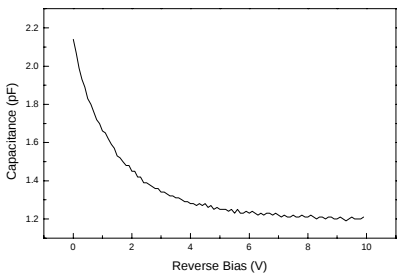
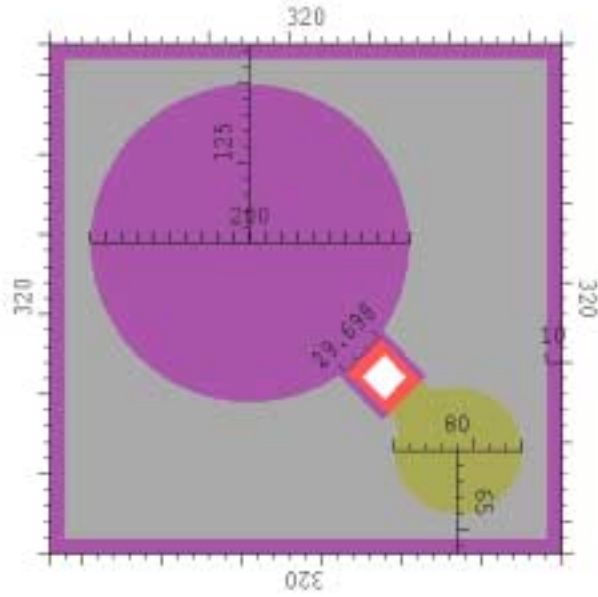


Fig. 4 Typical C-V Curve



OUTLINE DIAGRAM:



- Chip size is typical 320 μm square.
- Sensitive area is typical 200 μm in diameter.