盛世光通信
Shengshi Optical

InGaAs APD FOR OTDR

Features

- Small Dark Current:ID = 2 nA
- Small Terminal Capacitance:CT = 0.35 pF at 0.9 VBR
- High Quantum Efficiency:
  η = 90% at λ = 1310 nm, M = 1 η = 77% at λ = 1550 nm, M = 1
- High Speed Response :fc = 2.5 GHz at M = 10
- Detecting Area Size:50um

Coaxial Module With Single Mode Fiber (SM-9/125)

Applications

OTDR System/Other Sensing Probe

Absolute Maximum Ratings

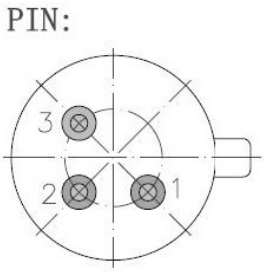
Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Current	IF			10	mA
Reverse Current	IR			0.5	mA
Operating Case Temp.	TC	-40		85	°C
Storage Temperature	TSTG	-40		85	°C
Lead Soldering Temp.	TSOL	-		260(10s)	°C
Relative Humidity	RH	0		85	%

Optical & Electrical Characteristics

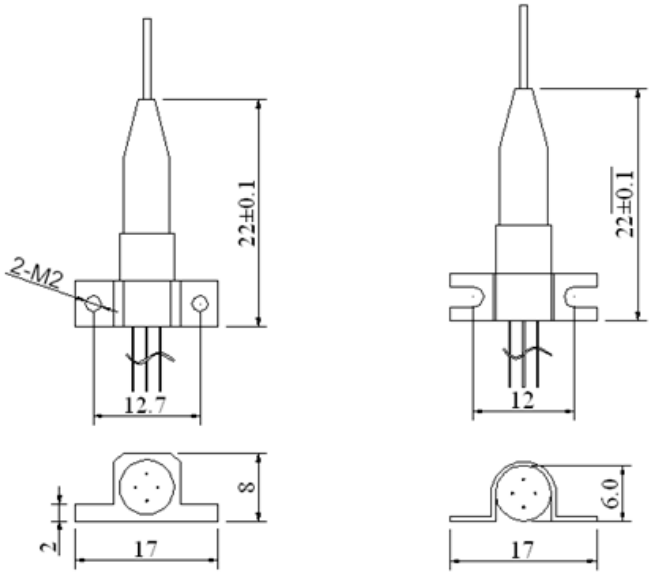
Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Reverse Breakdown Voltage	VBR	40	45	55	V	ID = 100 μA
Temperature Coefficient of Reverse Breakdown Voltage1	δ		0.2		%/°C	
Dark Current	ID		5	25	nA	VR = VBR x 0.9
Multiplied Dark Current	IDM		1	3	nA	M = 2 to 10
Terminal Capacitance	Ct		0.35		pF	VR = VBR x 0.9, f = 1 MHz
Cut-off Frequency	fC	2.5			GHz	M = 10
Quantum Efficiency	η	76	90		%	λ = 1310 nm, M = 1
		65	77			λ = 1550 nm, M = 1
Responsivity	S	0.85	0.90		A/W	λ = 1310 nm, M = 1
		0.90	0.95			λ = 1550 nm, M = 1
Excess Noise Factor	X		0.7		-	λ = 1310 nm, IPO = 1.0 μw, M = 10, f = 35 MHz, B = 1 MHz
	F		5			λ = 1550 nm, IPO = 1.0 μw, M = 10, f = 35 MHz, B = 1 MHz
Optical Return Loss	ORL	30	40		dB	SMF

Pin Assignment

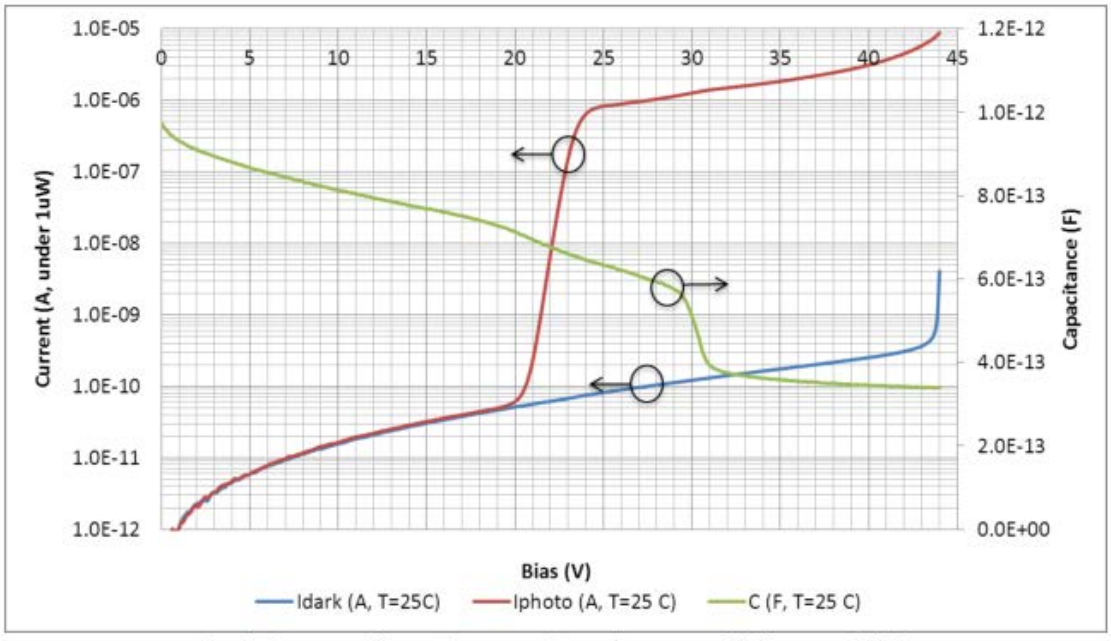
Address: 5-floor,Block B Creative Building, Shaojia Tsui, Wenz hi St.,Hongshan District,Wuhan,City,Hubei,P.R.China 430074
Tel: 86-027-87172995 Fax: 86-027-87179709 www.laserdiodedevice.com



Drawing



Typical Performance at 25°C



Dark Current, Photo Current, Capacitance vs. Voltage at 25°C

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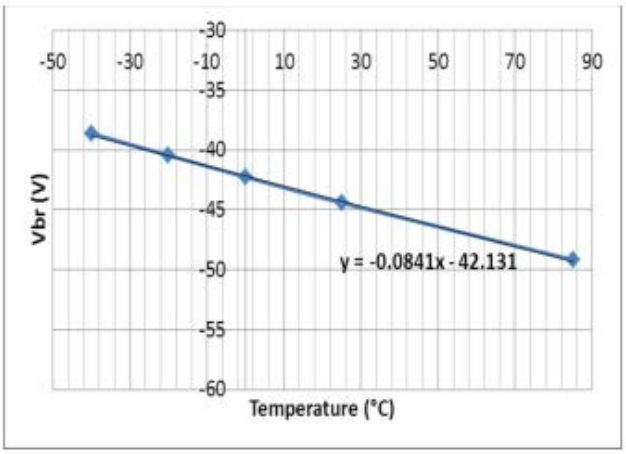
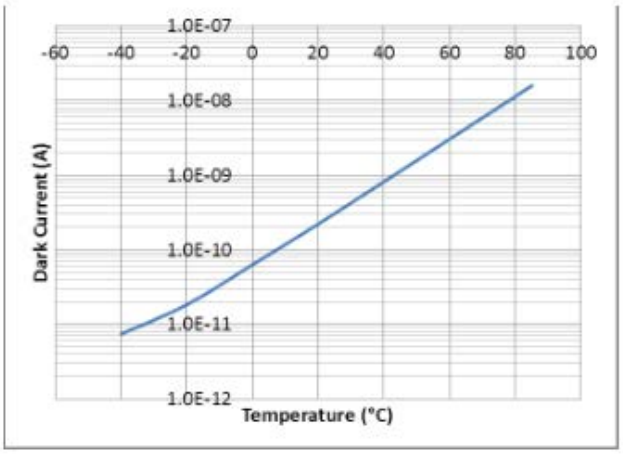
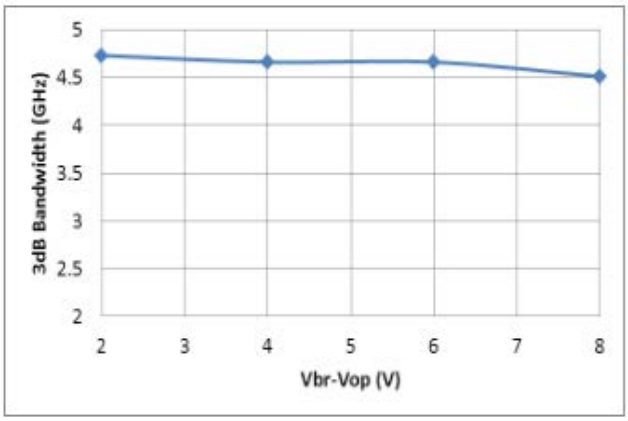


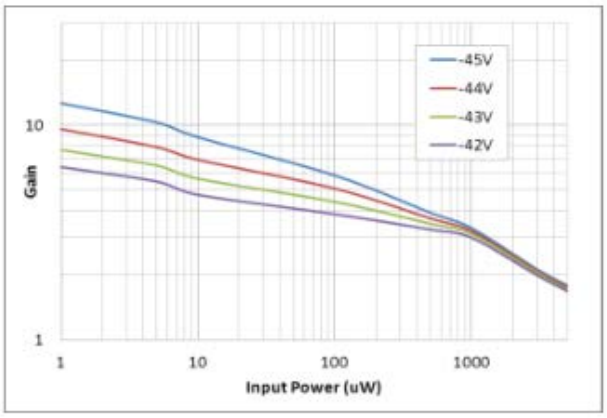
Breakdown Voltage vs. Temperature



Dark Current (at V_{br}-3V) vs. Temperature



Bandwidth vs. Operating Voltage (25°C)



Gain vs. Input Power (25°C)

Order Information

MAP-3XXX

M	AP	-3	X	X	X
Mode	**Product Type**	**Bandwidth**	**Connector**	**Fiber Type**	**Pigtail Length**
		3：3Gb/s	1：FC/APC 2：FC/PC 3：SC/APC 4：SC/PC 5：LC/PC 6：LC/APC W：Without	S9：9/125/900um S2：9/125/250um M5：50/125/900um M6：62.5/125/900um	05：0.5M 10：1.0M

Additional requirements can be settled through friendly negotiation.
Shengshi Optical Tech. Co.,Ltd reserves the right to make changes to the product or information contained herein without notice.

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