



InGaAs PIN Photodiode

Type: PDS443-C-C

FEATURES:

Planar semiconductor design and dielectric passivation

3-pin coaxial streamline packaging . with lens cap

Superior noise and photoelectric performance

Hermetical packaging and 100% purge burn-in

Applied for optical fiber communication system, Optical power monitor, analog CATV application.

ELECTRO-OPTICAL CHARACTERISTICS(T=25):

PARAMETERS	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Wavelength			1000		1650	nm
Dark Current	I_D	$E_e=0, V_R=5V$		0.2	0.5	nA
Responsivity	R_e	$V_R=5V, \lambda=1310nm$	0.85	0.90		A/W
Responsivity	R_e	$V_R=5V, \lambda=1550nm$	0.90	0.95		A/W
Capacitance	C	$f=1MHz, case grounded V_R=5V E_e=0$		0.63	0.75	pF
Second order inter-modulation distortion	IMD2	$f_1=400MHz, P_1=-3dBm; f_2=450.25MHz, P_2=-3dBm; MI=40%. P_{avg}=0dBm. R_{load}=50 \Omega$ IMD2: $f_1+f_2=850.25MHz. V_R=12V$			-70	dBc
Operating voltage	V_{opr}			-5	-15	V
Frequency Responsibility	BW	$V_R=5V, 50 \Omega$ load with lead length=6mm, case open	2.00			GHz

ABSOLUTE MAXIMUM RATINGS(T=25):

PARAMETERS	MIN	MAX	UNIT
Reverse Voltage		25	V
Input optical power		10	dBm
Reverse Current		5	mA
Forward Current		10	mA
Operating Temperature	-40	+85	
Storage Temperature	-40	+85	
Lead Solder Temperature		260	
Lead soldering duration		10	s

PRECAUTIONS:

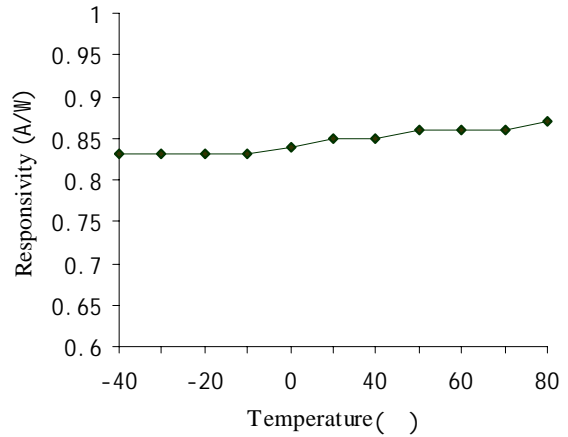
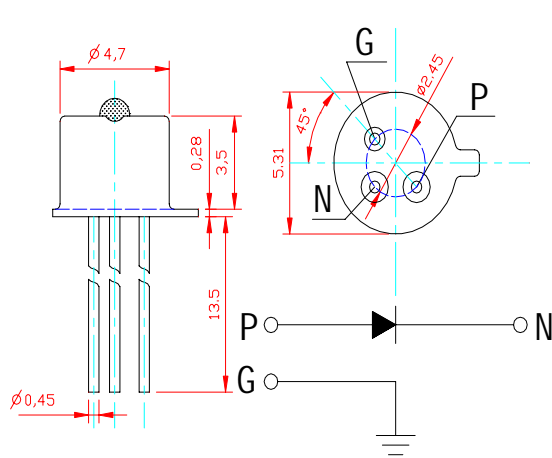
a ESD protection is imperative.

b Please shorten the length of the devices leads as much as possible.

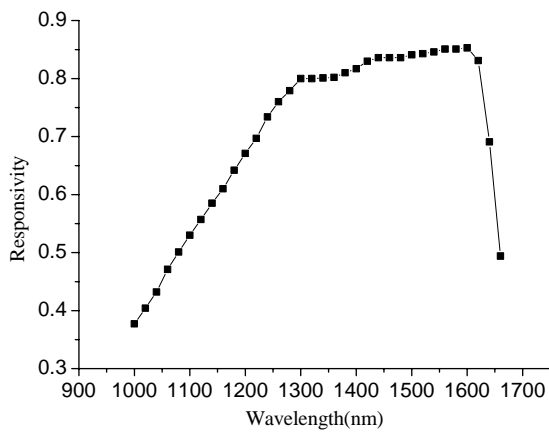


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Beijing SWT Optical Communication Technology Co., Ltd.

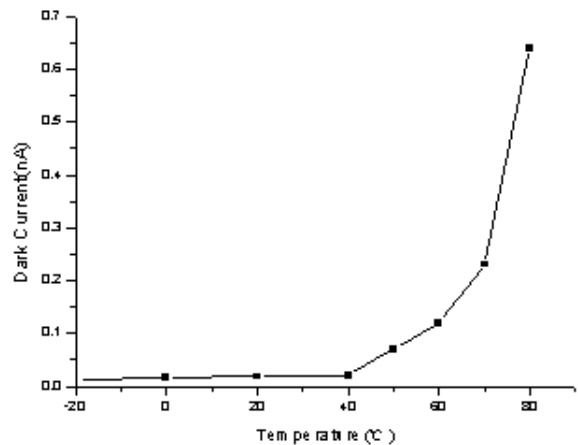


Package Dimensions

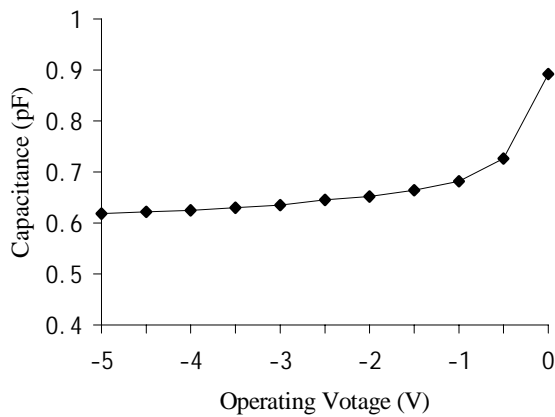


Spectrum Curve

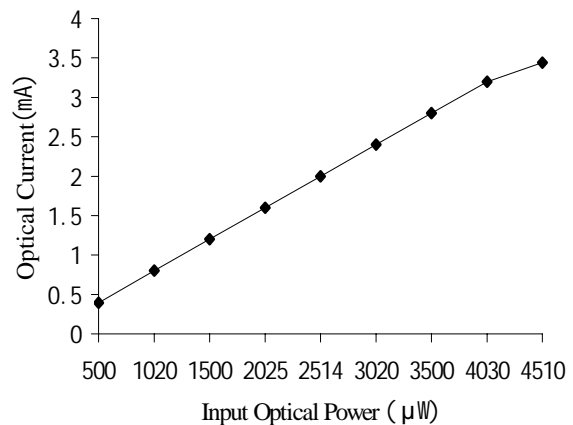
Responsivity-Temperature Curve



Dark Current-Temperature Curve



Capacitance-Voltage Curve



Current-Optical Power Curve

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