



InGaAs PIN Photodiode

Type: PDS143-CFA-C0202

FEATURES:

- Planar semiconductor design and dielectric passivation
- 3-pin coaxial streamline packaging ,SM pigtail withFC/APC connector
- 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	$E_e=0, V_R=5V, f=1MHz, case grounded$		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
Back Reflection	RL				-40	dB
Frequency Responsibility	BW	$V_R=5V, 50 \Omega$ load with lead length=6mm, case open	2			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
Fiber yield strength		1	kgf
Fiber bend radius	30		mm
Length of pigtail	1.0		m

PRECAUTIONS:a ESD protection is imperative.

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

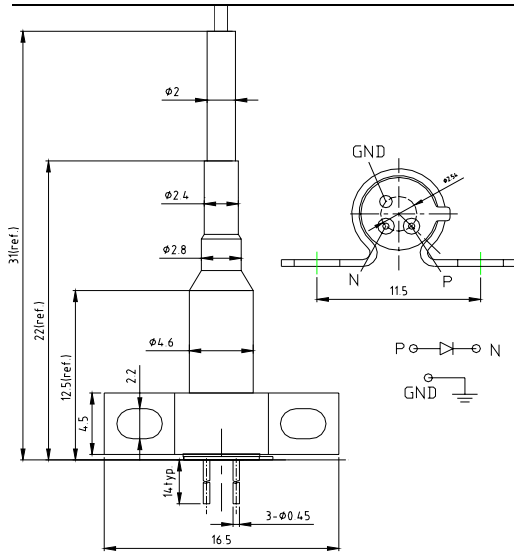
Address : 10th Floor, Tower C2, Dong ChangAn Street Dongcheng Diatric, Beijing

P.C. : 100738 Tel : 010-85180588 Fax : 010-85185617 <http://www.swt-oc.com>

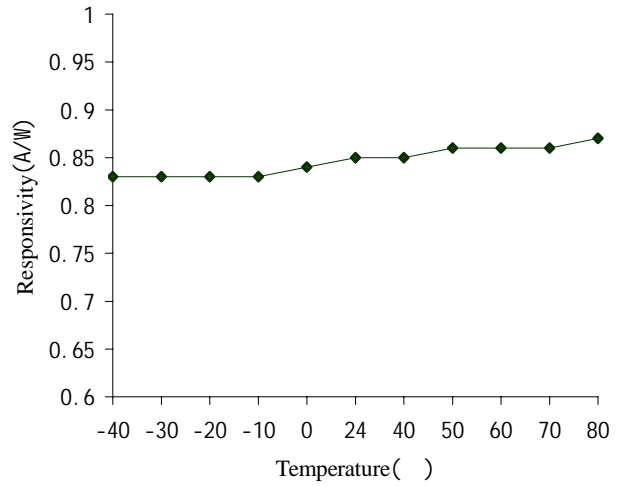


北京世维通光通讯技术有限公司

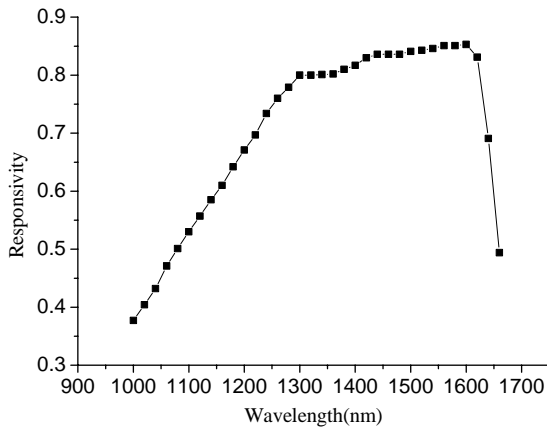
Beijing SWT Optical Communication Technology Co., Ltd.



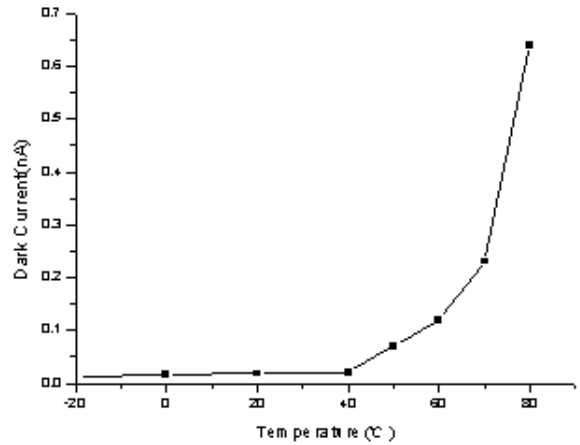
Package Dimensions



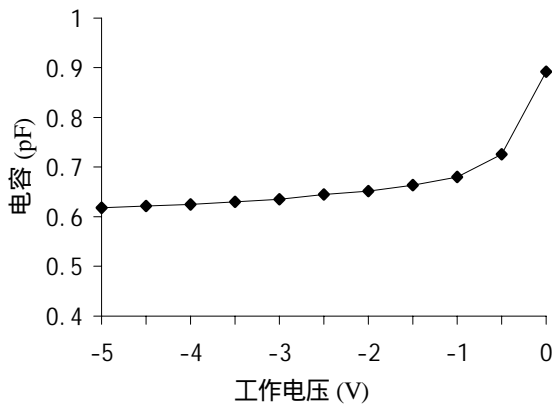
Responsivity-Temperature Curve



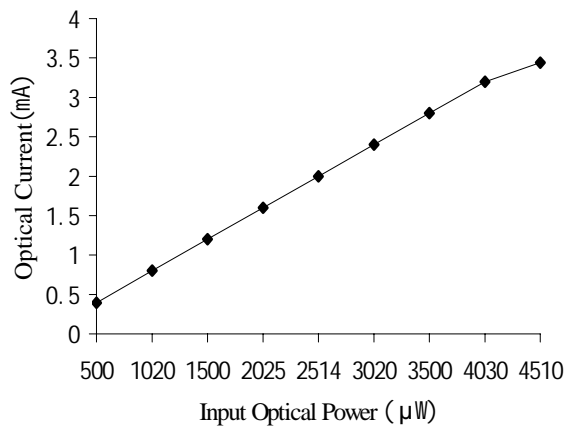
Spectrum Curve



Dark Current-Temperature Curve



Capacitance-Voltage Curve



Current-Optical Power Curve

Address : 10th Floor, Tower C2, Dong ChangAn Street Dongcheng Diatric, Beijing

P.C. : 100738 Tel : 010-85180588 Fax : 010-85185617 <http://www.swt-oc.com>