



InGaAs PIN Photodiode

Type: PDS423-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
For analog CATV application

ELECTRO-OPTICAL CHARACTERISTICS(T=25°C):

PARAMETERS	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Wavelength	λ		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	$f=1MHz, case grounded$ $V_R=5V E_e=0$		0.45	0.65	pF
Operating voltage	V_{opr}			-5	-15	V
Frequency Responsibility	BW	$V_R=5V, 50\Omega$ load with lead length=6mm, case open	2.50			GHz

ABSOLUTE MAXIMUM RATINGS(T=25°C):

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:

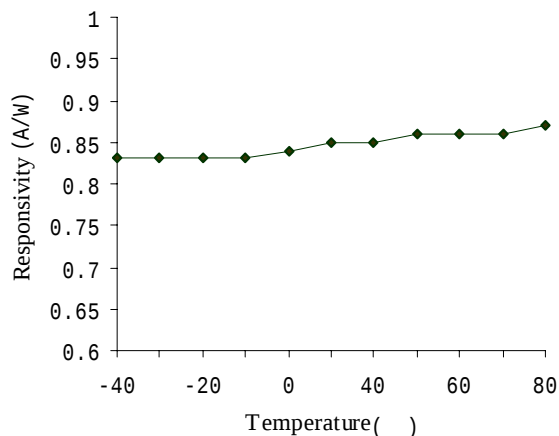
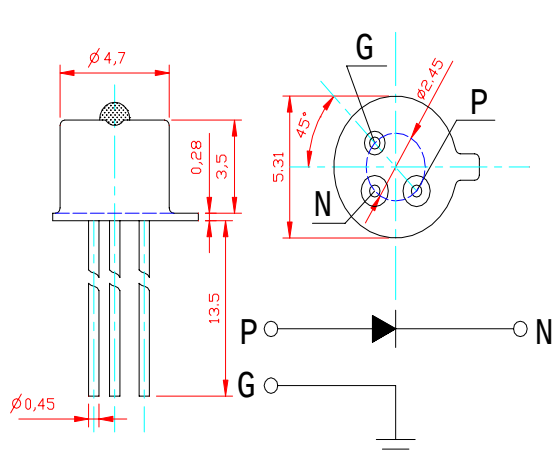
a ESD protection is imperative.

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

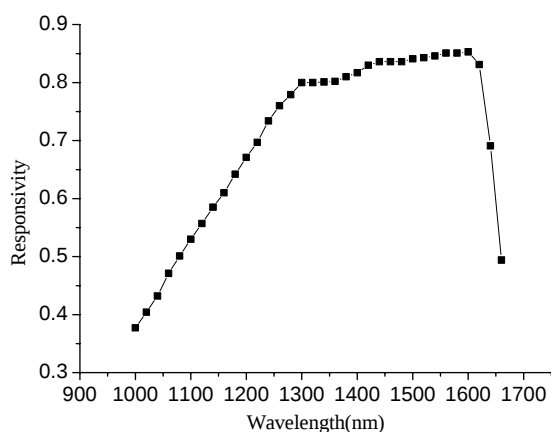


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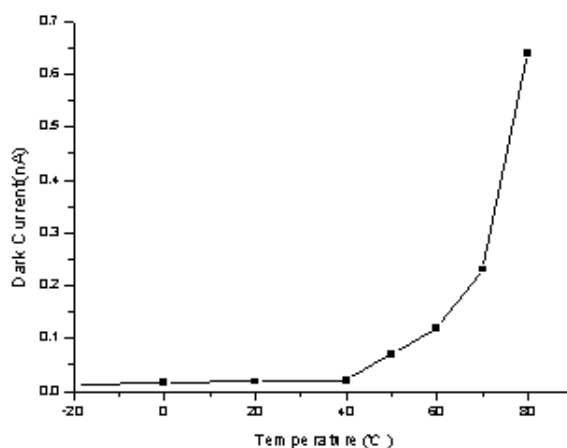
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Package Dimensions

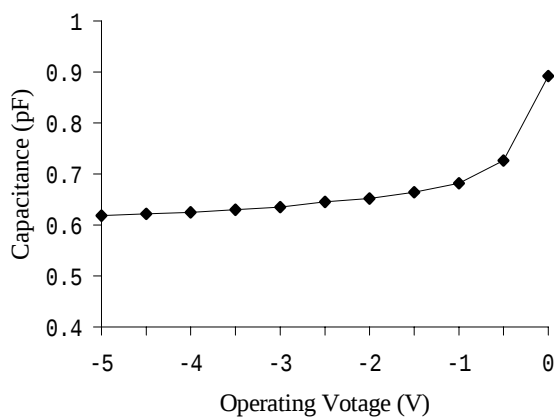


Responsivity-Temperature Curve

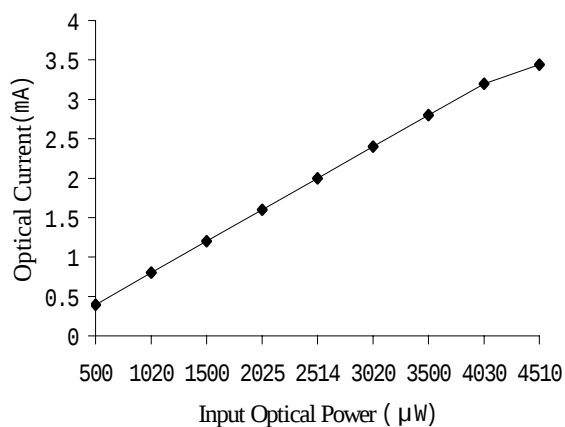


Spectrum Curve

Dark Current-Temperature Curve



Capacitance-Voltage Curve



Current-Optical Power Curve

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



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Type: PDS423-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
For analog CATV application
Low intermodulation distortion

ELECTRO-OPTICAL CHARACTERISTICS(T=25°C):

PARAMETERS	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Wavelength	λ		1000		1650	nm
Dark Current	I_D	$E_e=0, V_R=5V$		0.2	0.5	nA
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Capacitance	C	$f=1MHz, case grounded V_R=5V E_e=0$		0.45	0.65	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	2.5			GHz

ABSOLUTE MAXIMUM RATINGS(T=25)::

PARAMETERS	MIN	MAX	UNIT
Reverse Voltage		25	V
Input optical power		10	dBm
Reverse Current		5	mA
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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.

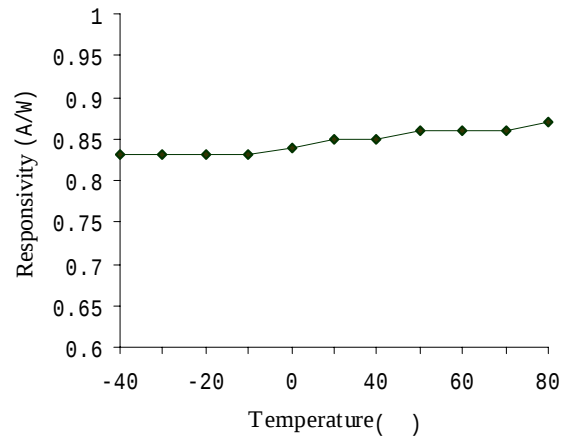
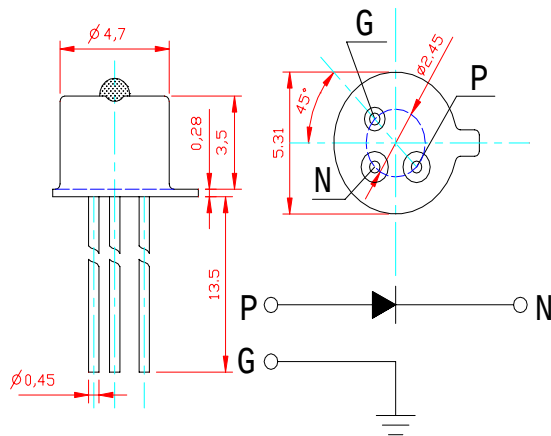
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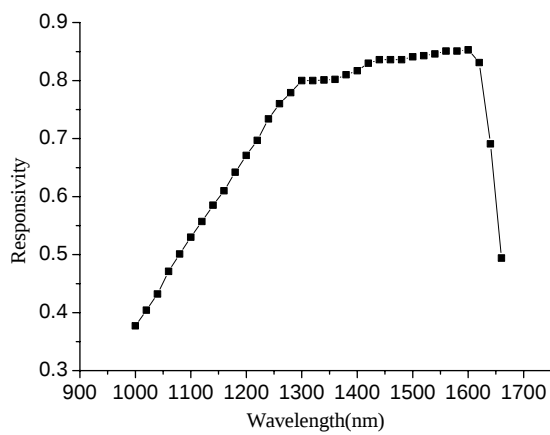


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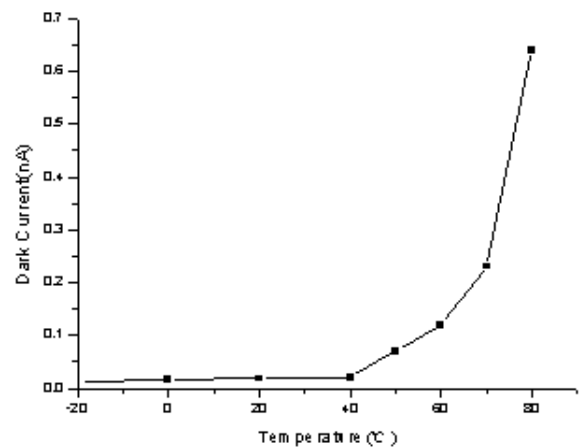
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Package Dimensions

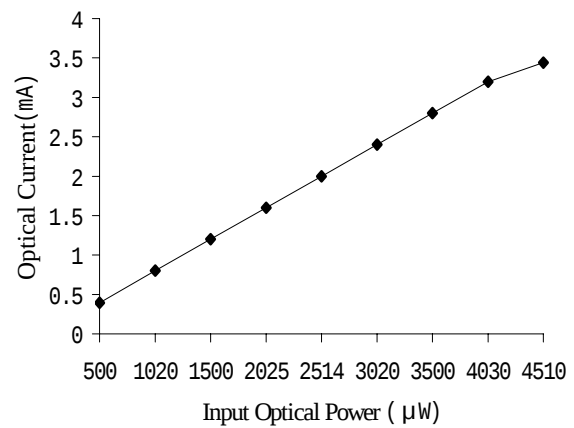
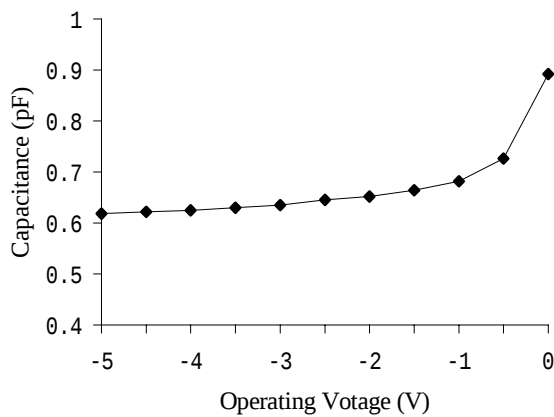


Responsivity-Temperature Curve



Spectrum Curve

Dark Current-Temperature Curve



Capacitance-Voltage Curve

Current-Optical Power Curve

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InGaAs PIN Photodiode

Type: PDS443-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
For analog CATV application

ELECTRO-OPTICAL CHARACTERISTICS(T=25°C):

PARAMETERS	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Wavelength	λ		1000		1650	nm
Dark Current	I_D	$E_e=0, V_R=5V$		0.2	0.5	nA
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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
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°C):

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:

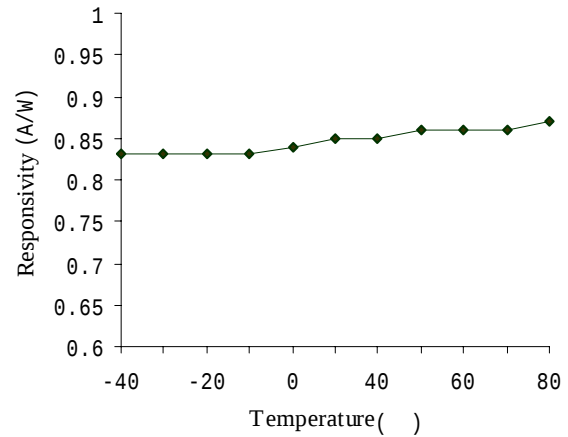
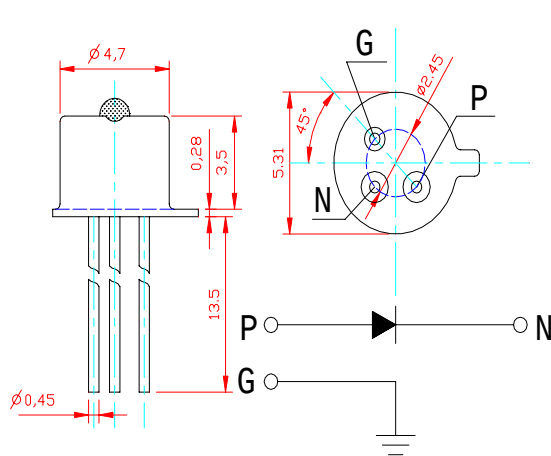
a ESD protection is imperative.

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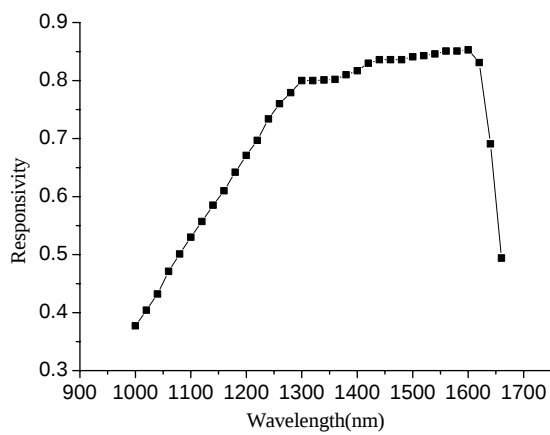


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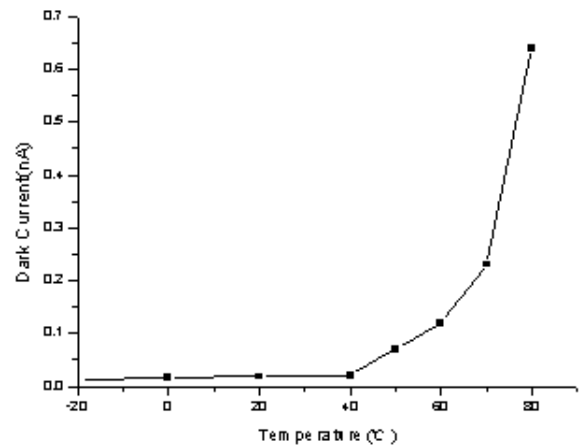
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Package Dimensions

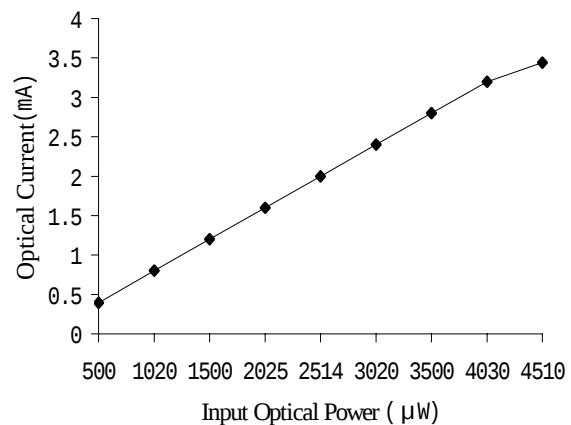
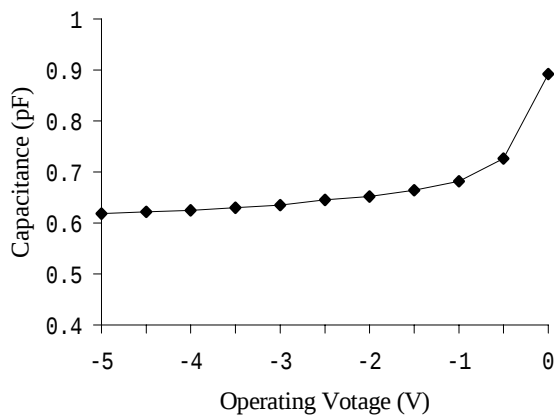


Responsivity-Temperature Curve



Spectrum Curve

Dark Current-Temperature Curve



Capacitance-Voltage Curve

Current-Optical Power Curve

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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	λ		1000		1650	nm
Dark Current	I_D	$E_e=0, V_R=5V$		0.2	0.5	nA
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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)::

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PRECAUTIONS:

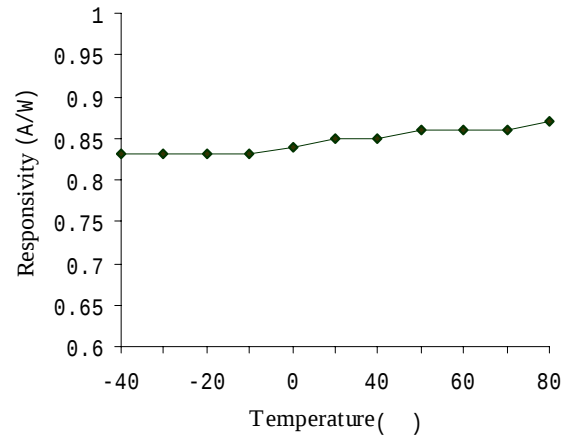
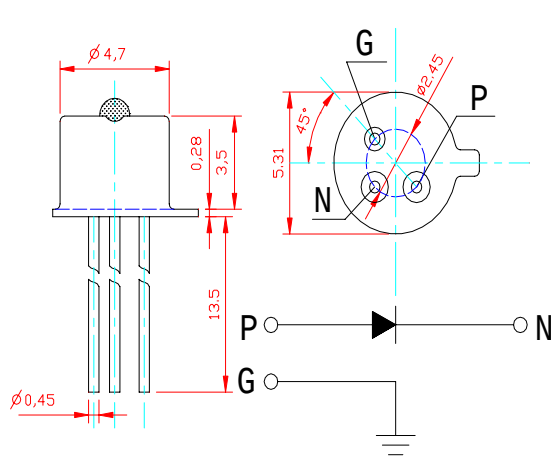
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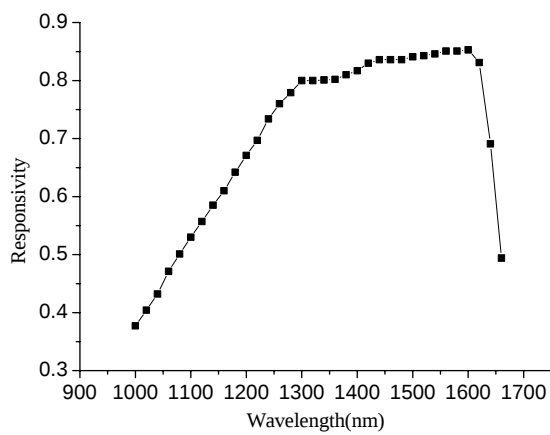


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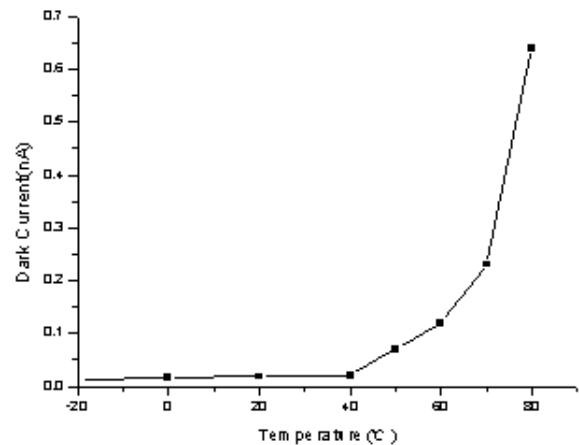
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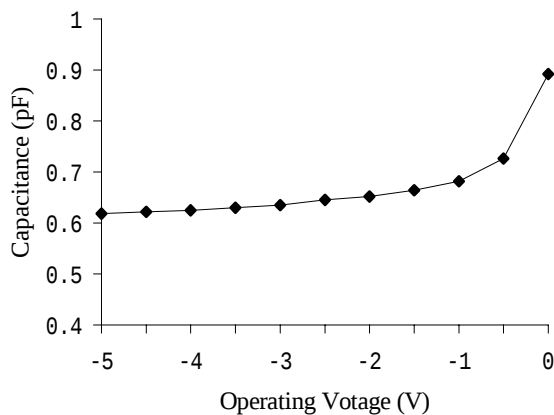


Responsivity-Temperature Curve

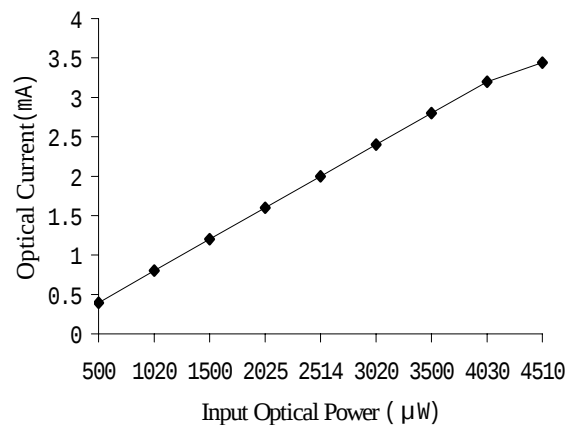


Spectrum Curve

Dark Current-Temperature Curve



Capacitance-Voltage Curve



Current-Optical Power Curve

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InGaAs PIN Photodiode

Type: PDS423-C-C06

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
Long optical work distance for Bi-Di Or Triplexer application

ELECTRO-OPTICAL CHARACTERISTICS(T=25°C):

PARAMETERS	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Wavelength	λ		1000		1650	nm
Dark Current	I_D	$E_e=0, V_R=5V$		0.2	0.5	nA
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Operating voltage	V_{opr}			-5	-15	V
Frequency Responsibility	BW	$V_R=5V, 50\Omega$ load with lead length=6mm, case open	2.5			GHz

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PARAMETERS	MIN	MAX	UNIT
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Lead Solder Temperature		260	
Lead soldering duration		10	s

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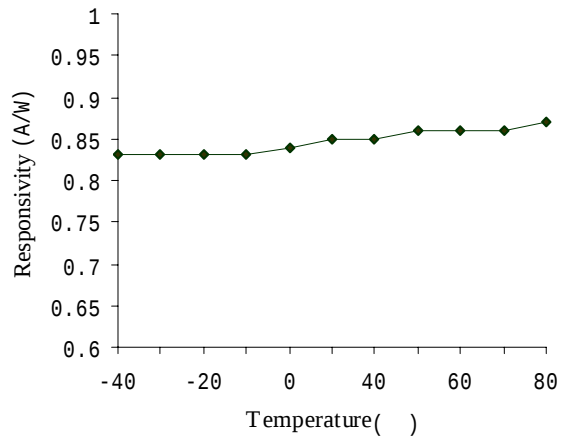
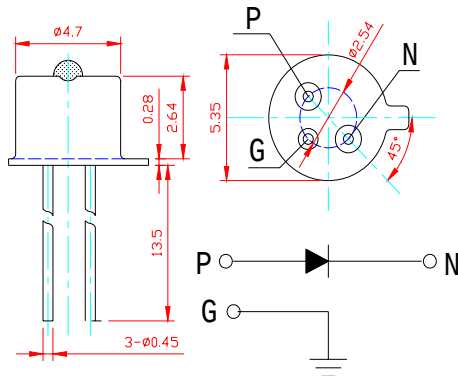
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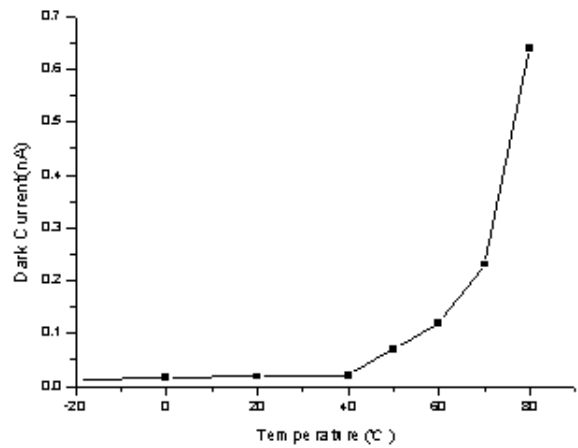
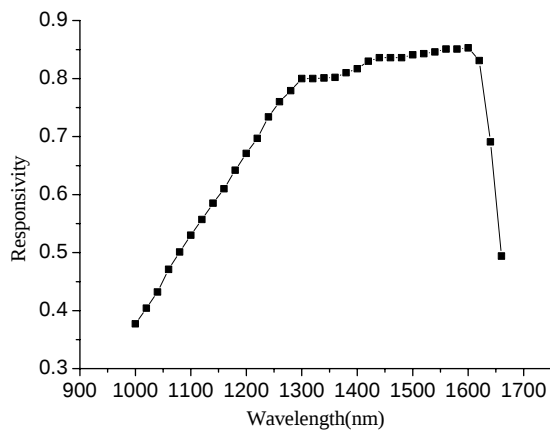
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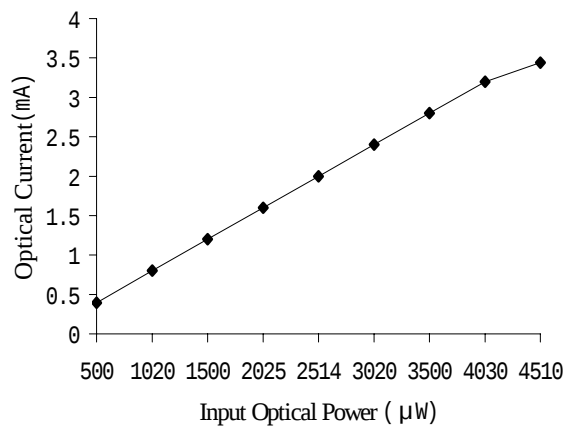
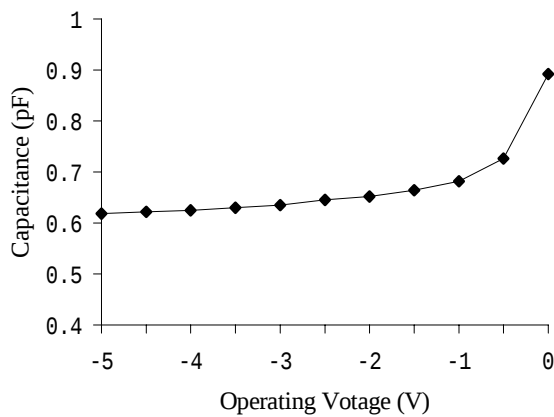
Package Dimensions

Responsivity-Temperature Curve



Spectrum Curve

Dark Current-Temperature Curve



Capacitance-Voltage Curve

Current-Optical Power Curve

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