

# 1.5mm InGaAs Quadrant PIN Photodiode

Version: 3.1 17-03-01

**Model: LSIQPD-1.5**
**Features:**

- Low noise and high reliability
- 800-1700nm wavelength range
- Narrow element gap 45um
- Fast rise time and fall time
- Low crosstalk
- Hermetical TO5 Can with flat window



08.1-Au

**Applications:**

- Beam alignment
- eye-safe Laser guidance、
- Laser positioning and Laser navigation
- Laser range finder
- Beam profiling

**Absolute maximum ratings:**

parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Forward current	I <sub>F</sub> each channel	5	mA
Reverse voltage	V <sub>R</sub>	10	V
Soldering temperature(time)	Ts (10s)	260	°C

**Electrical and optical characteristics:(T=25°C)**

Parameters	Sym.	Test conditions	Min	Typ	Max	Unit
Response Spectrum	$\lambda$	—	800~1700			nm
Active diameter	$\varphi$	—	1.5			mm
Element Gap			45			um
Responsivity	Re	$\lambda=1550\text{nm}, V_R=5\text{V}$	0.9	0.95		mA/mW
		$\lambda=1310\text{nm}, V_R=5\text{V}$	0.85	0.9		
		$\lambda=1060\text{nm}, V_R=5\text{V}$	0.6	0.70		
Response time	Tr	f=1MHz, RL=50Ω, V <sub>R</sub> =5V, Each Channel	.	3.5		ns
Dark current	I <sub>d</sub>	V <sub>R</sub> =5V, Each Channel		0.3		nA
Crosstalk	SL	V <sub>R</sub> =5V, BW=100MHZ, 100uW		10		%
Junction capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =5V, Each Channel		25		pF
Reverse breakdown voltage	V <sub>BR</sub>	I <sub>R</sub> =10uA, Each Channel		35		V
Saturated Optical Power	P <sub>s</sub>	V <sub>R</sub> =5V, Each Channel		5		mW
Operating voltage	V <sub>R</sub>		0		5	V
Shunt resistance	R <sub>sh</sub>	V <sub>R</sub> =10mV, , Each Channel		500		MΩ
package	Hermetical TO5 Can with flat window					

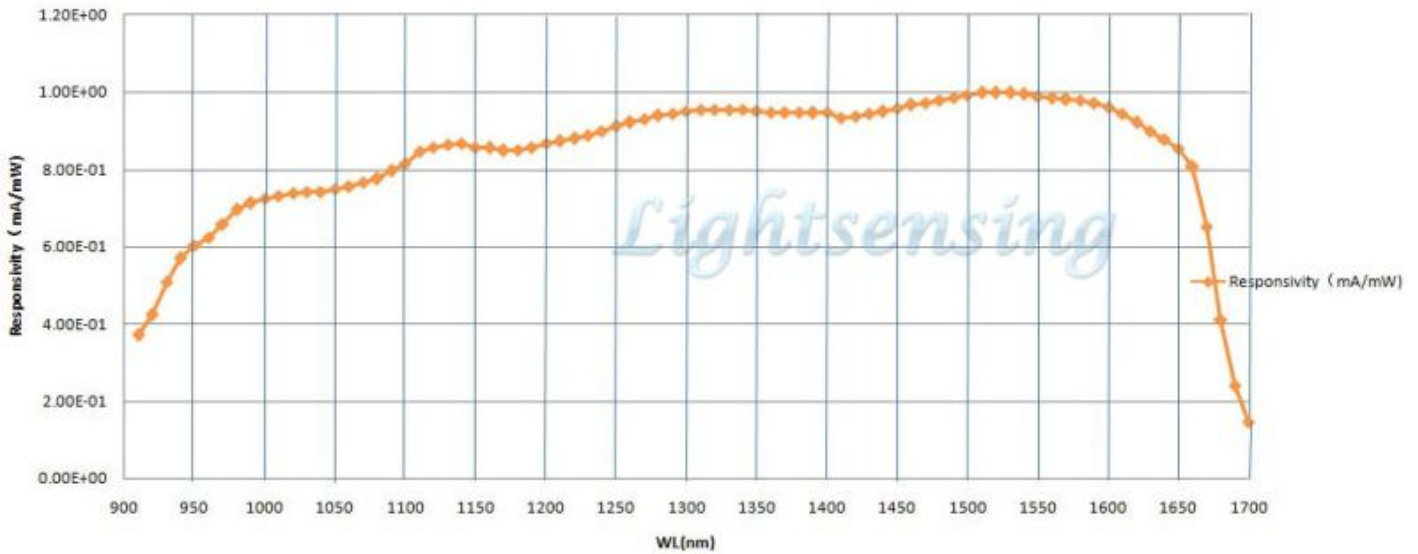
NOTICE: The above product specifications are subject to change without notice.

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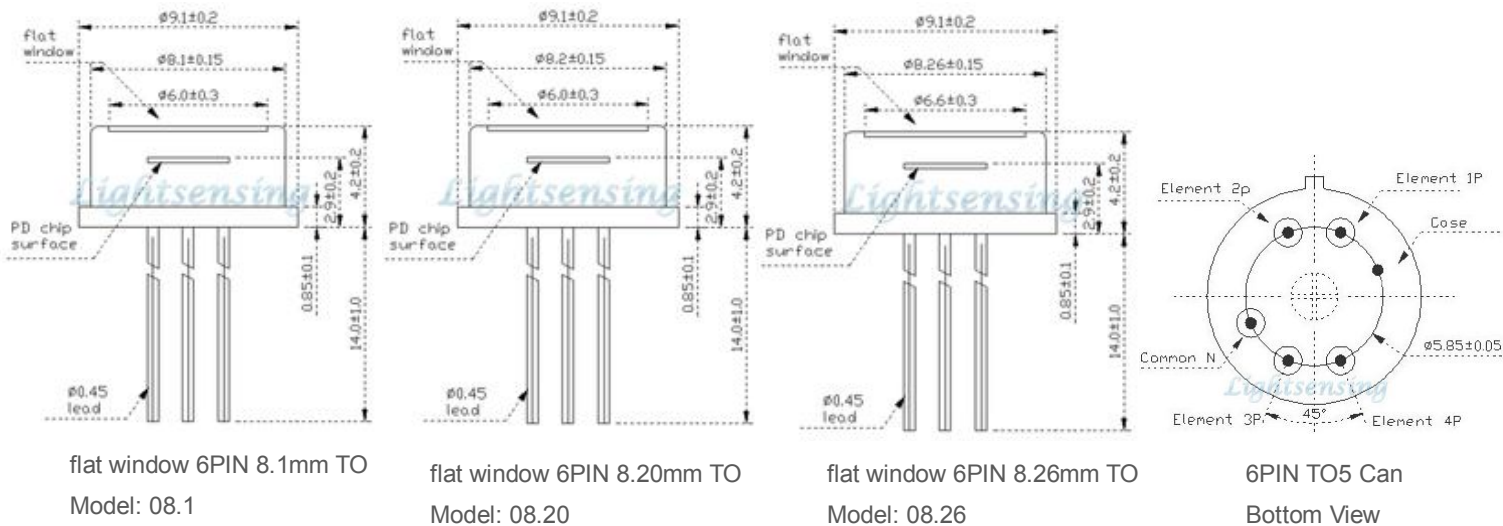
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### The typical characteristic curve



### TO package and Lead



### Order information

LSIQPD-1.5-X

- X=08.1-Au TO-5 Can with flat window  $\Phi$ 8.1mm Au cap
- X=08.20 TO-5 Can with flat window  $\Phi$ 8.20mm nickel cap
- X=08.26 TO-5 Can with flat window  $\Phi$ 8.26mm nickel cap
- X=08.26A TO-5 Can with flat window  $\Phi$ 8.26mm nickel cap and Antireflection Coatings
- X=Other By customer's request

### The cautions

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protecting measures are recommend in storage, transporting and using.