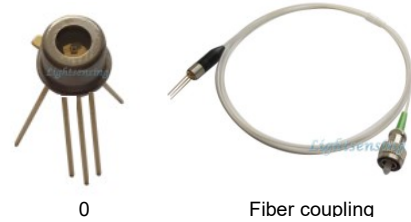


10G InGaAs M=30 Avalanche Photodiode Version: sample 18-09-01

Model: LSIAPD-10G

Features:

- High reliability, low dark current
- 800-1700nm wavelength range
- High Gain up to M=30
- High rate up to 10Gbps
- Hermetic TO46 Can or with fiber coupling



Applications:

- Ultra Weak pulse optical detecting
- Optical fiber sensor, OTDR
- Laser lidar, laser range finding
- high resolution Optical Coherence Tomography
- Science analysis and experiment

The absolute values

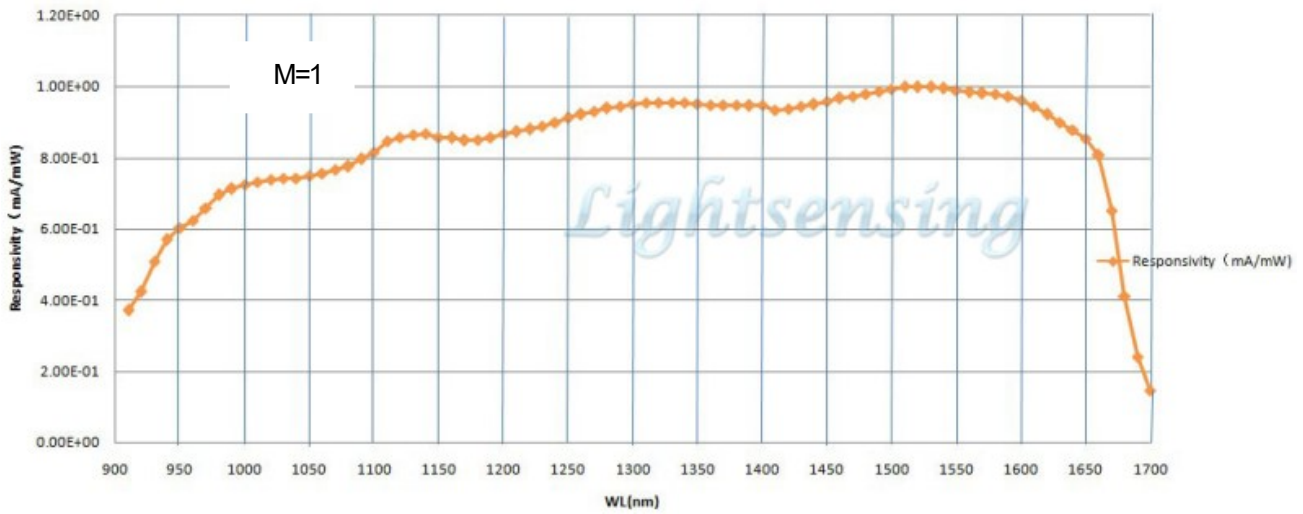
Operating voltage	0.99×V _{BR}	Operating temperature	-40~+85℃	Power dissipation	50mW
Forward current	4mA	storage temperature	-45~+100℃	Soldering temperature(time)	260℃ (10s)

The opto-eletronic characteritics (@Tc=22±3℃)

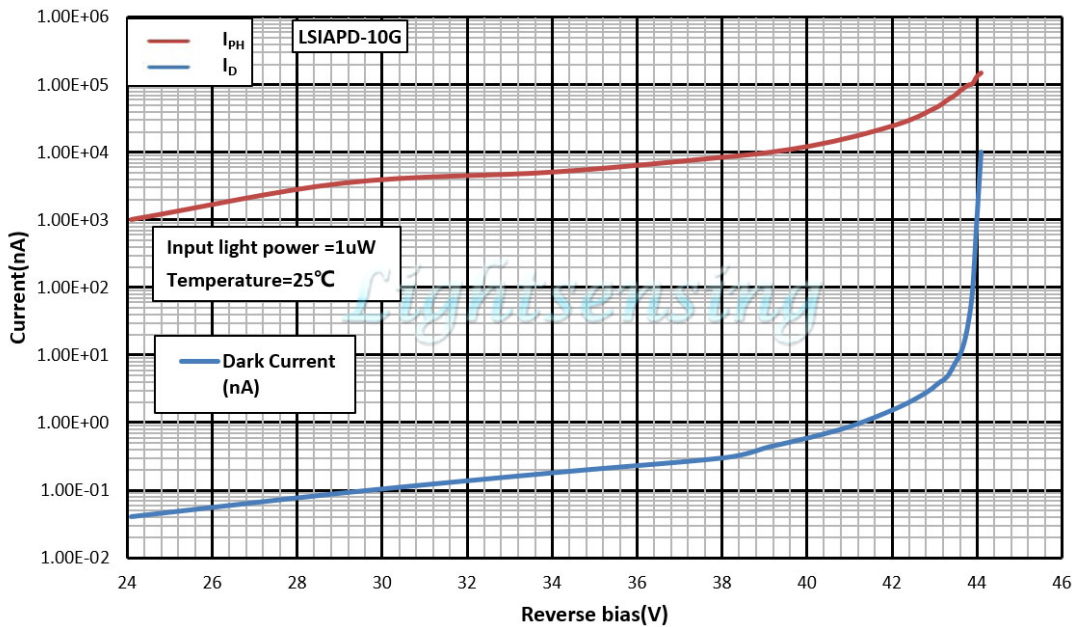
Parameters	Sym.	Test conditions	Min	Typ	Max	Unit
Response Spectrum	λ	—	800~1700			nm
Active diameter	φ	—	30			μm
Responsivity	Re	λ=1.55μm, φ _e =1μW, M=1		0.8		A/W
Multiplication gain	M	λ=1.55μm, φ _e =1μW, V _{BR} -4V		10		
		λ=1.55μm, φ _e =1μW, V _{BR} -2V		20		
		λ=1.55μm, φ _e =1μW, V _{BR} -1.2V		30		
Rate	R _B	M=10, R _L =50Ω		10		Gbps
Dark current	I _D	M=10		0.5		nA
Total capacitance	C _{tot}	M=10		0.3		pF
Reverse breakdown voltage	V _{BR}	I _R =10uA	20	28	50	V
Maximum instantaneous input power	P	M=10, 1550nm, 10ns, 10KHZ			100	uW
Operating voltage temperature coefficient	δ	Tc=-40~+85℃		0.11	0.15	V/℃
package	Hermetic TO46 Can or with fiber coupling					

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

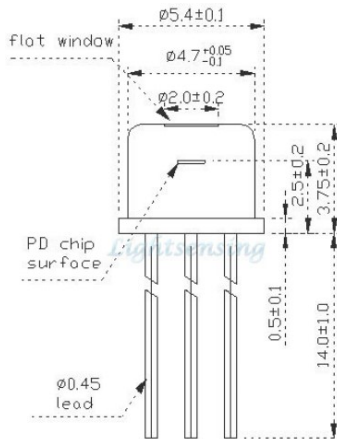
The typical characteristic curve



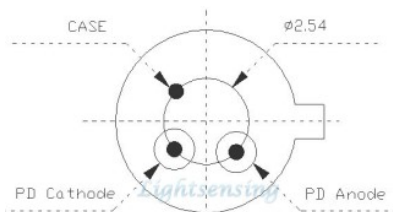
Dark current and photo current vs voltage



TO package and Lead



2mm flat window TO
Model: 0



Type B PIN description
Bottom View

地址: 北京市海淀区苏州街 33 号 12 层 1202 邮编: 100080

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Ordering information

LSIAPD-10G-X - X

X=B	Type B PIN description	X=0	TO-46 Can with 2mm flat window cap
X=Other		X=0A	TO-46 Can with 2mm flat window cap and Antireflection Coatings
		X=SMFA/P	TO-46 Can with SM Fiber coupling with FC-APC/FC-PC connector
		X=SMSA	TO-46 Can with SM Fiber coupling with SC-APC connector
		X=5MMFA	50um MM Fiber coupling with FC-APC connector
		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.
- 3: The fiber bending radius no less than 20mm for avoiding fiber damaged ,Be sure the fiber coupling facet is clean before connecting it to opto-circuit.