

0.4mm InGaAs PIN photodiode for power meter Version: 3.1 17-05-25

Model: LSIPD-M0.4

Features:

- High reliability, Ultra low dark current
- 800-1700nm spectral range
- Active diameter 0.4mm
- Saturated optical power up to 9dBm in 0V bias voltage
- Hermetic TO46 Can or Mini TO can or with receptacle or with fiber coupling

Applications:

- Optical power meter
- Optical sensor
- Industrial automatic control
- Medical field application
- Security field application



Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Тор	-40~+85	${\mathbb C}$
Storage temperature	Tstg	-40~+100	${\mathbb C}$
Forward current	I _f	6	mA
Reverse voltage	V_r	20	V
Soldering temperature(time)	Ts (10s)	260	$^{\circ}$

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

parameter	symbol unit Value		Value (typ.)
Active diameter	Ф тт		0.4
Spectral range	λ nm 800-1700		800-1700
Responsivity	Re(V _R =0V,λ=1310nm)	mA/mW	0.85
	Re(V _R =0V,λ=1550nm)	mA/mW	0.90
Response time	Tr (R_L =50 Ω , V_R =5 V)	ns	0.8
Dark current	Id(V _R =0V)	pA	2
	Id(V _R =5V)	pA	30
Reverse Breakdown voltage	V _{BR} (I _R =10uA)	V	30
Junction capacitance	Cj (f=1MHz, V _R =0V)	pF	950
	Cj (f=1MHz, V _R =5V)	pF	5.2
Saturated Optical Power	Ps(VR =0V,no load)	mW	8(9dBm)
Operating voltage	V _R V		0-10
Shunt resistance	Rsh (VR=10mV) $G\Omega$ 5		5
package	Hermetic TO46 Can or Mini TO Can or with receptacle or fiber coupling		

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

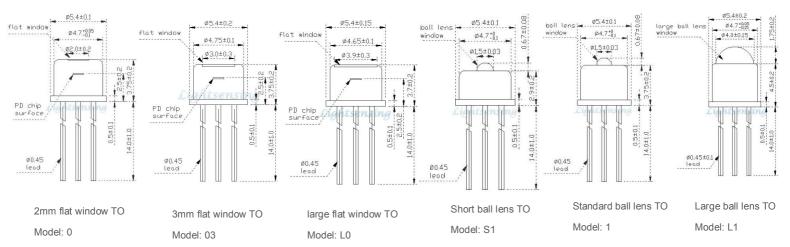
地址:北京市海淀区苏州街 12 号西屋国际 E 座 1201 邮编: 100080 Address: Building E Rm 1201, Westing house, No 12 Suzhou Street,, Haidian District, Beijing 100080, China. TEL: +86-010-82873449 FAX: +86-010-62557230 Email: info@lightsensing.com Website: www.lightsensing.com

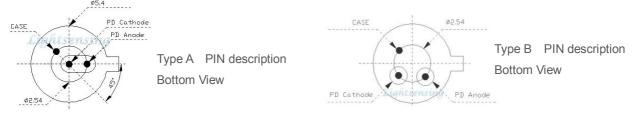


The typical Responsivity curve

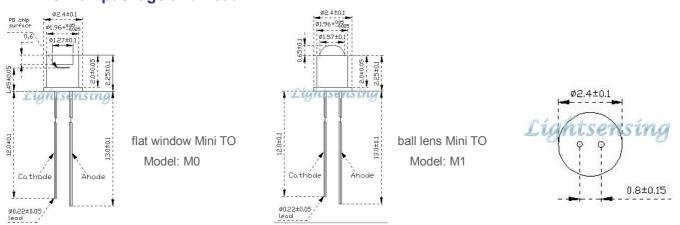


TO46 TO package and Lead





Mini-TO Can package and Lead



Note: In order to get other dimensions, please contact us.



TO46 package Order information

LSIPD-M0.4- <u>X</u> - <u>X</u>		
X=A Type A PIN description	X=0	TO-46 Can with 2mm flat window cap
X=B Type B PIN description	X=0A	TO-46 Can with 2mm flat window cap and Antireflection Coatings
	X=03	TO-46 Can with 3mm flat window cap
	X=L0	TO-46 Can with 3.9mm flat window cap
	X=1	TO-46 Can with ball lens cap
	X=1A	TO-46 Can with ball lens cap and Antireflection Coatings
	X=S1	TO-46 Can with short ball lens cap
	X=S1A	TO-46 Can with short ball lens cap and Antireflection Coatings
	X=L1	TO-46 Can with large ball lens cap
	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/P	TO-46 Can with 50um MM Fiber coupling with FC-APC/FC-PC connector
	X=6MMFA/P	TO-46 Can with 62.5um MM Fiber coupling with FC-APC/FC-PC connector
	X=10MMA/P	TO-46 Can with 105um MM Fiber coupling with FC-APC/FC-PC connector
	X=20MMA/P	TO-46 Can with 200um MM Fiber coupling with FC-APC/FC-PC connector
	X=2JKFC	TO-46 Can with fixed receptacle with FC connector and 2 pieces of fix holes
	X=4JKFC	TO-46 Can with fixed receptacle with FC connector and 4 pieces of fix holes
	X=2JKFC-1	TO-46 Can with fixed receptacle with FC connector and 2 pieces of fix holes
		and better repeatability but with lower saturated power
	X=4JKFC-1	TO-46 Can with fixed receptacle with FC connector and 4 pieces of fix holes
		and better repeatability but with lower saturated powe
	X=Other	By customer's request

Mini TO package Ordering information



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.

地址:北京市海淀区苏州街 12 号西屋国际 E 座 1201 邮编: 100080 Address: Building E Rm 1201, Westing house, No 12 Suzhou Street,, Haidian District, Beijing 100080, China. TEL: +86-010-82873449 FAX: +86-010-62557230 Email: info@lightsensing.com Website: www.lightsensing.com