

InGaAs PIN Photodiode with Dia. 1mm Active Area

Model No.: PDT-LF46A1-0, PDT-LF46A1-A, PDT-SF46A1-0, PDT-SF46A1-A

Features:

- High reliability, low dark current
- 800-1700nm spectral range
- Active diameter 1mm
- Hermetic TO-46 Can



PDT-SF46A1-X



PDT-LF46A1-X

Applications:

- Optical sensor and Optical power meter
- Industrial automatic control
- Science analysis and experiment
- Space light detect equipment
- Response spectrum testing

X=0 for TO-Can with flat window cap

X=A for TO-Can with flat window cap and Anti-reflection Coating

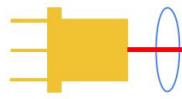
Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°C
Forward current	I _f	12	mA
Reverse voltage	V _r	20	V
Soldering temperature(time)	T _s (10s)	260	°C

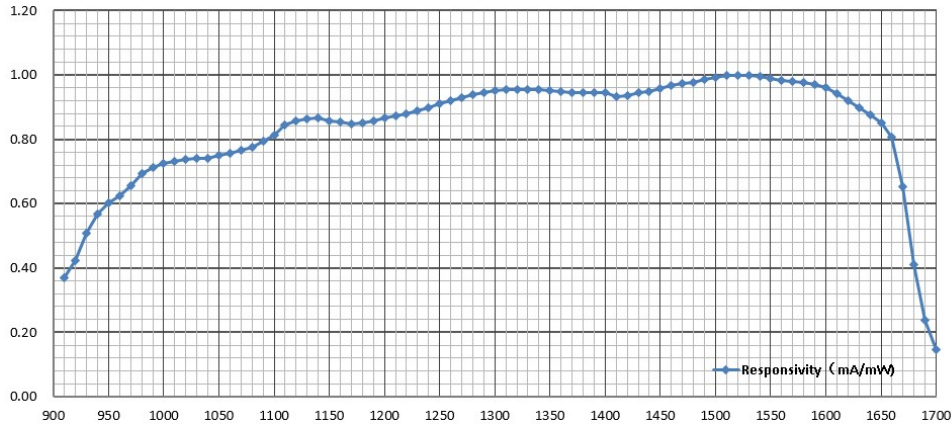
Electrical and optical characteristics:(T=25°C)

parameter	symbol	unit	Value typ.
Active diameter	Φ	mm	1
Spectral range	λ	nm	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 =50Ω,V _R =5V)	ns	10
Dark current	Id(V _R =0V)	nA	0.1
	Id(V _R =5V)	nA	1
Reverse Breakdown voltage	V _{BR} (I _R =10uA)	V	30
Junction capacitance	C _j (f=1MHz, V _R =0V)	pF	1200
	C _j (f=1MHz, V _R =5V)	pF	75
Saturated Optical Power	P _s (V _R =5V)	mW	10
Operating voltage	V _R	V	0-5
Shunt resistance	R _{sh} (V _R =10mV)	MΩ	100
package	Hermetic TO46 Can		

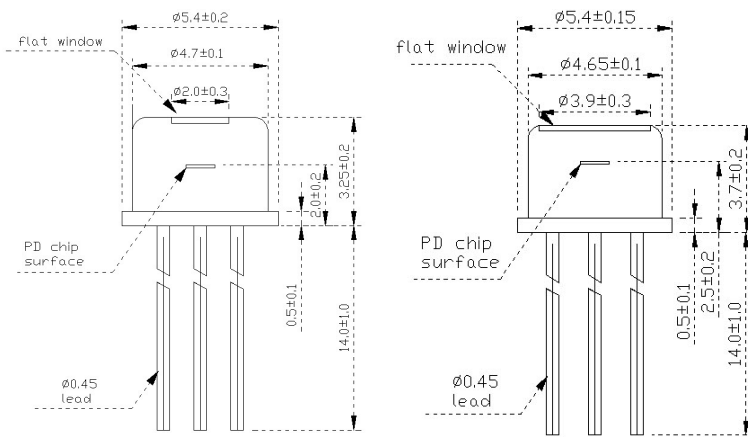
NOTICE: The specifications are subject to change without notice.



The typical Responsivity curve

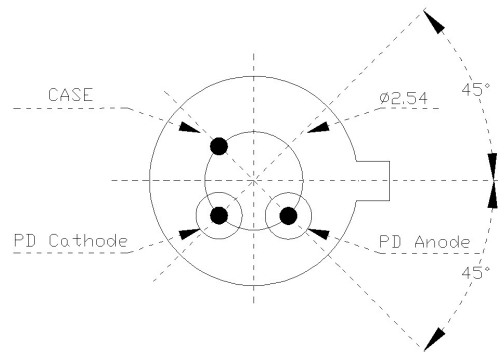


TO package and Lead



2mm flat window TO
PDT-SF46A1-X

large flat window TO
PDT-LF46A1-X



PIN configuration
Bottom View

Order information

PDT-SF46A1-X & PDT-LF46A1-X

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X=A for TO-Can with flat window cap and Anti-reflection Coating

Cautions

- 1: The above specifications are subject to change without notice.
- 2: The suitable ESD protecting measures are needed in storage, transportation and handling.