

Dia. 1mm Active Area InGaAs PIN Photodiode

Part No. PDT-LF46A1-x | PDT-SF46A1-x

Features

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

Applications

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



PDT-SF46A1-X

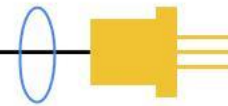


PDT-LF46A1-X

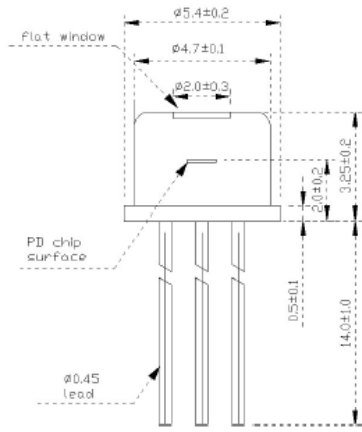
Specifications

Electro-Optical Characteristics (T=25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active Diameter	Φ		1		Mm	
Spectral Range	λ	800		1700	nm	
Responsivity	R_e		0.85 0.9		mA/mW	$V_R=0V, \lambda=1310nm$ $V_R=0V, \lambda=1550nm$
Response Time	T_r		10			$R_L=50ohm, V_R=5V$
Dark Current	I_d		0.1 1		nA	$V_R=0V$ $V_R=5V$
Reverse Breakdown Voltage	V_{BR}		30			V
Junction Capacitance	C_j		1200 75		pF	$f=1MHz, V_R=0V$ $f=1MHz, V_R=5V$
Saturated Optical Power	P_{sat}		10			mW
Operating Voltage	V_R	0		5	V	
Shunt Resistance	R_{sh}		100		M Ω	

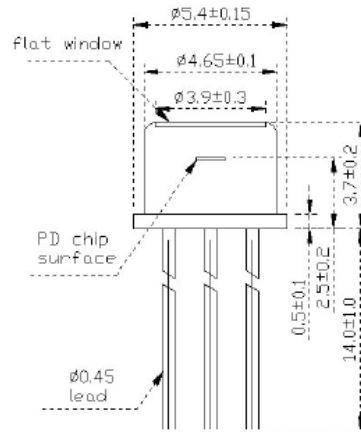
Absolute Maximum Ratings					
Parameters	Min.	Max.	Unit	Conditions	
Storage Temperature	-40	100	°C		
Operating Temperature	-40	85	°C		
Lead Solder Temperature		260	°C	10 seconds	
Forward Current		12	mA		
Reverse Voltage		20	V		



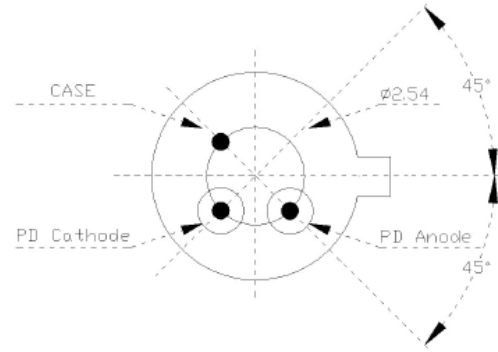
Outline Dimensions (unit: mm)



2mm flat window TO
PDT-SF46A1-X



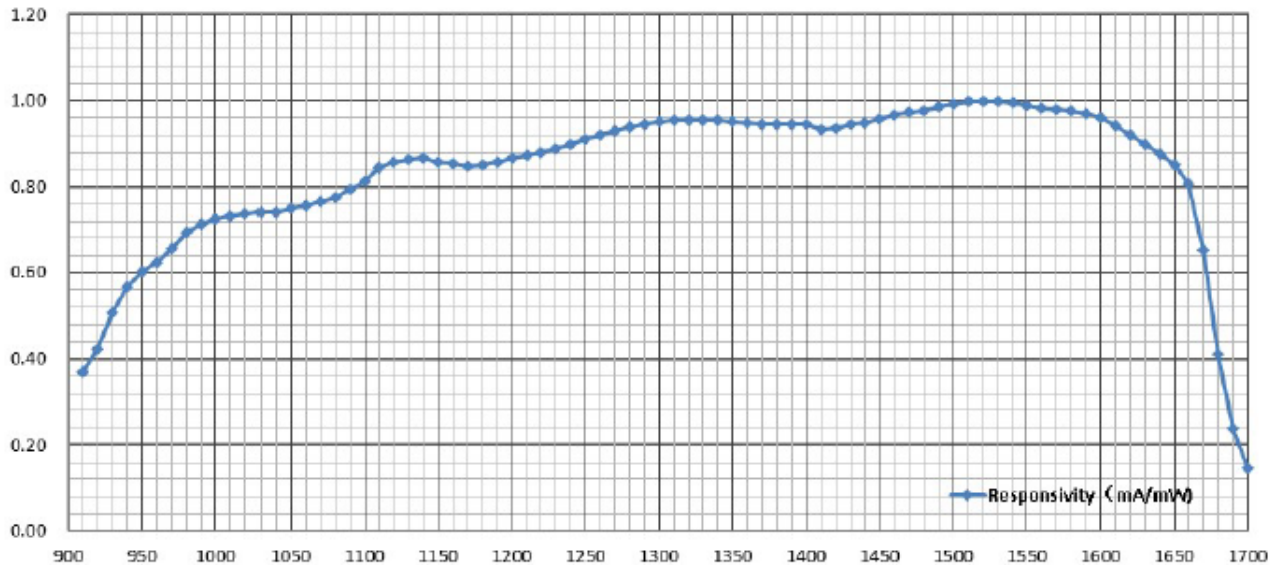
large flat window TO
PDT-LF46A1-X



PIN configuration
Bottom View

Typical Characteristics

Typical Responsivity Curve



Ordering Information

Part Number	Package
PDT-SF46A1-0	TO-can with 2mm flat window cap
PDT-SF46A1-A	TO-can with 2mm flat window cap and Anti-reflection coating
PDT-LF46A1-0	TO-can with large flat window cap

Additional Notes

1. Specifications are subject to change without notice.
2. The suitable ESD protective measures are needed in storage, transportation and handling.