

1mm UV Silicon PIN photodiode

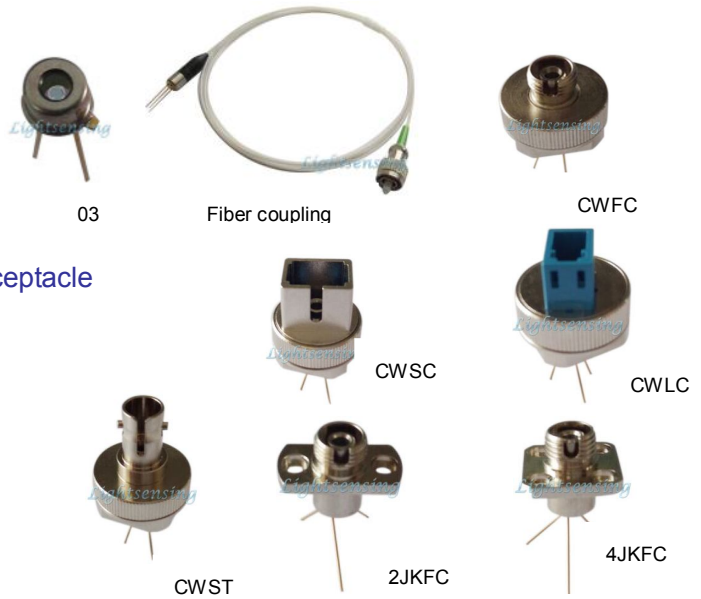
Version: 3.1 17-03-01

Model: LSSPD-U1
Features:

- High reliability, low dark current
- Active diameter 1x1mm
- 200-1100nm spectral range
- Hermetic TO46 Can with UV window or with receptacle

Applications:

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


Absolute maximum ratings:

| parameter | symbol | value | unit |
|-----------------------------|----------------------|----------|------|
| Operating temperature | Top | -40~+85 | °C |
| Storage temperature | Tstg | -40~+100 | °C |
| Forward current | I _f | 9 | 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 | 1x1 |
| Spectral range | λ | nm | 200-1100 |
| Responsivity | Re(V _R =0V,λ=200nm) | mA/mW | 0.08 |
| | Re(V _R =0V,λ=405nm) | mA/mW | 0.15 |
| | Re(V _R =0V,λ=650nm) | mA/mW | 0.32 |
| | Re(V _R =0V,λ=905nm) | mA/mW | 0.44 |
| | Re(V _R =0V,λ=1064nm) | mA/mW | 0.27 |
| Response time | T _r (R _L =50Ω, V _R =5V) | ns | 0.6 |
| Dark current | I _d (V _R =0V) | pA | 0.2 |
| | I _d (V _R =5V) | pA | 20 |
| Reverse Breakdown voltage | V _{BR} (I _R =10uA) | V | 100 |
| Junction capacitance | C _j (f=1MHz, V _R =0V) | pF | 33 |
| | C _j (f=1MHz, V _R =5V) | pF | 4.5 |
| Saturated Optical Power | P _S (V _R =5V) | mW | 12 |
| Operating voltage | V _R | V | 0-15 |
| Shunt resistance | R _{sh} (V _R =10mV) | GΩ | 50 |
| package | Hermetic TO46 Can with UV window or with receptacle or fiber coupling | | |

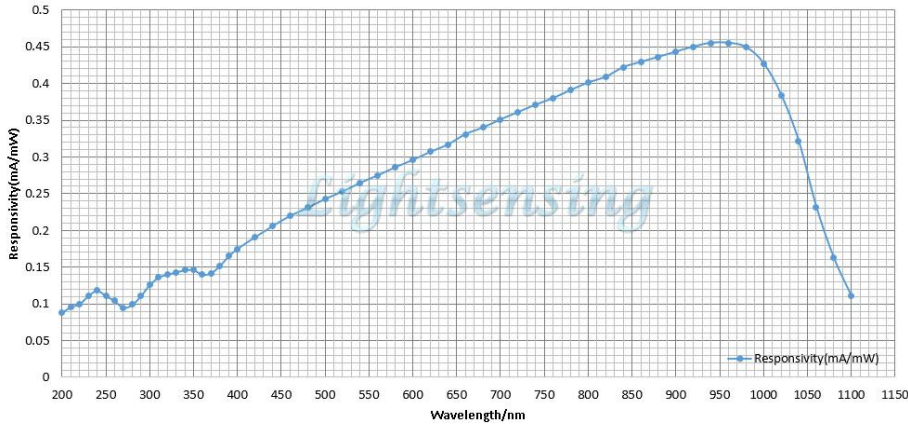
NOTICE: The above product specifications are subject to change without notice.

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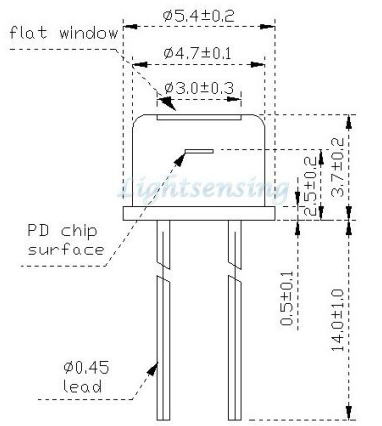
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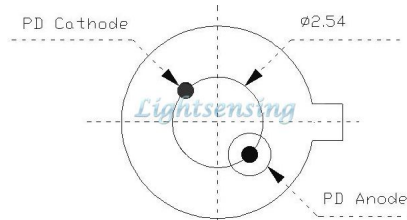
The typical Responsivity curve



TO package and Lead



3mm Flat UV window 2PIN TO Model: 03



2 PIN Bottom View

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

Order information

LSSPD-U1-X-X
 X=2P 2 PIN out

- | | |
|------------|--|
| X=03 | TO-46 Can with 3mm flat UV window 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=6MMFA/P | TO-46 Can with 62.5um MM Fiber coupling with FC-APC/FC-PC connector |
| X=10MMFA/P | TO-46 Can with 105um MM Fiber coupling with FC-APC/FC-PC connector |
| X=20MMFA/P | TO-46 Can with 200um MM Fiber coupling with FC-APC/FC-PC connector |
| X=CWFC | TO-46 Can with replaceable receptacle with FC connector |
| X=CWSC | TO-46 Can with replaceable receptacle with SC connector |
| X=CWLC | TO-46 Can with replaceable receptacle with LC connector |
| X=CWST | TO-46 Can with replaceable receptacle with ST 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=Other | By customer's request. Example, We can provide photodiode with filter |

The cautions

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protection is required in storage, transportation 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.