

FEATURES

- 10.0 mm square active area
- Low dark current
- Long term stability
- High shunt resistance

DESCRIPTION

100 mm² Low Dark Current PIN Photodiode. Packaged in a black ceramic header with a fused silica window.

APPLICATIONS

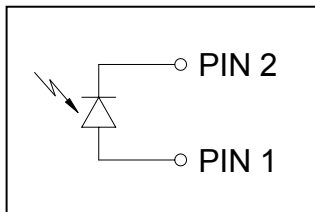
- Precision photometry
- Bar code readers
- Medical equipment
- Pulsed light sensor



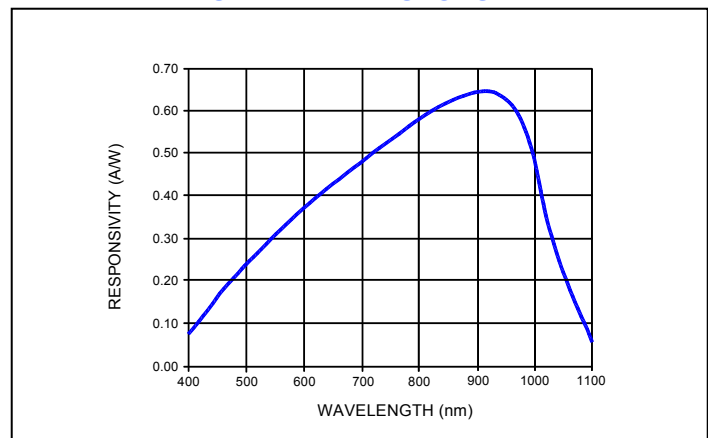
ABSOLUTE MAXIMUM RATING

| SYMBOL | PARAMETER | MIN | MAX | UNITS |
|---------------------|---------------------------|-----|-----|-------|
| T _{STG} | Storage Temp | -20 | +80 | °C |
| T _{OP} | Operating Temp | -20 | +60 | °C |
| V _{R(OP)} | Reverse Operating Voltage | - | 50 | V |
| I _(PEAK) | Peak DC Current | - | 10 | mA |

SCHEMATIC



SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS @ 22° C

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|-----------------|------------------------|--|-----|-------------------------|-----|---------------------|
| R _{SH} | Shunt Resistance | V _R = ±10 mV | 75 | 200 | --- | MΩ |
| I _D | Dark Current | V _R = 10 V | --- | 0.5 | --- | nA |
| C | Capacitance | V _R = 0 V; | --- | 900 | --- | pF |
| | | V _R = 10 V; | --- | 160 | --- | |
| | Responsivity | V _R = 0 V; λ = 633 nm | --- | 0.40 | --- | A/W |
| | | V _R = 0 V; λ = 900 nm | --- | 0.64 | --- | |
| NEP | Noise Equivalent Power | V _R = 10 V; λ = 850 nm; R _L = 50 Ω | --- | 3.0 × 10 ⁻¹⁴ | --- | W/Hz ^{1/2} |
| V _{BR} | Breakdown Voltage | I _R = 10 μA | 100 | --- | --- | V |
| t _r | Rise Time | V _R = 10 V; λ = 850 nm; R _L = 50 Ω | --- | 50 | --- | ns |
| | | V _R = 80 V; λ = 850 nm; R _L = 50 Ω | --- | 7 | --- | |

Disclaimer: Due to our policy of continued development, specifications are subject to change without notice.

USA:

Pacific Silicon Sensor, Inc.
5700 Corsa Avenue, #105
Westlake Village, CA 91362 USA
Phone (818) 706-3400
Fax (818) 889-7053
Email: sales@pacific-sensor.com
www.pacific-sensor.com

7/19/2010

International sales:

Silicon Sensor International AG
Peter-Behrens-Str. 15
D-12459 Berlin, Germany
Phone +49 (0)30-63 99 23 10
Fax +49 (0)30-63 99 23 33
Email: sales@silicon-sensor.de
www.silicon-sensor.de