

FEATURES

- \varnothing 7.80 mm active area
- Small gap
- Low dark current
- High resolution

DESCRIPTION

4 X 11.78 mm² Low Dark Current Quadrant Photodiode with P on N construction and 42 μ m gaps. Surface mount packaged with clear epoxy encapsulant.

APPLICATIONS

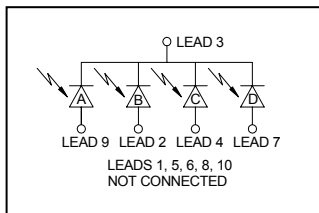
- Laser beam position sensor
- Autocollimators
- Optical tweezers
- Ellipsometers



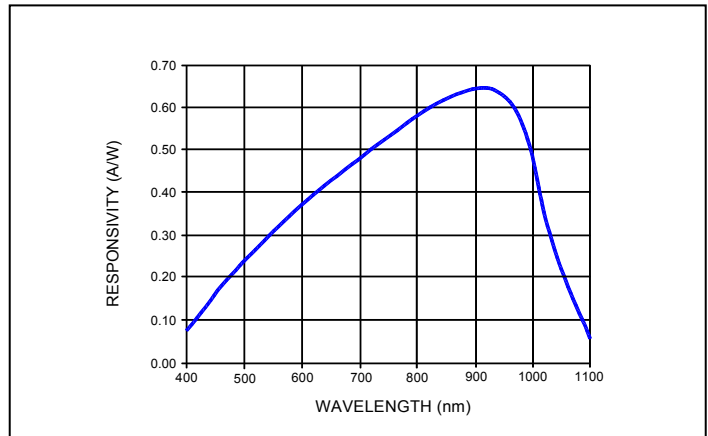
ABSOLUTE MAXIMUM RATING

| SYMBOL | PARAMETER | MIN | MAX | UNITS |
|---------------------|---------------------------|-----|-----|-------|
| T _{STG} | Storage Temp | -15 | +80 | °C |
| T _{OP} | Operating Temp | -15 | +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 |
|-----------------|---------------------------|---|-----|---------|---------|-------|
| I _D | Dark Current* | V _R = 10 V | --- | 2.0 | --- | nA |
| C | Capacitance* | V _R = 10 V | --- | --- | 25.0 | pF |
| | Responsivity | V _R = 0 V; λ = 633 nm | --- | 0.40 | --- | A/W |
| | | V _R = 0 V; λ = 900 nm | --- | 0.64 | --- | |
| V _{BR} | Breakdown Voltage | I _R = 10 μ A | --- | 15 | --- | V |
| t _r | Rise Time | V _R = 10 V; λ = 850 nm; R _L = 50 Ω | --- | 40 | --- | ns |
| | Uniformity of Sensitivity | V _R = 10 V; λ = 880 nm | --- | \pm 1 | \pm 2 | % |

* per element

Disclaimer: Due to our policy of continued development, specifications are subject to change without notice. Package is not suitable for reflow soldering.

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

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

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