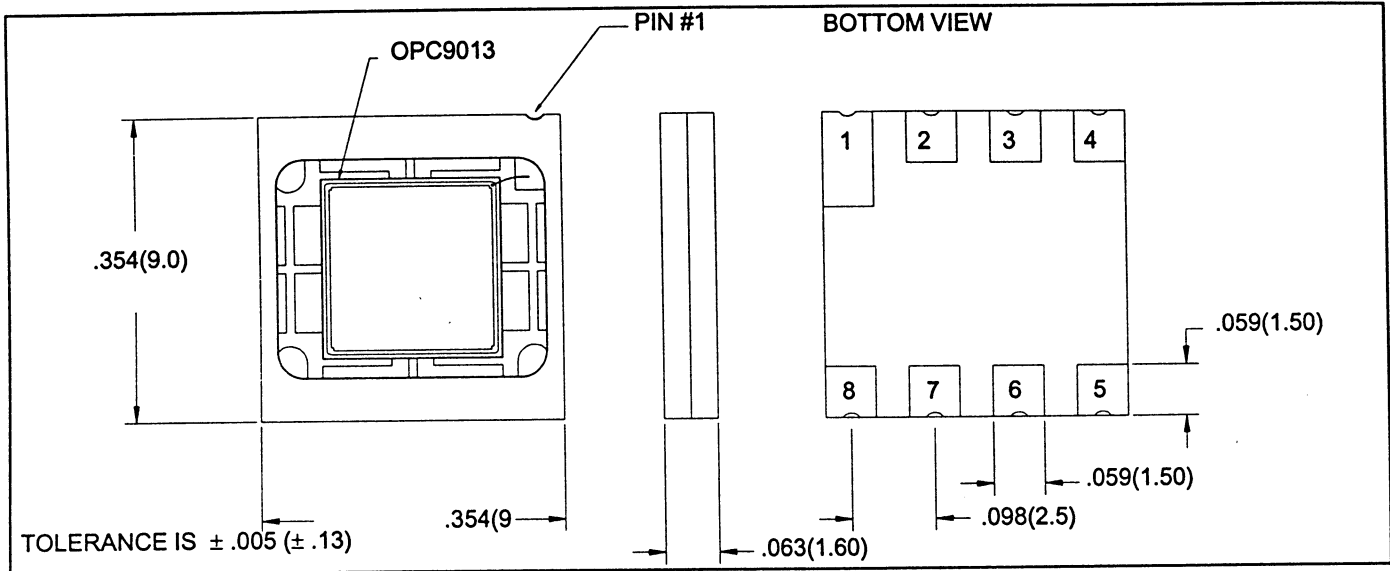


# Large Area SMD Silicon Photodiode Type OPR5913



### Features

- Surface Mountable
- Large Active Area
- High Temperature Operation

### Absolute Maximum Ratings (T<sub>A</sub> = 25° C unless otherwise noted)

Storage and Operating Temperature	-55° C to +125° C
Reverse Breakdown Voltage	10 V Min.
Solder Temperature (Vapor Phase Reflow for 30 sec.)	235° C

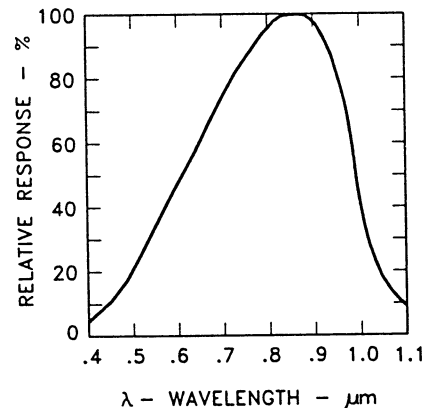
### Description

Enclosed in a compact polyimide chip carrier, this large area photodiode is well suited for open air communication applications and ambient light detection. The custom opaque package material shields the photodiode from stray light and can withstand multiple exposures to the most demanding soldering conditions. The wrap around solder pads are gold plated for exceptional storage and wetting characteristics.

### PIN OUT:

- |         |                |
|---------|----------------|
| PIN #1. | ANODE          |
| 2.      | COMMON CATHODE |
| 3.      | COMMON CATHODE |
| 4.      | N/C            |
| 5.      | N/C            |
| 6.      | COMMON CATHODE |
| 7.      | COMMON CATHODE |
| 8.      | N/C            |

SPECTRAL RESPONSIVITY



### Electrical Characteristics (T<sub>A</sub> = 25° C unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
I <sub>C(ON)</sub>	On State Collector Current	1.0			mA	V <sub>CE</sub> = 5 V, E <sub>e</sub> = 150 μW/cm <sup>2</sup> (890 nm light source)
I <sub>CEO</sub>	Dark Current			100	nA	V <sub>CE</sub> = 5 V, E <sub>e</sub> = 0
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	30			V	I <sub>C</sub> = 100 μA
V <sub>(BR)ECO</sub>	Emitter-Collector Breakdown Voltage	5			V	I <sub>e</sub> = 100 μA
V <sub>CE(SAT)</sub>	Saturation Voltage			0.4	V	I <sub>C</sub> = 100 μA, E <sub>e</sub> = 5 mW/cm <sup>2</sup>
t <sub>r</sub> , t <sub>f</sub>	Rise Time, Fall Time		2.5		μs	V <sub>CC</sub> = 5 V, I <sub>C</sub> = 800 μA, R = 100 Ω

HYBRID ASSEMBLIES