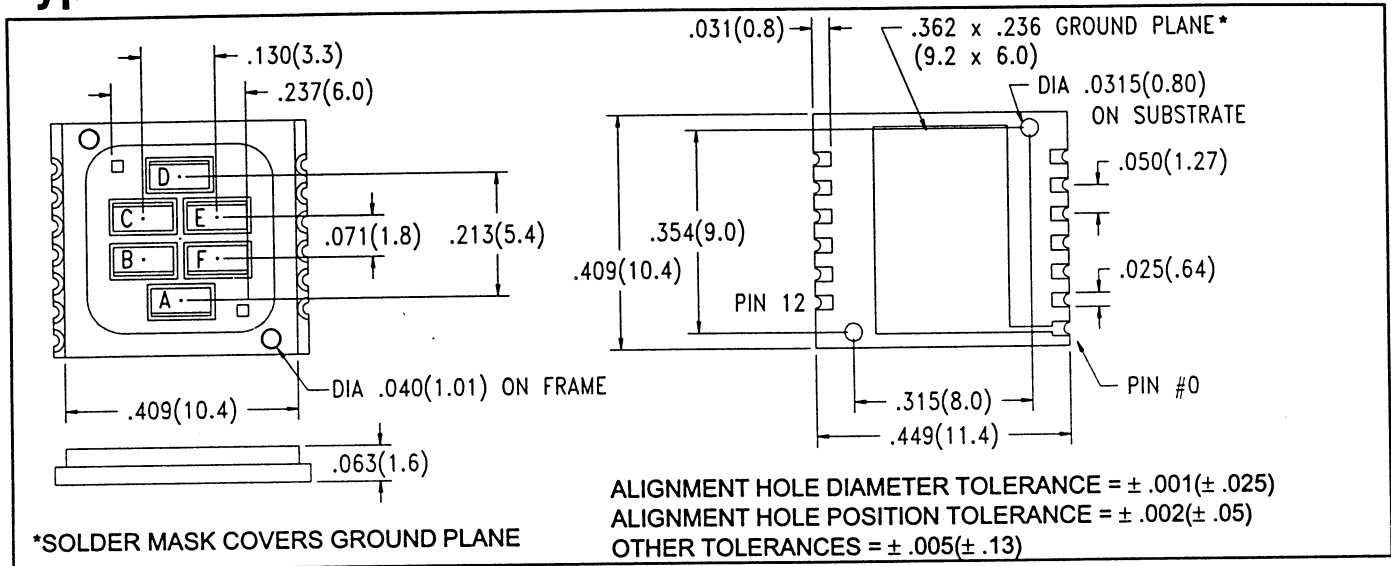


# Six Element SMD Photodiode Array Type OPR2100



## Features

- Surface Mountable
- Closely Matched Responsivity
- High Temperature Operation

## Description

Enclosed in a compact polyimide chip carrier, this six element photodiode has been specifically designed to meet the needs of motor encoder applications. Six individual chips are mounted on isolated cathode contacts to allow external connection in any desired configuration. The custom opaque package material shields the photodiodes 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.

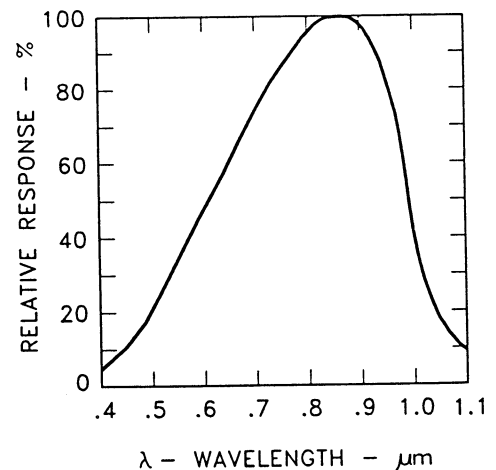
## Absolute Maximum Ratings ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Storage and Operating Temperature	.....	$-55^\circ\text{C}$ to $+125^\circ\text{C}$
Reverse Breakdown Voltage	.....	50 V Min.
Solder Temperature (Vapor Phase Reflow for 30 sec.)	.....	$235^\circ\text{C}$

## PIN OUT:

PIN #0.	GROUND PLANE
1.	CATHODE A
2.	CATHODE B
3.	ANODE B
4.	ANODE C
5.	CATHODE C
6.	CATHODE D
7.	ANODE D
8.	CATHODE E
9.	ANODE E
10.	ANODE F
11.	CATHODE F
12.	ANODE A

## SPECTRAL RESPONSIVITY



## Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETERS	MIN	TYP	MAX	UNITS	TEST CONDITIONS
$R_\lambda$	Responsivity	0.45			A/W	$\Phi_e = 10 \mu\text{W}$ , $\lambda = 890 \text{ nm}$ , $V = 0 \text{ V}$
$V_{(BR)R}$	Reverse Breakdown Voltage	50			V	$I_R = 100 \mu\text{A}$
$I_D$	Reverse Dark Current			10	nA	$V_R = 10 \text{ V}$
$C_T$	Capacitance		10		pf	$V_R = 10 \text{ V}$
L x W	Active Area (per diode)		2.9		$\text{mm}^2$	(1.1 mm x 2.6 mm)