

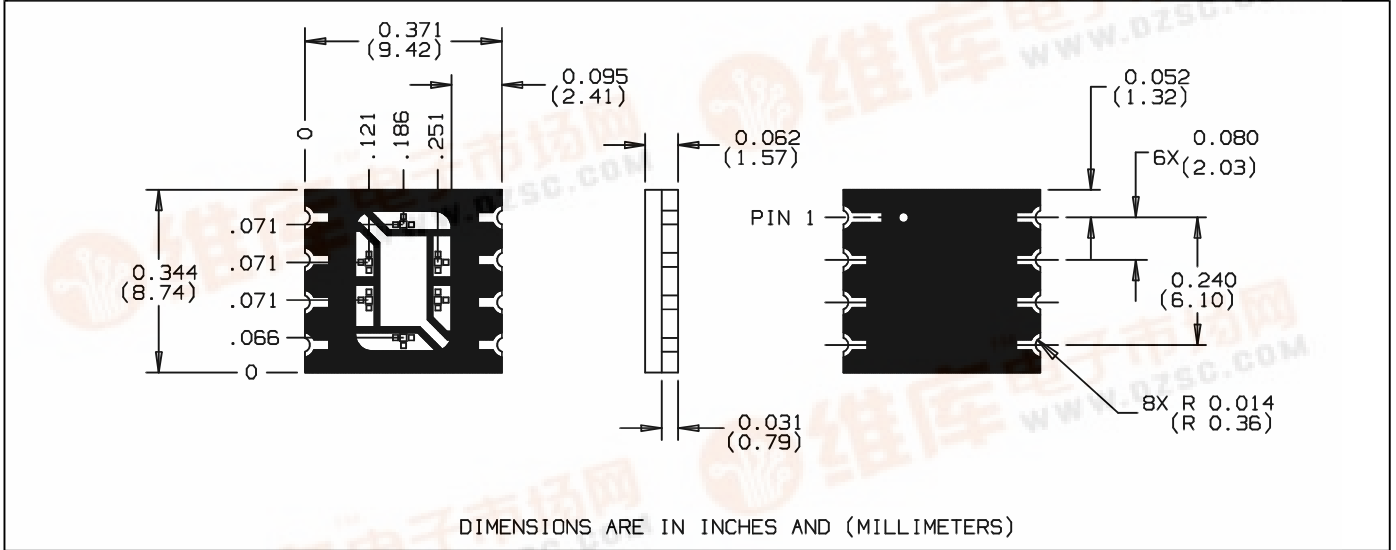


Product Bulletin OPR2100L
August 1996

PRELIMINARY

Six Element SMD LED Array

Type OPR2100L



Features

- Surface mountable
- High temperature operation
- Closely matched emissions
- Matched to OPR2100 Photodiode Array

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

Reverse Voltage	2.0 V
Continuous Forward Current	50 mA
Peak Forward Current (1 μA pulse width, 300 pps)	1.0 A
Storage and Operating Temperature	-55°C to $+125^\circ\text{C}$
Power Dissipation (derate @ 1.00 $\text{mW}/^\circ\text{C}$ above 25°C)	100 mW

Description

Enclosed in a compact polyimide chip carrier, this six element LED has been specifically designed to be used as an illuminating source for the OPR2100. The light is spectrally matched to the responsivity for maximum efficiency. The six chips are bonded with common cathodes and individual anodes to allow channel matching. The package can withstand multiple exposures to the most demanding solder conditions. The wrap around solder pads are gold plated for exceptional storage and wetting characteristics.

PIN OUT:

PIN#1	ANODE A
2	ANODE F
3	ANODE E
4	COMMON CATHODE
5	ANODE D
6	ANODE C
7	ANODE B
8	COMMON CATHODE

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

SYMBOL	PARAMETERS	MIN	TYP	MAX	UNITS	TEST CONDITIONS
P_O	Total Optical Power	350			μW	$I_F = 20\text{ mA}$
V_F	Forward Voltage Drop			1.8	V	$I_F = 20\text{ mA}$
I_R	Reverse Leakage Current			100	μA	$V_R = 2\text{ V}$
	Peak Wavelength	870		910	nm	$I_F = 20\text{ mA}$
	Rise Time			600	ns	$I_p = 100\text{ mA}$
	Fall Time			350	ns	$I_p = 100\text{ mA}$

