

SMD Multi Element LED Array Type OPR5013L

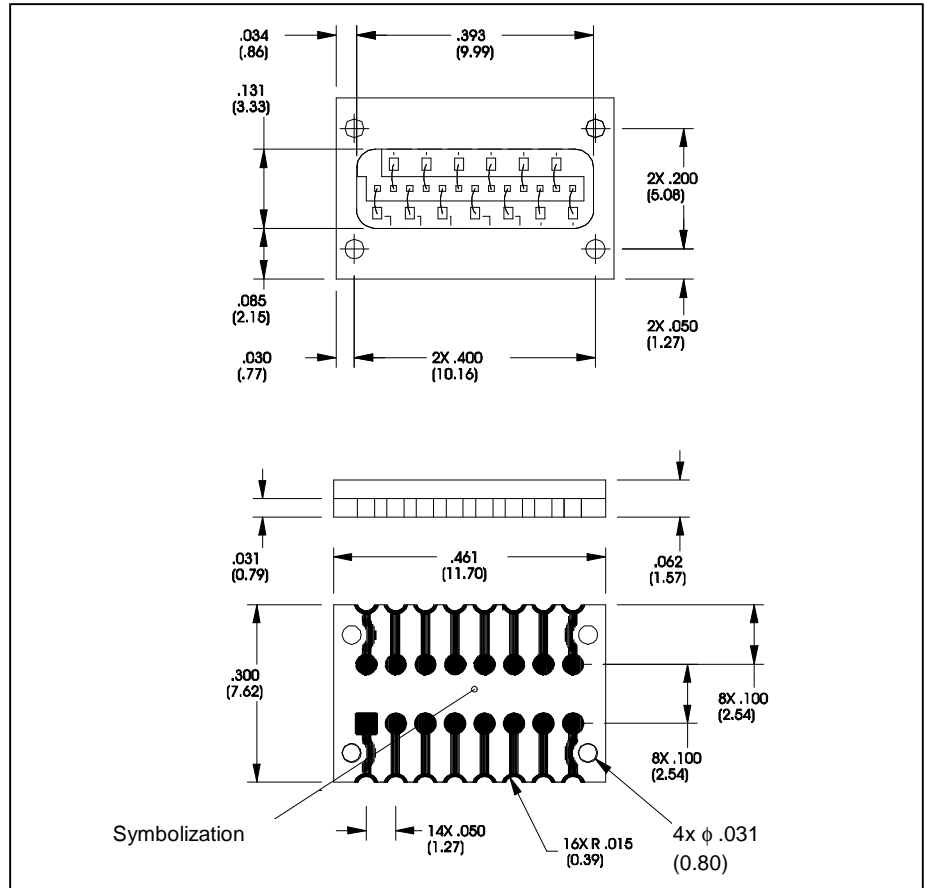


Features

- Surface mountable
- Closely matched power emissions
- High temperature operation
- Spacing matched to the OPR5013 phototransistor array

Description

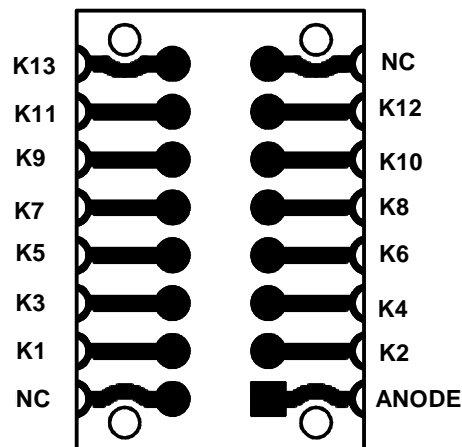
The OPR5013L is a thirteen element GaAlAs LED array in a high temperature polyimide chip carrier. The LED chips are bonded with common anodes and individual cathodes to allow channel matching. The custom opaque package material can withstand multiple exposures to the most demanding soldering conditions. The wrap around solder pads are gold plated for exceptional storage and wetting characteristics.



Absolute Maximum Ratings (TA = 25° C unless otherwise noted)

Reverse Voltage	2 V
Continuous Forward Current (Each LED)	50 mA
Peak Forward Current (1μA pulse width, 300pps)	1.0 A
Storage and Operating Temperature	-55° C to +125° C
Soldering Temperature (Vapor Phase Reflow for 30 sec.)	235° C
Power Dissipation (derate @ 1.00 mW/° C above 25° C)	100 mW

PIN OUT



Types OPR5013L

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITION
P_O	Total Optical Power	350				$I_F = 20 \text{ mA}$
V_F	Forward Voltage			1.8	V	$I_F = 20 \text{ mA}$
I_R	Reverse Leakage Current	7			V	$I_R = 0.1 \text{ mA}$
λ_P	Peak Emission Wavelength	870	880	910	nM	$I_F = 20 \text{ mA}$
t_r	Rise Time			600	ns	$I_P = 20 \text{ mA}$
t_f	Fall Time			350	μs	$I_P = 20 \text{ mA}$