



PRODUCT SPECIFICATION

Part Number
PL311A-3R12

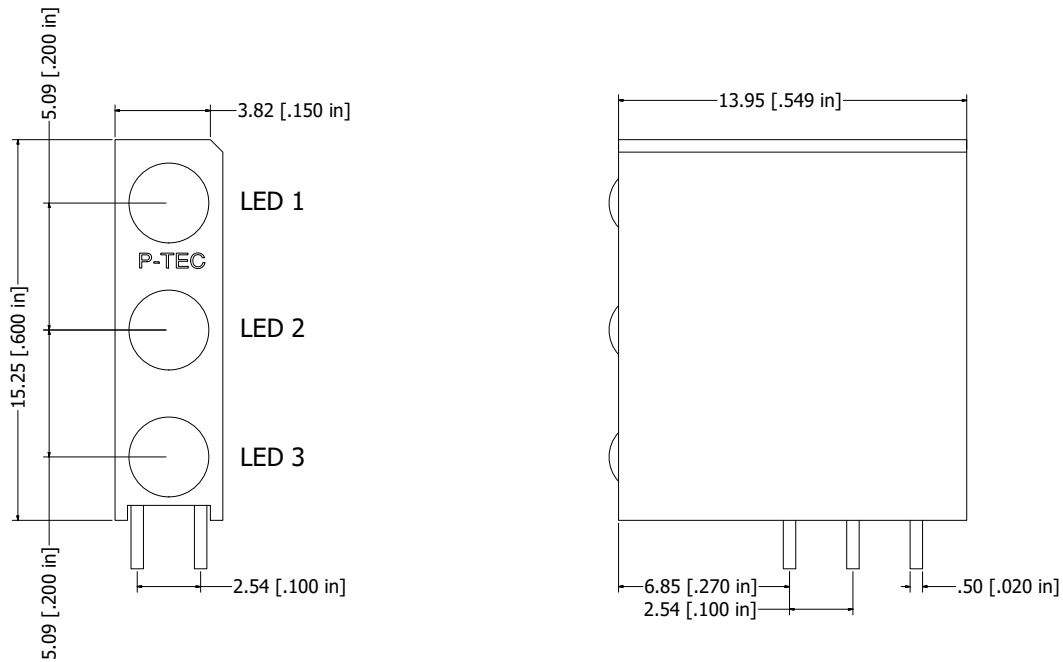
Details

- Tri-Level CBI LED
- Orange-Red Emitting
- Chip Material: GaAsP/GaP
- Housing Material: Nylon 66 UL94V-2

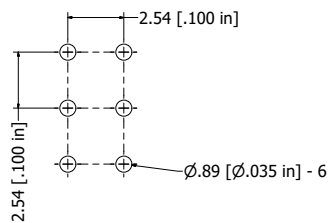
Features

- RoHS Compliant
- Space-Saving Circuit Board Indicator
- Rugged and Durable
- LEDs Have Color Diffused Lens

Mechanical Dimensions



Recommended PCB Layout



Notes:

1. All dimensions are in millimeters unless otherwise noted
2. Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted
3. Specifications subject to change without notice



Device Selection Guide

Part Number	Housing Material	Chip		
		Material	Emitting Color	Lens Type
PL311A-3R12	Nylon 66 UL94V-2	GaAsP/GaP	Orange-Red	Color Diffused

LED Absolute Maximum Ratings at Ta=25 °C

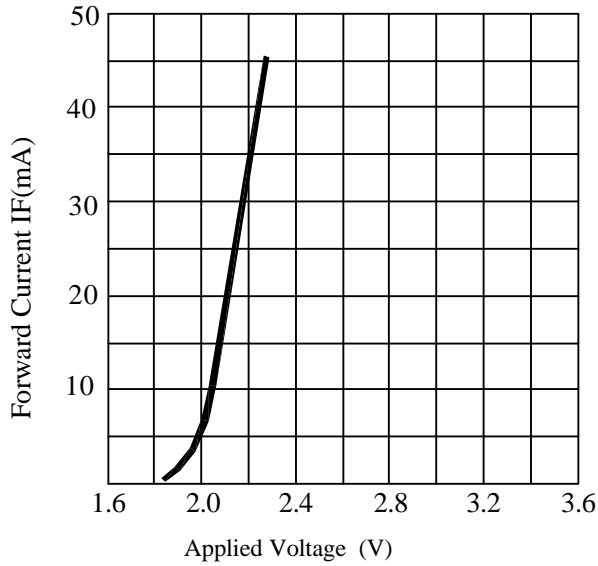
Parameter	Symbol	Rating	Unit
Power Dissipation	PD	78	mW
Reverse Voltage	VR	5	V
DC Forward Current	IF	30	mA
Reverse (Leakage) Current	Ir	100	μA
Peak Current (duty cycle 1/10, 1KHz)	IPF	100	mA
Operating Temperature	Topr	-25~+85	°C
Storage Temperature	Tstg	-40~+100	°C
Soldering Temperature (1.6mm from body)	Tsol.	Dip Soldering : 260°C for 5 sec. Hand Soldering : 350°C for 3 sec.	

LED Electrical and Optical Characteristics at Ta=25 °C

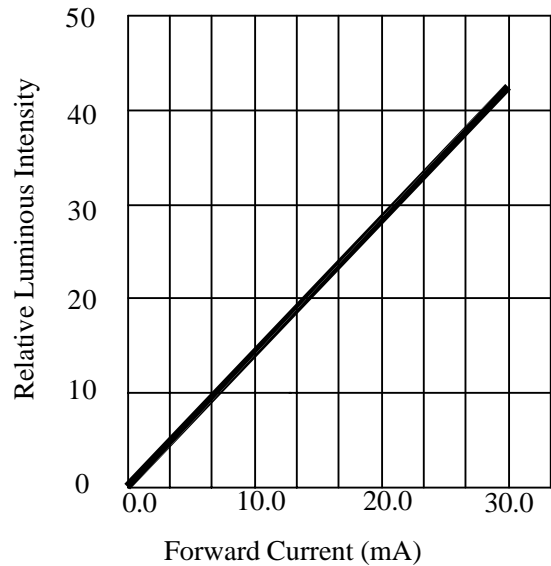
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	10.0	30.0	--	mcd	IF=20mA
Forward Voltage	Vf	--	2.1	2.6	V	
Peak Wavelength	λp	--	635	--	nm	
Dominant Wavelength	λd	--	626	--		
Reverse (Leakage) Current	Ir	--	--	100	μA	Vr=5V
Viewing Angle	2θ1/2	--	40	--	--	deg
Spectrum Line Halfwidth	Δλ	--	35	--	nm	IF=20mA

- Notes: 1. Tolerance of Luminous Intensity is ±15%
2. Tolerance of Forward Voltage is ±0.1V
3. Tolerance of Dominant Wavelength is ±1nm
4. Customer's special requirements are welcomed

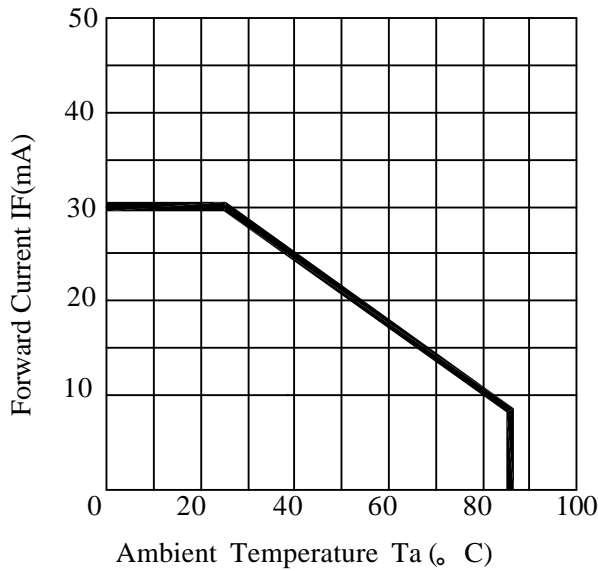
LED Typical Electrical / Optical Characteristic Curves



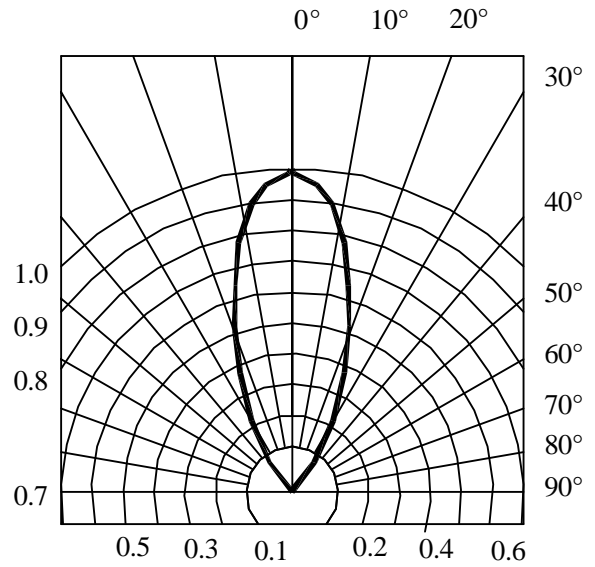
FORWARD CURRENT VS. APPLIED VOLTAGE



FORWARD CURRENT VS. LUMINOUS INTENSITY



AMBIENT TEMPERATURE VS. FORWARD CURRENT



RADIATION DIAGRAM

