

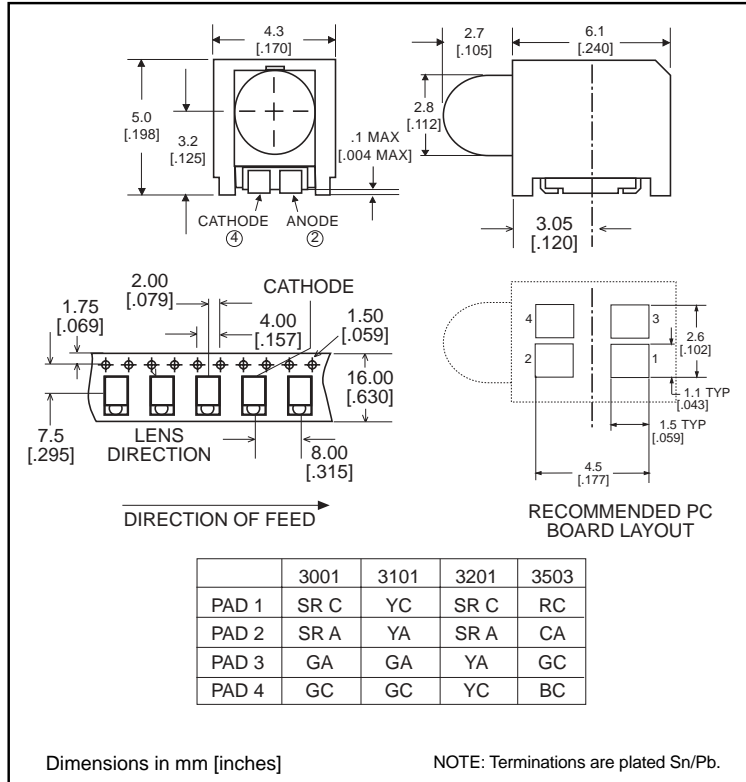
3mm

Prism® CBI® Circuit Board Indicator  
Surface Mount LED, Round Lens

**Dialight**

591-3x0x-0xx

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U.S. Patent RE 34,254; foreign patents pending.

**Part Number\* Type**

- 591-3001-0xx Super Red/Green Bi-Color
- 591-3101-0xx Yellow/Green Bi-Color
- 591-3201-0xx Super Red/Yellow Bi-Color
- 591-3503-0xx Red/Blue/Green Tri-Color

**NEW**

**Features**

- Helps to eliminate mixed technology PC board processing.
- Unique patented low part count design.
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase solder processes.
- Packaged on 16mm tape, 7" or 13" reels per EIA-481-2.
- Black housing enhances contrast ratio.
- Housing material meets UL94V-0 flammability rating.
- Lens material meets UL94-HB flammability rating.
- Uses LEDs designed specifically for surface mounting.

<b>*ORDERING INFORMATION</b>	
<b>591-3x01-0xx</b>	
packaging option $\uparrow$	
02	20 pieces on tape
07	7" reel, 400 pcs/reel
13	13" reel, 1600 pcs/reel

**NEW**

# 591-3x0x-0xx

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

Parameter	-3001	-3101	-3201	-3503
Color*	30	31	32	35
Power Dissipation	100mW	100mW	100mW	150mW Total
Forward DC Current	30mA	30mA	30mA	20mA single chip on 30mA all chips on
Peak Forward Current (10µsec)	500mA	500mA	500mA	
Operating Temperature	-55°C to +100°C			
Storage Temperature	-55°C to +100°C			
Soldering Temperatures Convection IR Vapor Phase	235° Peak, above 185° for 90 sec., 215°C for 3 Min.			

Solder Adherence per MIL-STD-202E, Method 208C

\* LED colors: 30) Super Red/Green Bi-Color 31) Yellow/Green Bi-Color 32) Super Red/Yellow Bi-Color 35) Red/Blue/Green Tri-Color

## Operating Characteristics (T<sub>A</sub> = 25°C)

Parameter	Part No.	Color	Min	Typ	Max	Units	Test Cond.
Forward Voltage V <sub>F</sub>	-3001	30		2/2	2.6/2.6	V	I <sub>F</sub> =10 mA
	-3101	31		2/2	2.6/2.6		
	-3201	32		2/2	2.6/2.6		
	-3503	35		2/3.8/2	2.6/4.5/2.6		
Reverse Voltage V <sub>R</sub>	-3001	30	5/5			V	I <sub>R</sub> = 10 µA
	-3101	31	5/5				
	-3201	32	5/5				
	-3503	35	5/1/5				
Dominant Wavelength λ Dom	-3001	30		628/570		nm	
	-3101	31		586/570			
	-3201	32		628/586			
	-3503	35		645/466/570			
Luminous Intensity I <sub>V</sub>	-3001	30		6.5/8		mcd	I <sub>F</sub> = 20 mA
	-3101	31		6.5/8			
	-3201	32		6.5/6.5			
	-3503	35		10/5/16			
Viewing Angle (2Θ 1/2 )	-3001	30		40/40		deg.	
	-3101	31		40/40			
	-3201	32		40/40			
	-3503	35		40/40/40			

Θ 1/2 is the off axis angle at which the luminous intensity is half the axial luminous intensity

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