

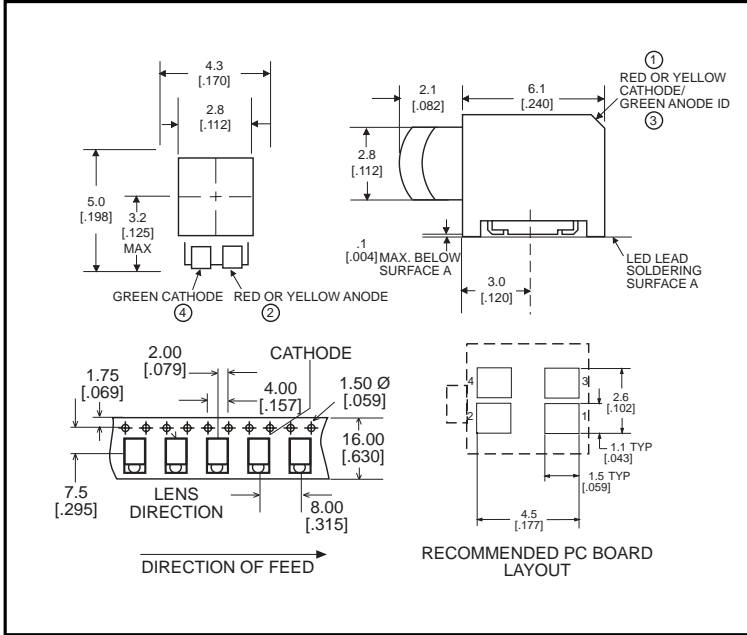
3mm

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



591-3x0x-1xx

1



Part

Number*

591-3001-1xx

591-3101-1xx

591-3503-1xx

Type

Red/Green Bi-color

Yellow/Green Bi-color

Red/Blue/Green Tri-color

NEW

Features

- 3mm square lens provides large viewing area.
- Unique patented low part count design.
- Helps to eliminate mixed technology PC boards.
- Compatible with automatic placement equipment.
- Housing material meets UL94V-0 flammability rating.
- Lens material meets UL94-HB flammability rating.
- Compatible with infrared and vapor phase solder processes.
- Black housing enhances contrast ratio.
- Packaged on 16mm tape, 7" or 13" reels per EIA-481-2.
- Uses LEDs designed specifically for surface mounting.

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

* ORDERING INFORMATION	
591-xx01-1xx	
packaging option	
02	20 pieces on tape
07	7" reel, 400 pcs/reel
13	13" reel, 1600 pcs/reel

NEW

591-3x0x-1xx

Absolute Maximum Ratings, $T_A=25^\circ\text{C}$

Parameter	-3001	-3101	-3503
Color*	30	31	35
Power Dissipation (derate linearly from 25°C at 1.3 mW/°C)	90mW	90mW	150mW Total
Forward DC Current	30mA	30mA	20mA single chip on 30mA all chips on
Peak Forward Current (10μ sec)	500mA	500mA	
Operating Temperature	-55°C to +100°C		
Storage Temperature	-55°C to +100°C		
Soldering Temperatures			
Convection IR	235° Peak, above 185° for 90 sec.,		
Vapor Phase	215°C for 3 Min.		

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

* LED colors: 30) Red/Green Bi-Color 31) Yellow/Green Bi-Color

35) Red/Blue/Green Tri-Color

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

Operating Characteristics ($T_A = 25^\circ\text{C}$)

Parameter	Part No.	Color*	Min	Typ	Max	Units	Test Cond.
Forward Voltage V_F	-3001	30	3.8	4.5	2.6/2.6	V	$I_F = 10\text{mA}$
	-3101	31	2	2.6	2.6/2.6		
	-3503	35	2	2.6			
Reverse Voltage V_R	-3001	30	5/5	1		V	$I_R = 10\ \mu\text{A}$
	-3101	31	5/5	5			
	-3503	35		5			
Dominant Wavelength λ_{Dom}	-3001	30		466		nm	
	-3101	31		570			
	-3503	35		645			
Luminous Intensity I_V	-3001	30		5		mcd	$I_F = 20\text{mA}$
	-3101	31		16			
	-3503	35		10			
Viewing Angle ($2\Theta_{1/2}$)	-3001	30		40/40		deg.	
	-3101	31		40/40			
	-3503	35		40/40/40			

$\Theta_{1/2}$ is the off axis angle at which the luminous intensity is half the axial luminous intensity

* LED colors: 30) Blue 31) Green 35) Red

