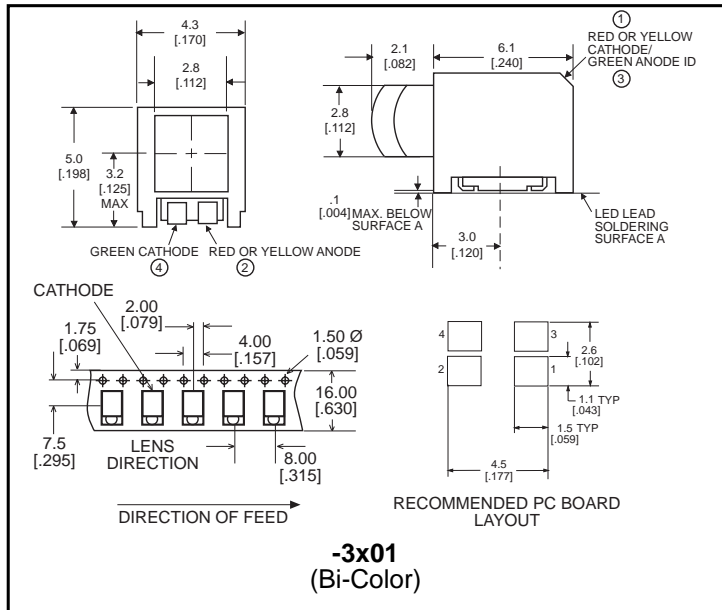
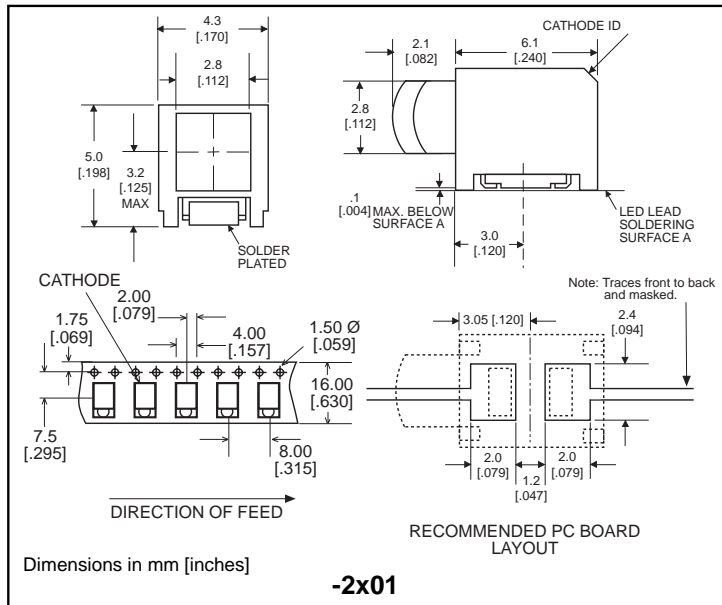


3mm

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

**Dialight**

**591-xx01-1xx**



**Part**

**Number\***

**Type**

591-2001-1xx	High Efficiency Red
591-2101-1xx	AlGaAs Red
591-2301-1xx	Green
591-2401-1xx	Yellow
591-2501-1xx	Orange
591-3001-1xx	Red/Green Bi-color
591-3101-1xx	Yellow/Green Bi-color

**Benefits**

- 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 and lens material meets UL94V-0 flammability rating.
- Compatible with infrared and vapor phase solder processes.
- Black housing enhances contrast ratio.
- Packaged on 16mm tape, 13" reels per EIA-481-2.
- Uses LEDs designed specifically for surface mounting.

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

* ORDERING INFORMATION	
<b>591-xx01-1xx</b>	
packaging option	
02	20 pieces on tape
13	13" reel, 1600 pcs/reel

# 591-xx01-1xx

## Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ )

Parameter	-2x01	-3x01
Power Dissipation (derate linearly from 25°C at 1.3 mW/°C, except 1.2 mW/°C for bi-color)	100 mW	90mW
Forward DC Current	30 mA	
Peak Forward Current (10μsec)	500 mA	
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

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

Parameter	Part No.	Min	Typ	Max	Units	Test Cond.
Forward Voltage $V_F$	-2001		2	2.6	V	$I_F = 10 \text{ mA}$
	-2101		1.75	2.6		
	-2301		2	2.6		
	-2401		2	2.6		
	-2501		2	2.6		
	-3001		2	2.6		
	-3101		2	2.6		
Reverse Voltage $V_R$	-2001	5			V	$I_R = 10 \mu\text{A}$
	-2101	3				
	-2301	5				
	-2401	5				
	-2501	5				
	-3001	5				
	-3101	5				
Dominant Wavelength $\lambda_{\text{Dom}}$	-2001		628		nm	
	-2101		645			
	-2301		570			
	-2401		590			
	-2501		605			
	-3001		628/570			
	-3101		590/570			
Luminous Intensity $I_V$	-2001		8		mcd	$I_F = 10 \text{ mA}$
	-2101		24			
	-2301		8			
	-2401		8			
	-2501		8			
	-3001		6.5/8			
	-3101		8/8			
Viewing Angle ( $2\Theta_{1/2}$ )	All		40		deg.	$I_F = 20 \text{ mA}$

NOTE: -3001 data Red/Green where applicable  
-3101 data Yellow/Green where applicable

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

# Dialight