

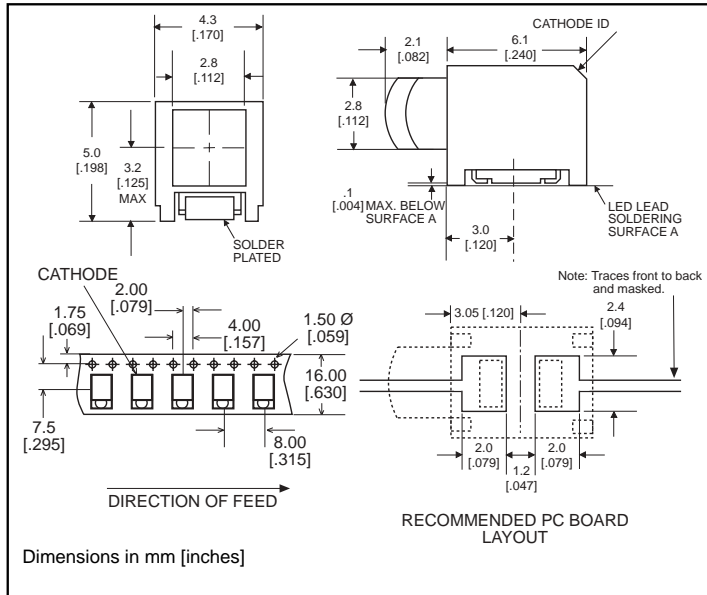
3mm

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



591-2101-1xx  
591-2201-1xx  
591-2701-1xx

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### Part

### Number\*

591-2101-1xx  
591-2201-1xx  
591-2701-1xx

### Type

AlGaAs Red  
High Intensity Green  
AlInGaP Yellow



### 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	
591-2x01-1xx	
packaging option	
02	20 pieces on tape
07	7" reel, 400 pcs/reel
13	13" reel, 1600 pcs/reel



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

Parameter	-2101	-2201	-2701
Color*	21	22	27
Power Dissipation (derate linearly from $25^\circ\text{C}$ mA $^\circ\text{C}$ )	100mA .8	100mA .6	100mA .6
Forward DC Current	40mW	30mW	50mW
Peak Forward Current (10 $\mu$ sec)	200mW	120mW	160mW
Operating Temperature	-55 $^\circ\text{C}$ to +100 $^\circ\text{C}$		
Storage Temperature	-55 $^\circ\text{C}$ to +100 $^\circ\text{C}$		
Soldering Temperatures Convection IR Vapor Phase	235 $^\circ$ Peak, above 185 $^\circ$ for 90 sec., 215 $^\circ\text{C}$ for 3 Min.		

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

\*LED colors: 21) AlGaAs Red 22) High Intensity Green, 27) AlInGaPYellow

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 $V_F$	-2101	21		1.8	2.4	V	$I_F = 20\text{mA}$
	-2201	22		2.1	2.6		
	-2701	27		2	2.4		
Reverse Voltage $V_R$	-2101	21	5			V	$I_F = 10\text{mA}$
	-2201	22	5				
	-2701	27	5				
Dominant Wavelength $\lambda_{\text{Dom}}$	-2101	21		638		nm	
	-2201	22		569			
	-2701	27		595			
Luminous Intensity $I_V$	-2101	21		23.9		mcd	$I_F = 10\text{mA}$
	-2201	22		9.1			
	-2701	27		33.6			
Viewing Angle ( $2\Theta_{1/2}$ )	-2101	21		40		deg.	
	-2201	22		40			
	-2701	27		40			

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

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