

3mm

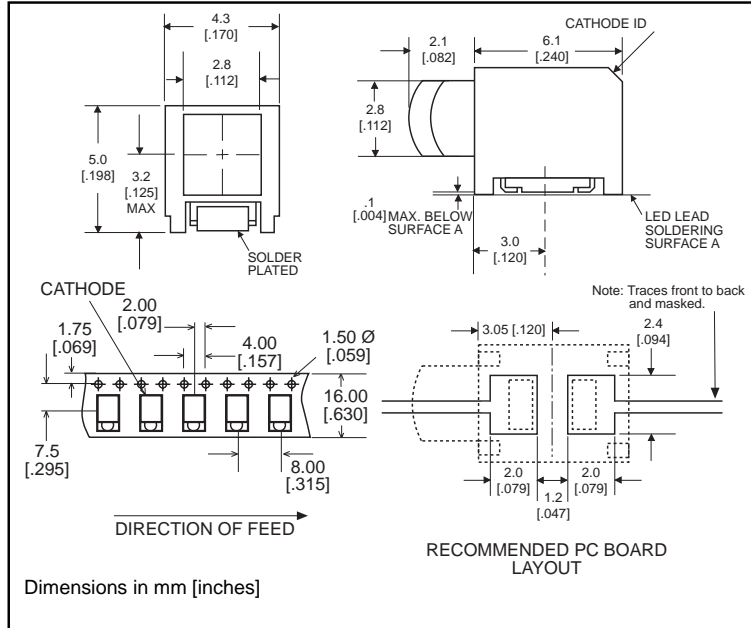
Prism® CBI® Circuit Board Indicator

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
AllnGaP 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



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

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

Parameter	-2101	-2201	-2701
Color*	21	22	27
Power Dissipation (derate linearly from 25°C mA/°C)	100mA .8	100mA .6	100mA .6
Forward DC Current	40mW	30mW	50mW
Peak Forward Current (10µ sec)	200mW	120mW	160mW
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: 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 λ_{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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