

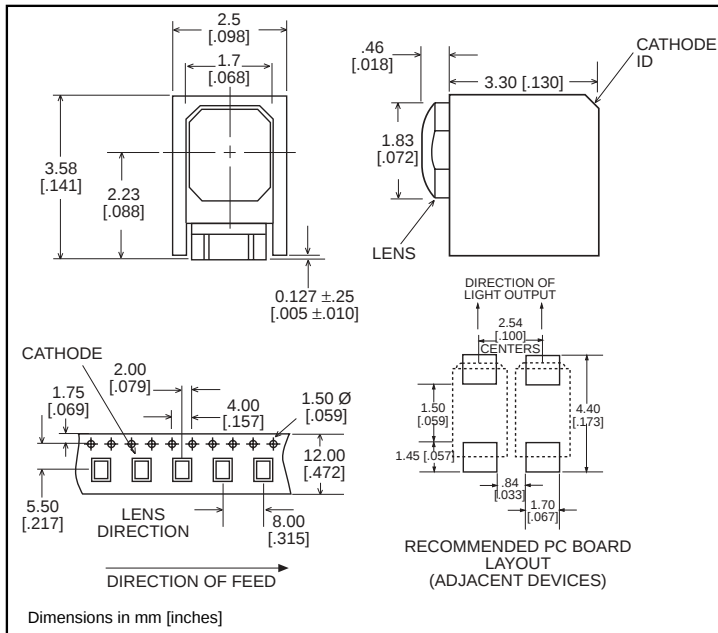
2mm

Prism® CBI® Circuit Board Indicator Surface Mount LED

Dialight

595-2x01-0xx

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

Part Number*

Type

595-2101-0xx

AlGaAs
Red

595-2201-0xx

High Intensity
Green

595-2301-0xx

High Performance
Green

595-2401-0xx

High Performance
Yellow

595-2701-0xx

AlInGaP
Yellow

NEW

NEW

Features

- Helps to eliminate mixed technology PC boards.
- Unique patented low part count design.
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase solder processes.
- Packaged on 12mm tape, 7" or 13" reels per EIA-481-1.
- Black housing enhances contrast ratio.
- 2 mm LED size saves space, allows .100" spacing.
- Housing material meets UL94V-0 flammability rating.
- Lens material meets UL94-HB flammability rating.
- Uses LEDs designed specifically for surface mounting.

* ORDERING INFORMATION

595-2x01-0xx

packaging option

02	20 pieces on tape
07	7" reel, 600 pcs/reel
13	13" reel, 2300 pcs/reel

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

Parameter	-2101	-2201	-2301	-2401	-2701
Color*	21	22	23	24	27
Power Dissipation (derate linearly from 25°C mW/ $^\circ\text{C}$)	60mA .42	75mA .42	75mA .42	75mA .42	75mA .42
Forward DC Current	30mA	30mA	30mA	30mA	30mA
Peak Forward Current (10 μ sec)	70mA	70mA	70mA	70mA	70mA
Operating Temperature	-30 $^\circ\text{C}$ to +85 $^\circ\text{C}$				
Storage Temperature	-30 $^\circ\text{C}$ to +80 $^\circ\text{C}$				
Soldering Temperatures Convection IR Vapor Phase	260 $^\circ$ Peak, above 120 $^\circ$ for 2 min., 215 $^\circ\text{C}$ for 3 Min.				

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

*LED colors: 21) AlGaAs Red 22) High Intensity Green, 23) High Performance Green, 24) High Performance Yellow, 27) AlInGaP Yellow

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

Parameter	Part No.	Color*	Min	Typ	Max	Units	Test Cond.
Forward Voltage V_F	-2101	21		1.7	2	V	$I_F=20\text{ mA}$
	-2201	22		2.1	2.5		
	-2301	23		2.1	2.5		
	-2401	24		2.2	2.5		
	-2701	27		2.2	2.5		
Reverse Voltage V_R	-2101	21	4			V	$I_R = 100\text{ }\mu\text{A}$
	-2201	22			5		
	-2301	23	4				
	-2401	24	4				
	-2701	27			5		
Peak Wavelength λ_{Dom}	-2101	21		660		nm	
	-2201	22		560			
	-2301	23		560			
	-2401	24		580			
	-2701	27		580			
Luminous Intensity I_V	-2101	21		25		mcd	$I_F = 20\text{ mA}$
	-2201	22		11			
	-2301	23		11			
	-2401	24		9			
	-2701	27		9			
Viewing Angle ($2\Theta_{1/2}$)	-2101	21		40		deg.	
	-2201	22		40			
	-2301	23		40			
	-2401	24		40			
	-2701	27		40			

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

*LED colors: 21) AlGaAs Red 22) High Intensity Green, 23) High Performance Green, 24) High Performance Yellow, 27) AlInGaP Yellow

