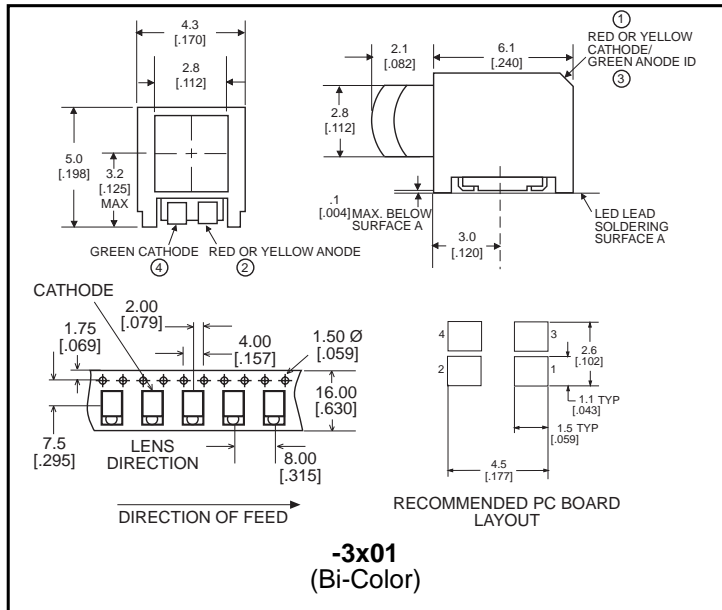
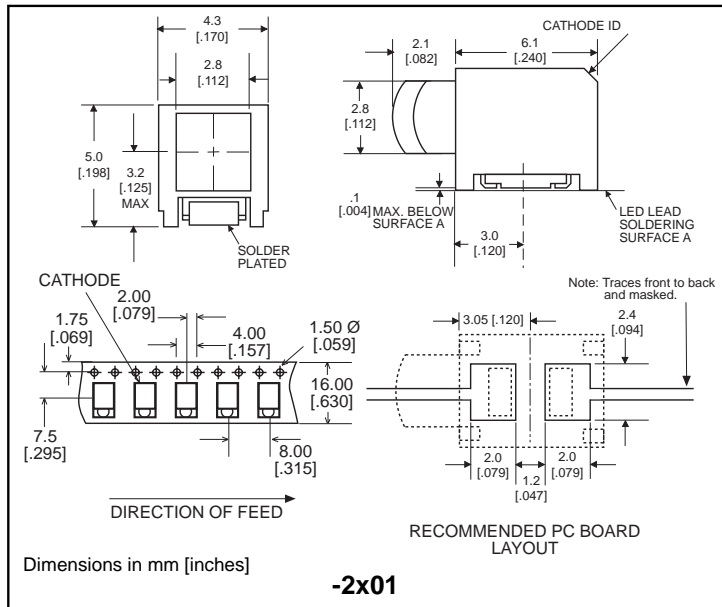


3mm

**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 | |
|------------------------|-------------------------|
| 591-xx01-1xx | |
| 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 λ_{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 | | | $I_F = 20 \text{ mA}$ |
| Viewing Angle ($2\Theta_{1/2}$) | All | | 40 | | deg. | |

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

