

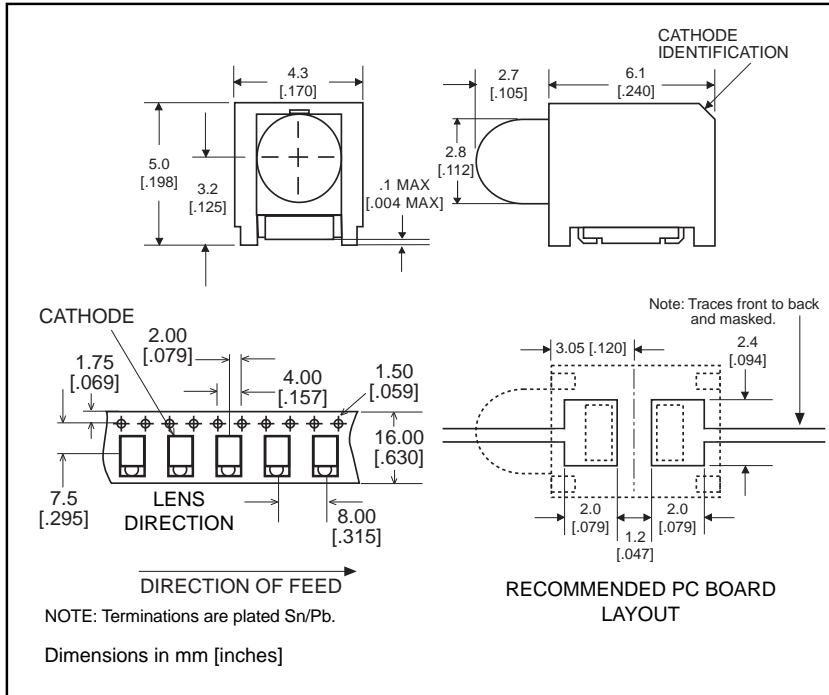
3mm

Prism® CBI® Circuit Board Indicator
Surface Mount LED, Round Lens

Dialight

591-2x01-0xx

2



Part Number*

Type

| | |
|--------------|-------------------------|
| 591-2001-0xx | High Efficiency Red |
| 591-2101-0xx | AlGaAs Red |
| 591-2301-0xx | High Performance Green |
| 591-2401-0xx | High Performance Yellow |

Benefits

- Helps to eliminate mixed technology PC board processing.
- Unique patented low part count design.
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase solder processes.
- Packaged on 16mm tape, 13" reels per EIA-481-2.
- Black housing enhances contrast ratio.
- Housing and lens material meets UL94V-0 flammability rating.
- Uses LEDs designed specifically for surface mounting.

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

Operating Characteristics (T_A = 25°C)

| Parameter | Part No. | Min | Typ | Max | Units | Test Cond. |
|--------------------------------------|----------|-----|------|-----|-------|------------------------|
| Forward Voltage V _F | -2001 | | 2 | 2.6 | V | I _F = 10mA |
| | -2101 | | 1.75 | 2.6 | | |
| | -2301 | | 2 | 2.6 | | |
| | -2401 | | 2 | 2.6 | | |
| Reverse Voltage V _R | -2001 | 5 | | | V | I _R = 10 μA |
| | -2101 | 3 | | | | |
| | -2301 | 5 | | | | |
| | -2401 | 5 | | | | |
| Dominant Wavelength λ Dom | -2001 | | 628 | | nm | |
| | -2101 | | 645 | | | |
| | -2301 | | 570 | | | |
| | -2401 | | 590 | | | |
| Luminous Intensity I _V | -2001 | | 5 | | mcd | I _F = 10mA |
| | -2101 | | 14 | | | |
| | -2301 | | 4 | | | |
| | -2401 | | 5 | | | |
| Viewing Angle (2θ 1/2) | All | | 40 | | deg. | |

θ 1/2 is the off axis angle at which the luminous intensity is half the axial luminous intensity

| *ORDERING INFORMATION | |
|------------------------------|-------------------------|
| 591-2x01-0xx | |
| packaging option | |
| 02 | 20 pieces on tape |
| 13 | 13" reel, 1600 pcs/reel |

Absolute Maximum Ratings, T_A=25°C

| Parameter | All Types |
|---|--|
| Power Dissipation (derate linearly from 25°C at 1.3 mW/°C) | 100 mW |
| 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