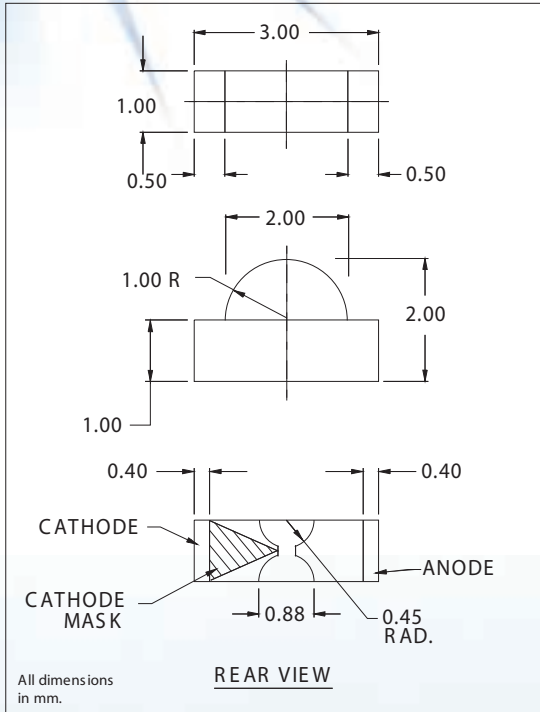


CMD12-21 Bright★Angle™ Right Angle Surface Mount LED
DESCRIPTION AND FEATURES



Surface Mount Technology

- Tape and reel packaged for high-speed autoinsertion.
- Convection and vapor-phase reflow compatible.
- Compact form enables high density placement.
- Packaged 2000 pieces per reel.

Leading Edge LED Optoelectronic Performance

- Consistent high brightness.
- Integral lensing for narrow angle light dispersion.
- Bi-color available.

Exceptional Reliability

- Stringent process controls assure quality.
- Extensive qualification testing to meet strictest requirements.
- Designed to permit easy post-reflow solder joint inspection.
- Solder pad geometry on page 1-X2.

ELECTRO-OPTICAL CHARACTERISTICS

| Part Number | Emitted Color | Lens Color | Luminous Intensity | | Forward Voltage | | Viewing Angle (degrees) | Peak Wavelength (nm) |
|------------------|---------------|------------|--------------------|------------|-----------------|----------|-------------------------|----------------------|
| | | | Min. (mcd) | Typ. (mcd) | Typ. (V) | Max. (V) | | |
| CMD12-21SRC/TR8 | Red | Clear | 14.0 | 24.0 | 1.7 | 2.4 | 120 | 660 |
| CMD12-21VRC/TR8 | H.E. Red | Clear | 3.0 | 5.0 | 2.0 | 2.8 | 120 | 640 |
| CMD12-21VYC/TR8 | Yellow | Clear | 1.5 | 3.0 | 2.0 | 2.8 | 120 | 585 |
| CMD12-21VGC/TR8 | Green | Clear | 4.4 | 8.8 | 2.1 | 2.8 | 120 | 570 |
| CMD12-21UGC/TR8 | Green | Clear | 9.0 | 14.9 | 2.1 | 2.8 | 120 | 570 |
| CMD12-21UYC/TR8 | Super Yellow | Clear | 36.0 | 60.0 | 2.1 | 2.8 | 120 | 590 |
| CMD12-21USOC/TR8 | Sunset Orange | Clear | 43.0 | 71.0 | 2.1 | 2.8 | 120 | 620 |

ABSOLUTE MAXIMUM RATINGS

| | Green | H.E.Red | Yellow | Red | Units |
|--|------------|------------|------------|------------|---------|
| Power Dissipation..... | 100 | 105 | 85 | 105 | mW |
| Storage/Operating Temperature..... | -40 to +85 | -40 to +85 | -40 to +85 | -40 to +85 | °C |
| Peak Forward Current (1µs @ 10% duty cycle)..... | 150 | 150 | 150 | 150 | mA |
| Reverse Voltage (IR=100µA)..... | 4.0 | 4.0 | 4.0 | 4.0 | V |
| Lead Solder Time @ 260°C..... | 5 | 5 | 5 | 5 | Seconds |
| Average Forward Current..... | 30 | 30 | 30 | 30 | mA |