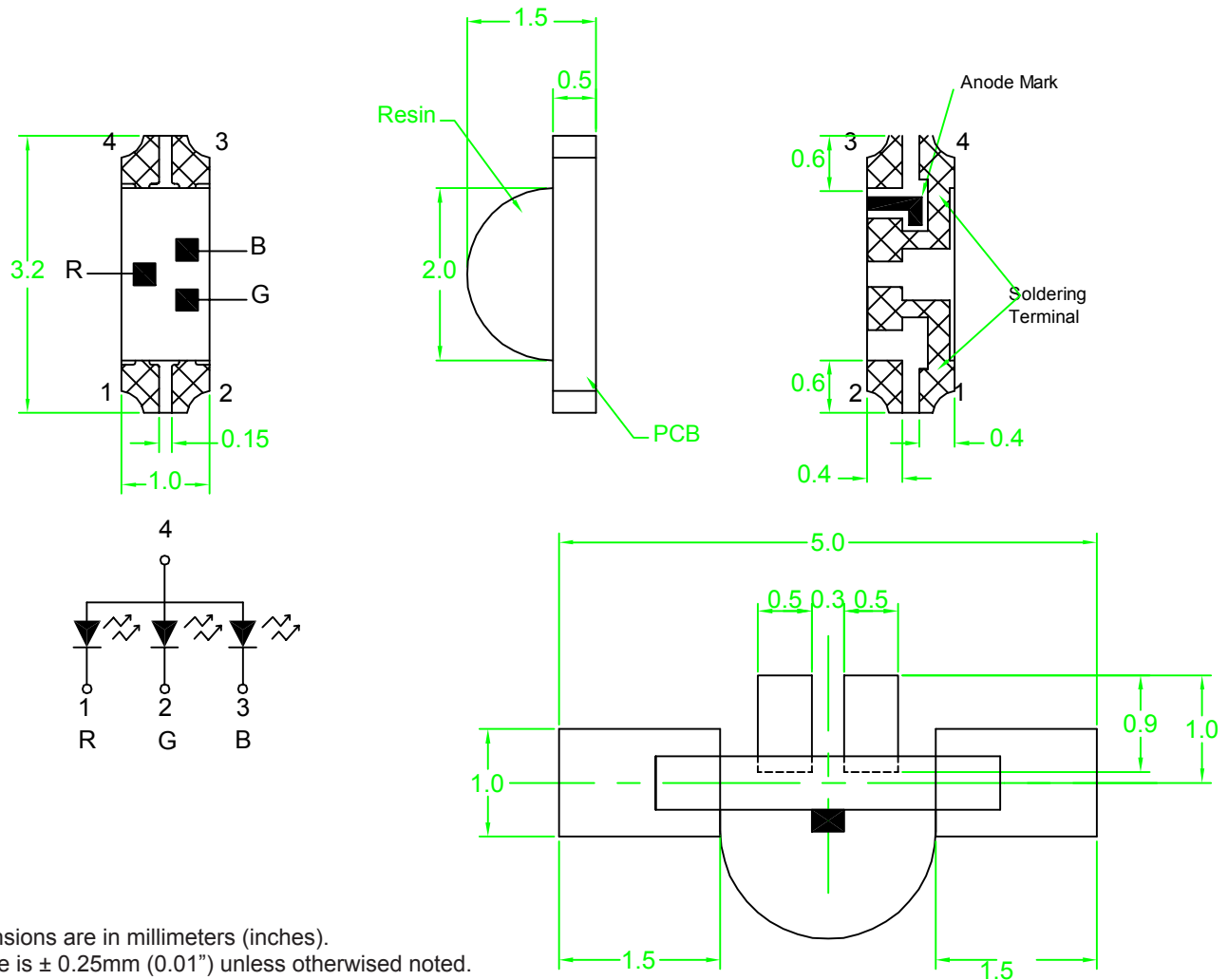


SPECIFICATION
CSRT125R2GT2B2C
PACKAGE OUTLINES


- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

| Part Number | Chip Material | Color of Emission | Lens Type | Viewing Angle |
|-----------------|---------------|-------------------|-------------|---------------|
| CSRT125R2GT2B2C | InGaAlP | Red | Water Clear | 120° |
| | InGaN | Green | Water Clear | 120° |
| | InGaN/GaN | Blue | Water Clear | 120° |



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

| Parameter | Symbol | Max Rating | | Unit |
|---|------------------|-------------------------|------------|------|
| | | Red | Green/Blue | |
| Forward Current | I _F | 30 | 20 | mA |
| Reverse Voltage | V _R | 5 | 5 | V |
| Power Dissipation | P _d | 72 | 80 | mW |
| Operating Temperature Range | T _{OP} | -40~+85 | | °C |
| Storage Temperature Range | T _{STG} | -40~+85 | | °C |
| Peak Pulsing Current (t _p ≤ 10 μs, duty cycle = 0.005) | I _{FP} | 130 | 100 | mA |
| Soldering Temperature | T _{SOL} | Max 260°C for 5 sec Max | | |

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

| Parameter | Symbol | Test Condition | Color | Value | | | Unit |
|-------------------------------------|-------------------|-----------------------|-------|-------|-----|-----|------|
| | | | | Min | Typ | Max | |
| Luminous Intensity | I _v | I _F = 20mA | Red | 80 | 150 | - | mcd |
| | | | Green | 320 | 550 | | |
| | | | Blue | 80 | 150 | | |
| Forward Voltage | V _F | I _F = 20mA | Red | - | 2.1 | 2.4 | V |
| | | | Green | - | 3.5 | 4.0 | |
| | | | Blue | - | 3.5 | 4.0 | |
| Viewing Angle at 50% I _v | 2θ _{1/2} | I _F = 20mA | - | - | 120 | - | Deg |
| Dominant Wavelength | λ _D | I _F = 20mA | Red | - | 630 | - | nm |
| | | | Green | | 525 | | |
| | | | Blue | | 470 | | |

*Tolerance of viewing angle: -10 / +5 deg.


 ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES (RED)

Fig.1 Forward current vs. Forward Voltage

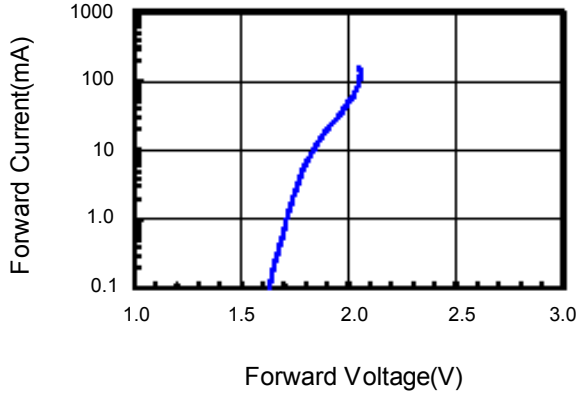


Fig.2 Relative Intensity vs. Forward Current

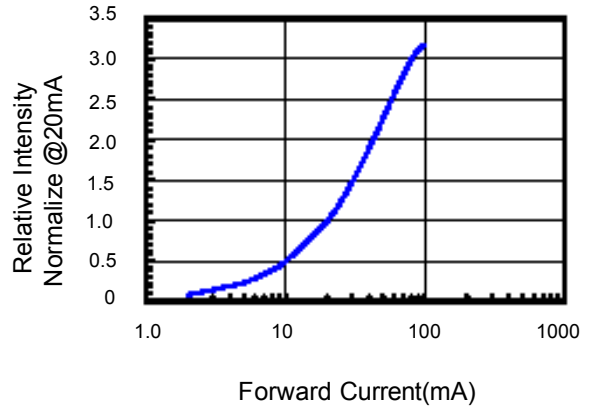


Fig.3 Forward Voltage vs. Temperature

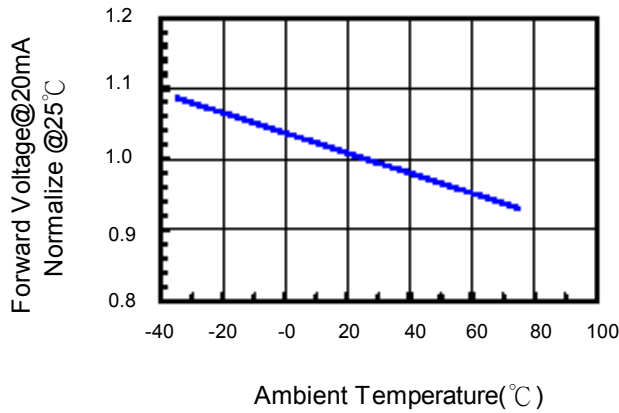


Fig.4 Relative Intensity vs. Temperature

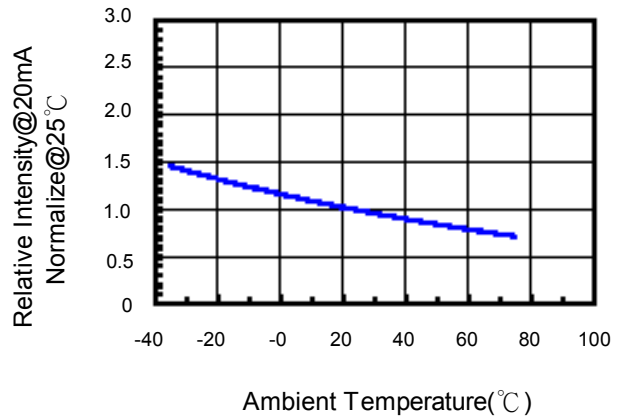


Fig.5 Relative Intensity vs. Wavelength

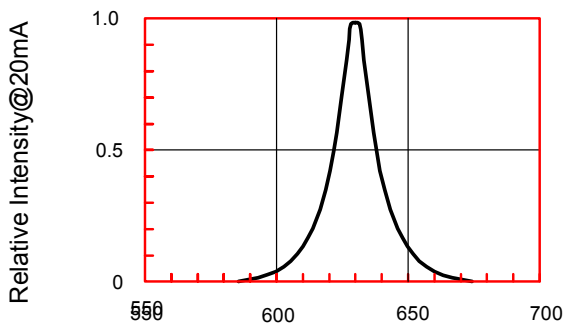
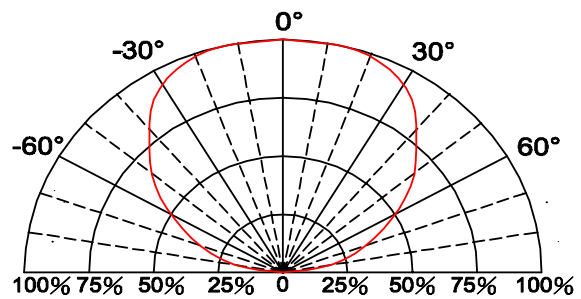


Fig.6 Directive Radiation



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES (GREEN)

Fig.1 Forward current vs. Forward Voltage

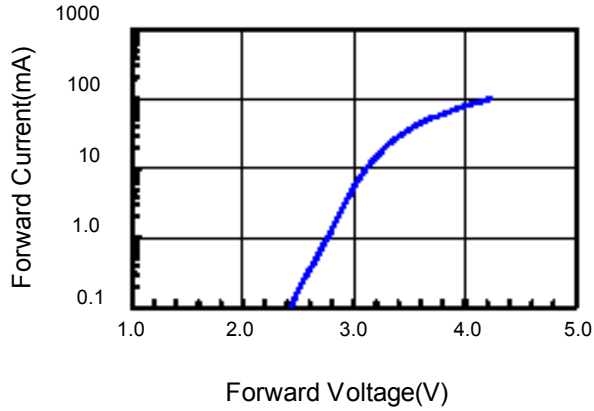


Fig.2 Relative Intensity vs. Forward Current

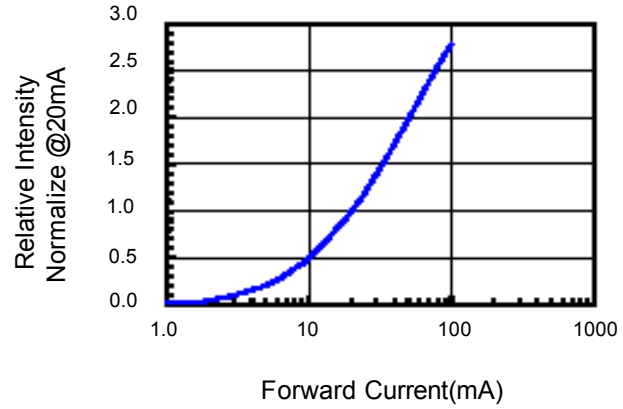


Fig.3 Forward Voltage vs. Temperature

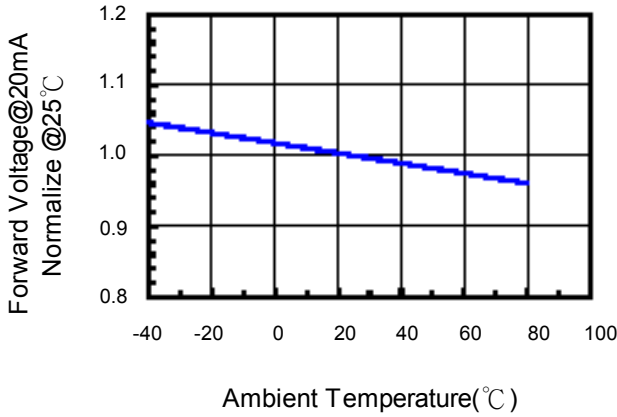


Fig.4 Relative Intensity vs. Temperature

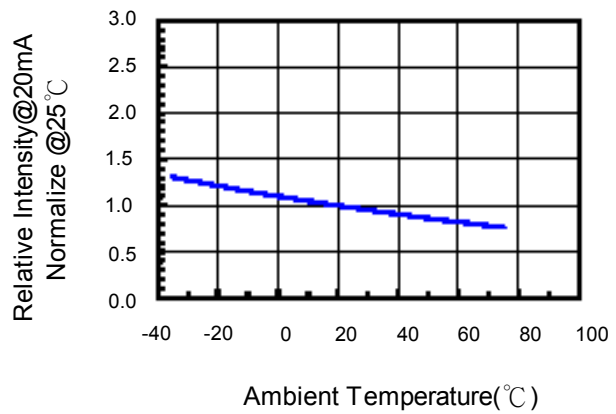


Fig.5 Relative Intensity vs. Wavelength

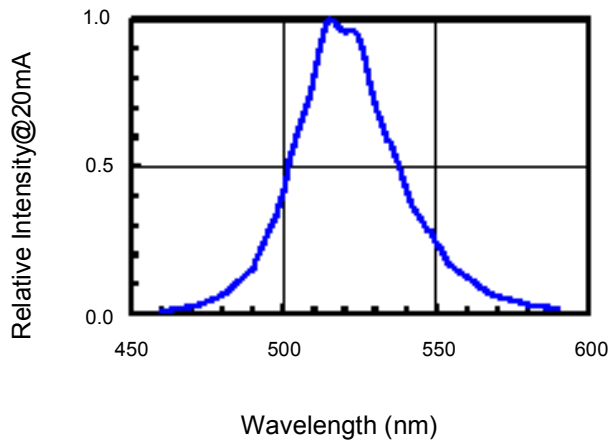
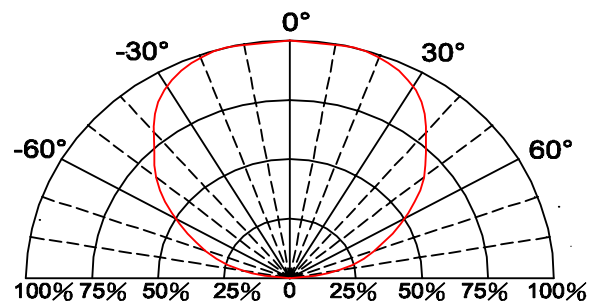


Fig.6 Directive Radiation



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES (BLUE)

Fig.1 Forward current vs. Forward Voltage

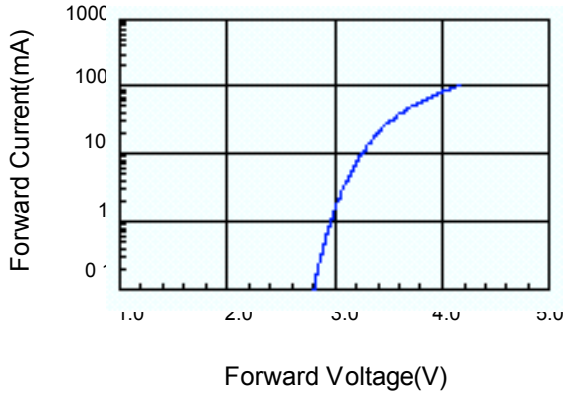


Fig.2 Relative Intensity vs. Forward Current

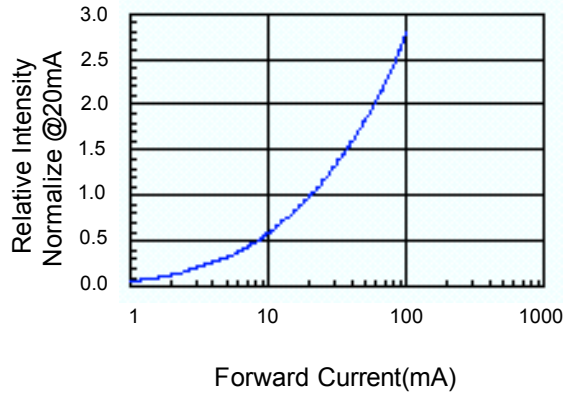


Fig.3 Forward Voltage vs. Temperature

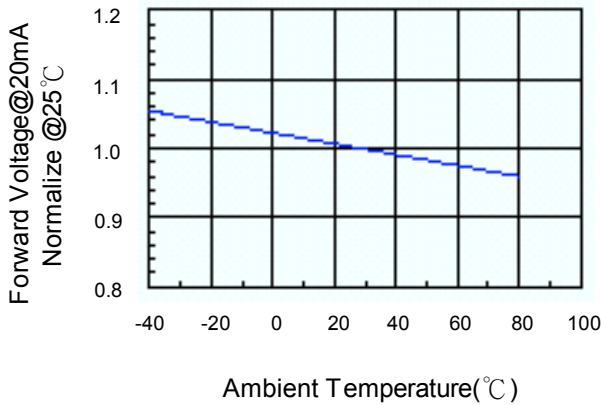


Fig.4 Relative Intensity vs. Temperature

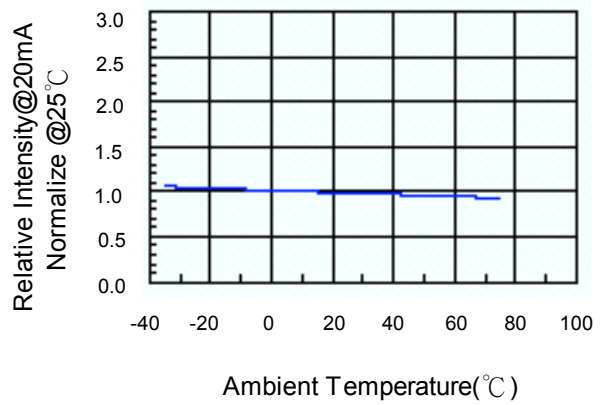


Fig.5 Relative Intensity vs. Wavelength

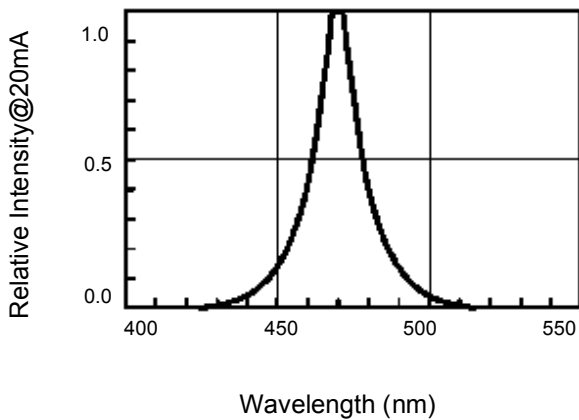
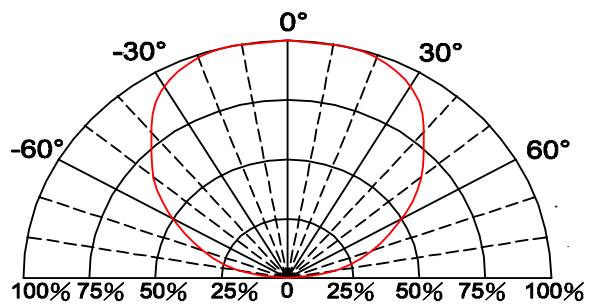


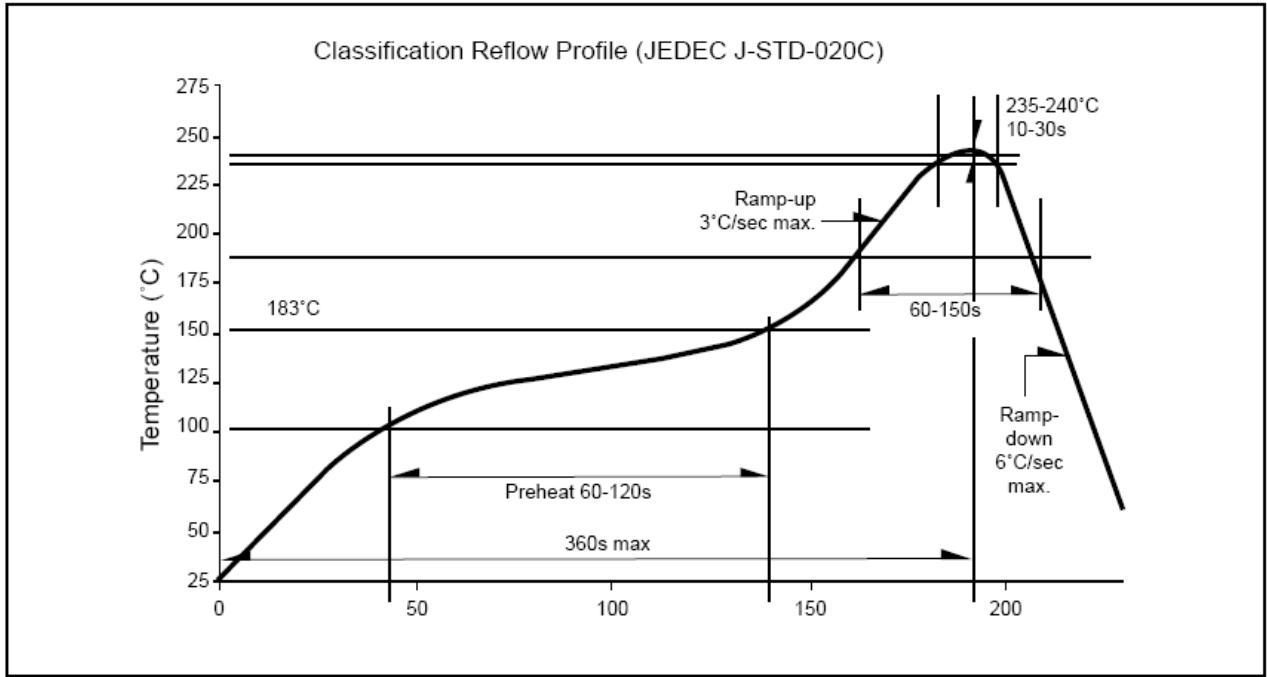
Fig.6 Directive Radiation



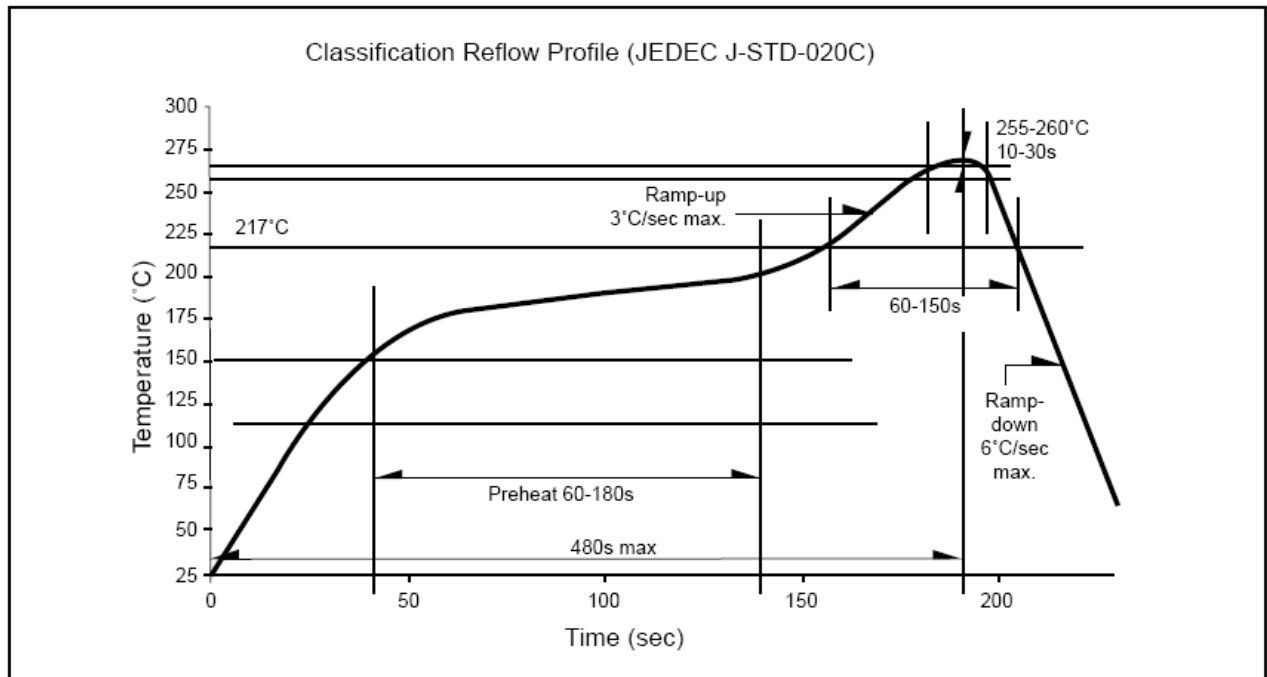
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

SOLDERING CONDITIONS

RECOMMENDED Sn-PB IR-Reflow Soldering Profile



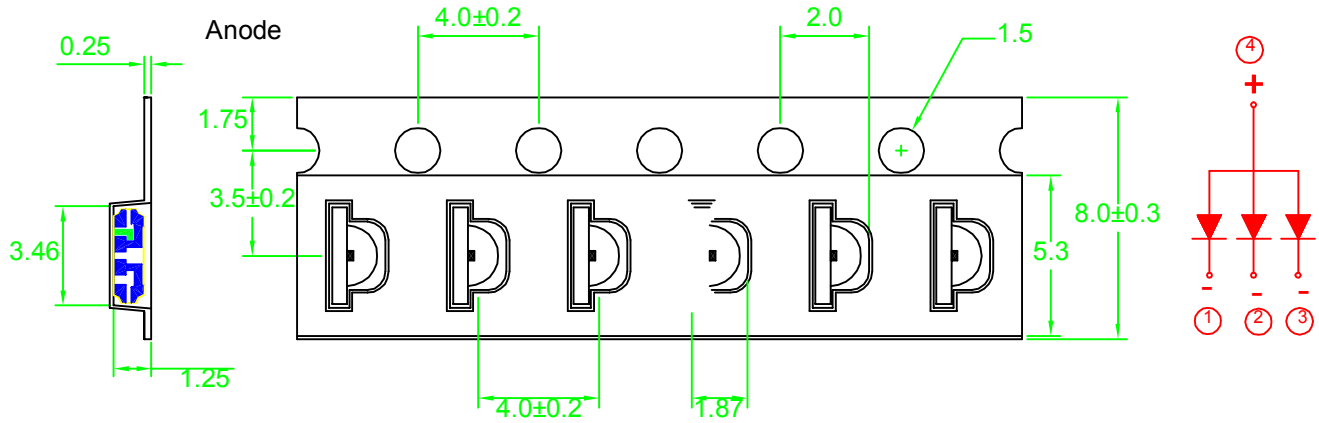
RECOMMENDED Pb-Free Soldering Profile



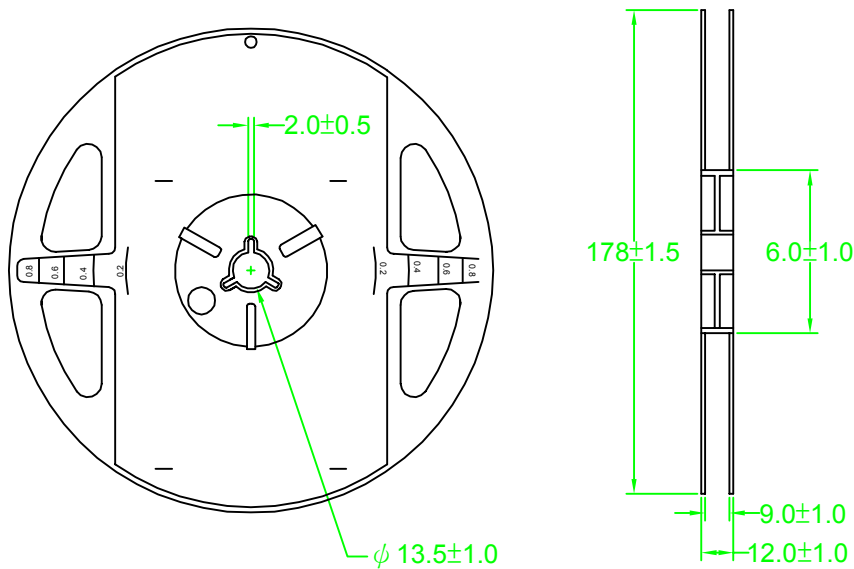
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

REEL PACKAGING

Carrier Type Dimensions



Reel Dimensions



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com