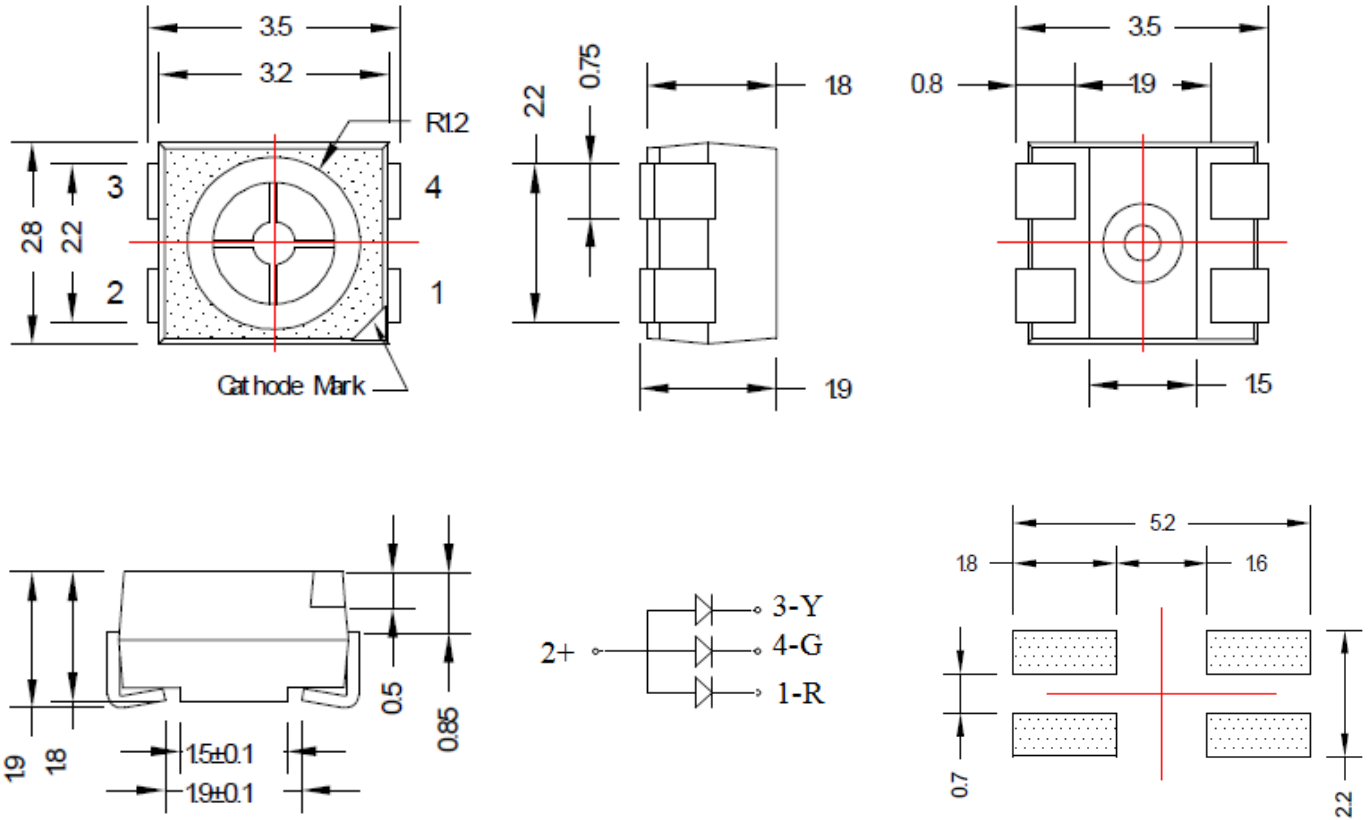


SPECIFICATION
CSPT1311Y2GT2R2CB
PACKAGE OUTLINES

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
CSPT1311Y2GT2R2CB	InGaAlP	Red	Water Clear	120°
	InGaN	True Green	Water Clear	120°
	InGaAlP	Yellow	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/ Yellow	Blue	
Forward Current	IF	30	25	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	Pd	72	90	mW
Operating Temperature Range	TOP	-40~+85		°C
Storage Temperature Range	TSTG	-40~+100		°C
Peak Pulsing Current (tp ≤ 10 μs, duty cycle = 0.005)	IFP	100		mA

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

Parameter	Symbol	Test Condition	Color	Value			Unit
				Min	Typ	Max	
Luminous Intensity	Iv	IF = 20mA	Red	250	400	-	mcd
			Green	700	1200	-	
			Yellow	250	400	-	
Forward Voltage	VF	IF = 20mA	Red	-	2.0	2.4	V
			Green	-	3.2	3.6	
			Yellow	-	2.0	2.4	
Viewing Angle at 50% Iv	2θ1/2	IF = 20mA	-	-	120	-	Deg
Dominant Wavelength	λD	IF = 20mA	Red	-	630	-	nm
			Green	-	525	-	
			Yellow	-	590	-	

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

*Tolerance of forward voltage is -/+ 0.05V

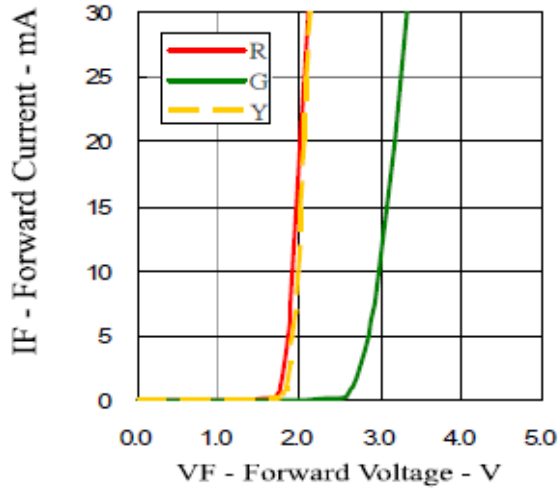
*Tolerance of luminous intensity -/+ 1nm



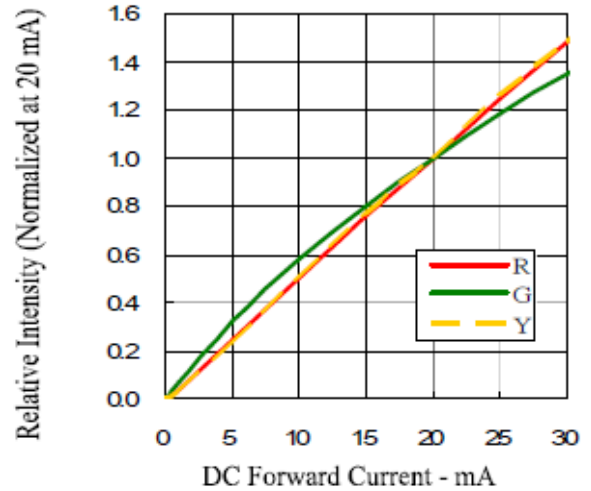
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES

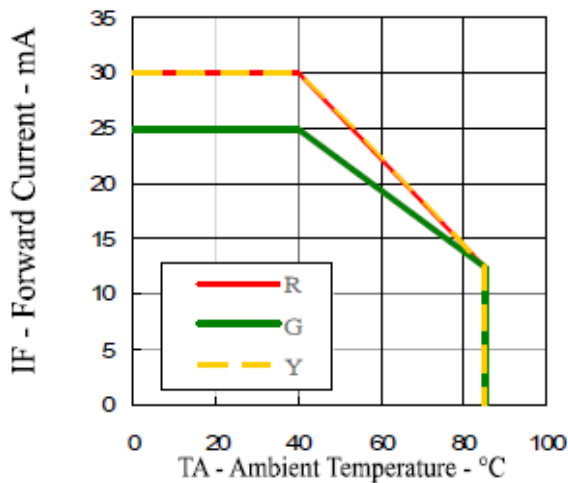
Forward Current vs. Forward Voltage



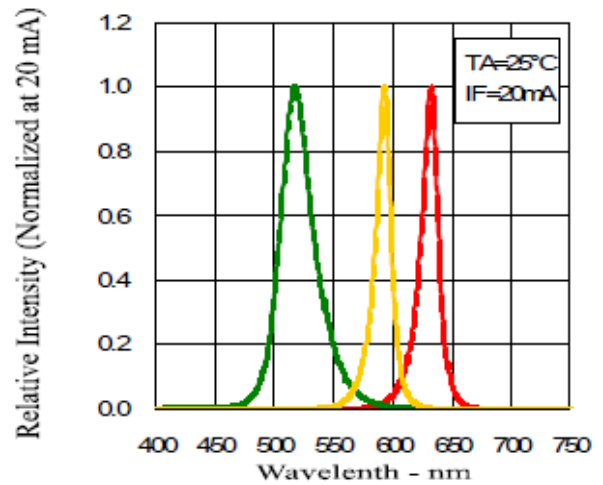
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature

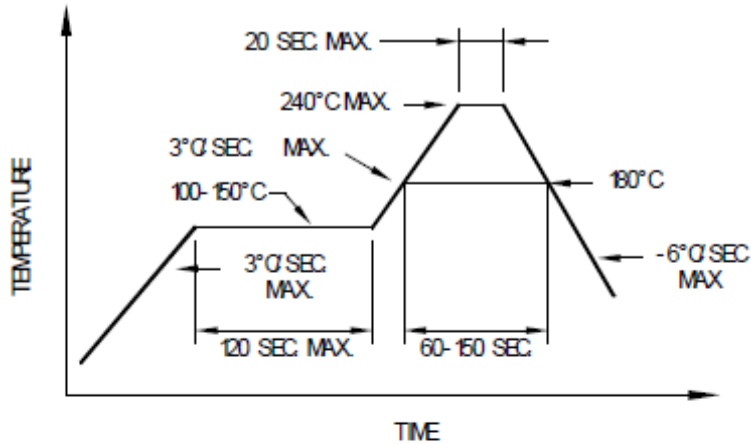


Relative Intensity vs. Wavelength

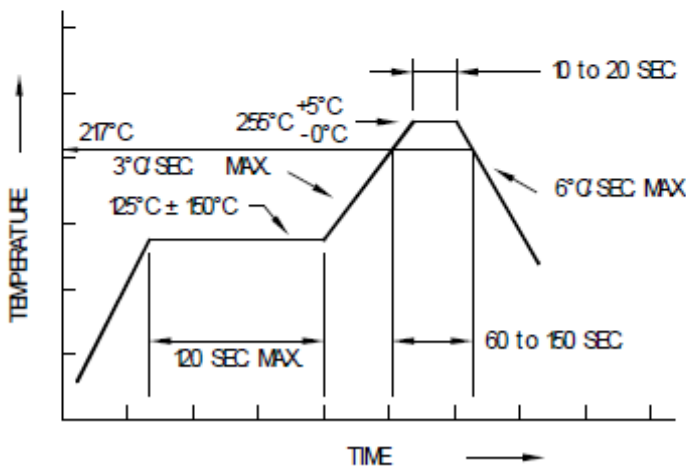


ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

SOLDERING CONDITIONS




Recommended reflow soldering profile



Recommended Pb-free reflow soldering profile

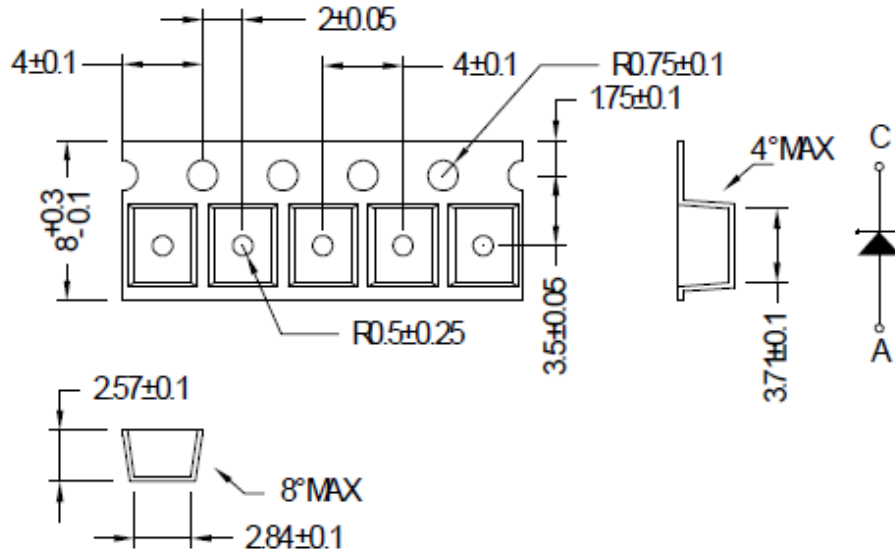
- Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.
- Reflow soldering should not be done more than two times.
- When soldering, do not put stress on the LEDs during heating.
- After soldering, do not warp the circuit board.



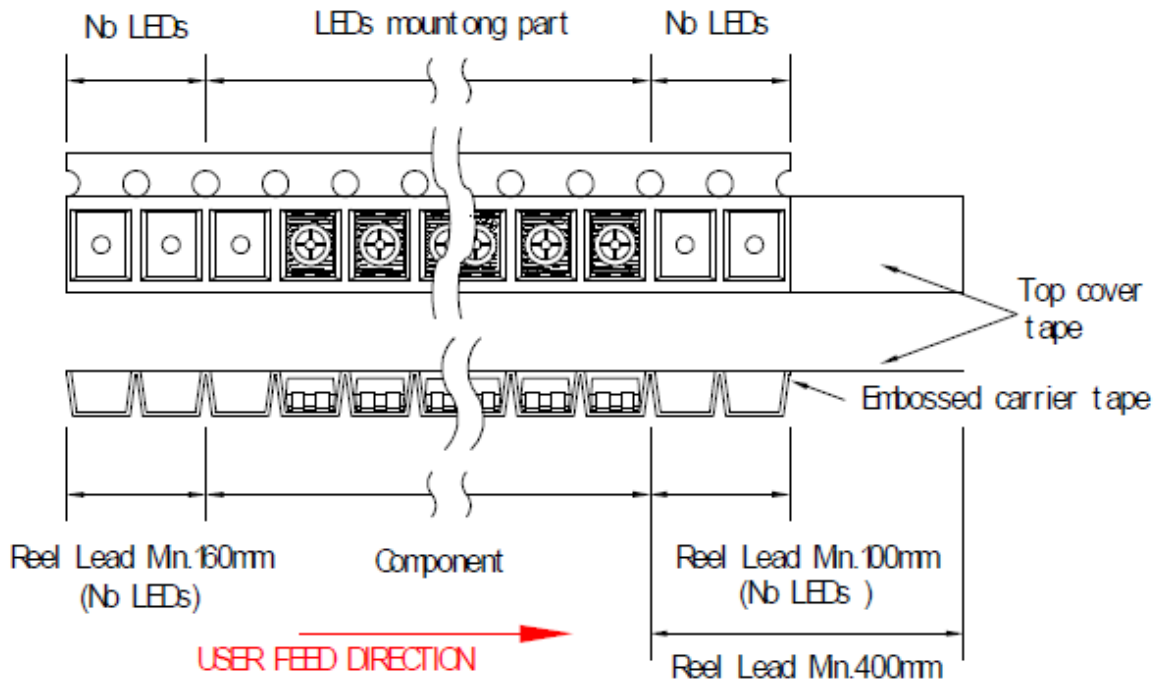
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

REEL PACKAGING

TAPE DIMENSIONS



TAPE LEADER AND TRAILER DIMENSIONS



Notes:

1. Baking is required under the following conditions: The pack has been opened for more than four weeks.
2. Baking recommended conditions: 60 ± 5°C for 20 hours.
3. Reel size: 2000 pcs/reel



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