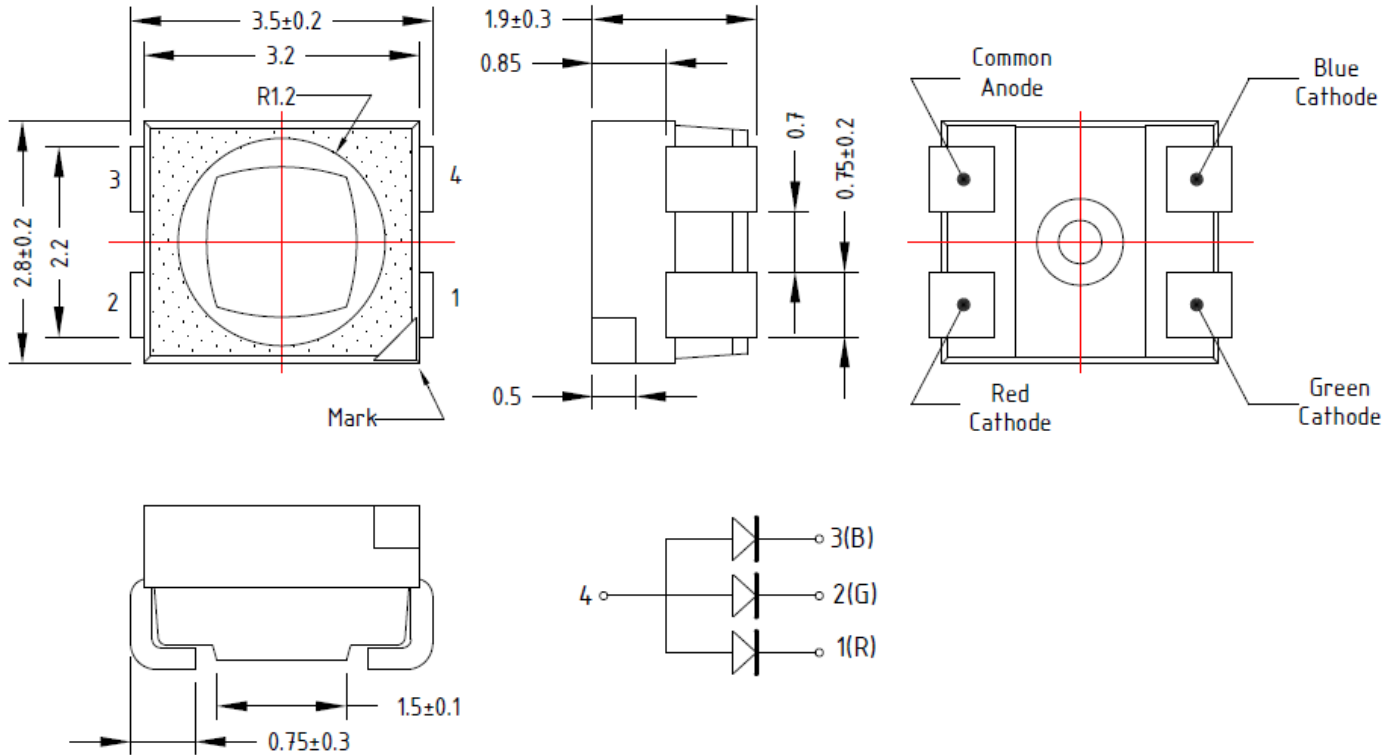


SPECIFICATION
CSPT1311R3GT3B3C
PACKAGE OUTLINES

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
CSPT1311R3GT3B3C	InGaAlP	Red	Water Clear	120°
	InGaN	True Green	Water Clear	120°
	InGaN	Blue	Water Clear	120°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating		Unit
		Blue/ Green	Red	
Forward Current	IF	25	30	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	Pd	90	72	mW
Operating Temperature Range	TOP	-30~+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	550	700	-	mcd
			Green	800	1400	-	
			Blue	250	300	-	
Forward Voltage	VF	IF = 20mA	Red	-	2.1	2.4	V
			Green	-	3.2	3.6	
			Blue	-	3.2	3.6	
Viewing Angle at 50% Iv	2θ1/2	IF = 20mA	-	-	120	-	Deg
Dominant Wavelength	λD	IF = 20mA	Red	620	625	630	nm
			Green	525	530	535	
			Blue	465	470	475	

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

*Tolerance of forward voltage is -/+ 0.05V

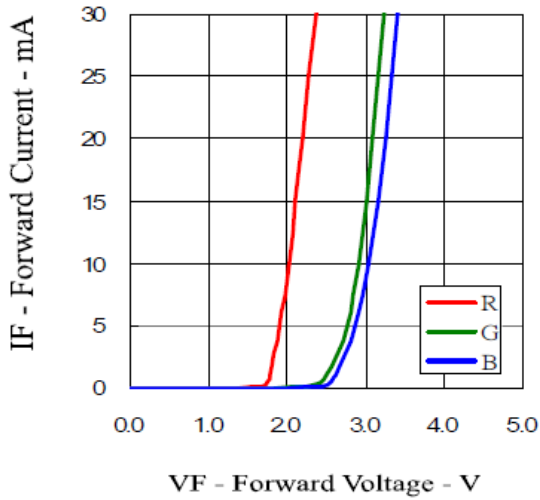
*Tolerance of luminous intensity -/+ 1nm



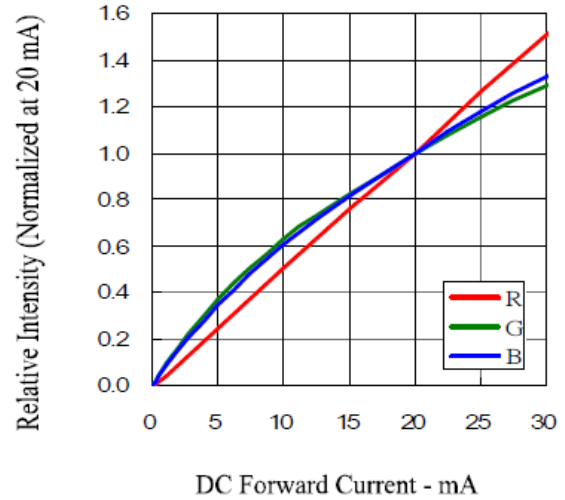
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TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES

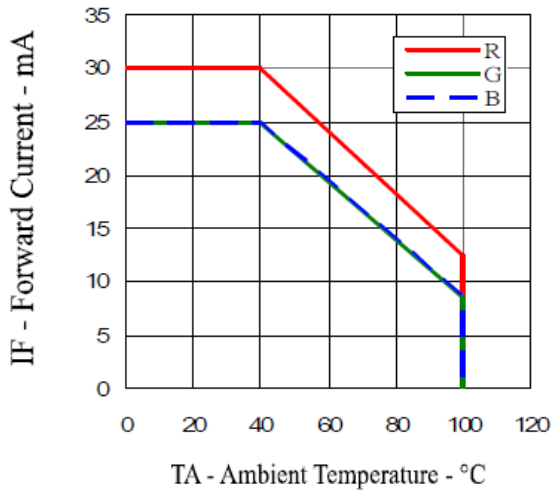
Forward Current vs. Forward Voltage



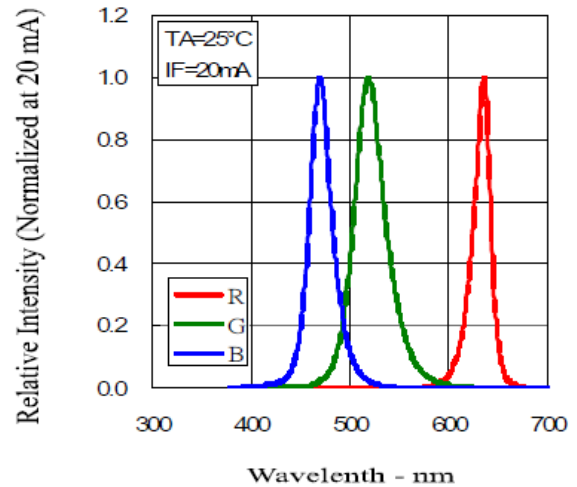
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature

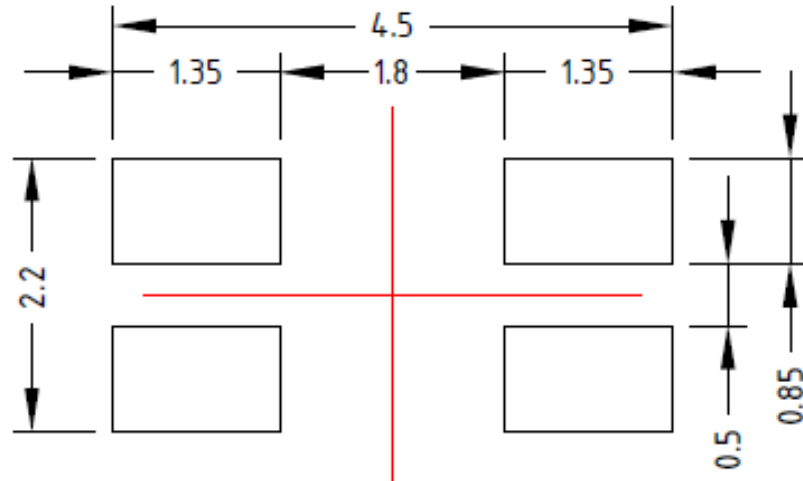


Relative Intensity vs. Wavelength



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RECOMMENDED SOLDERING PATTERN



Notes:

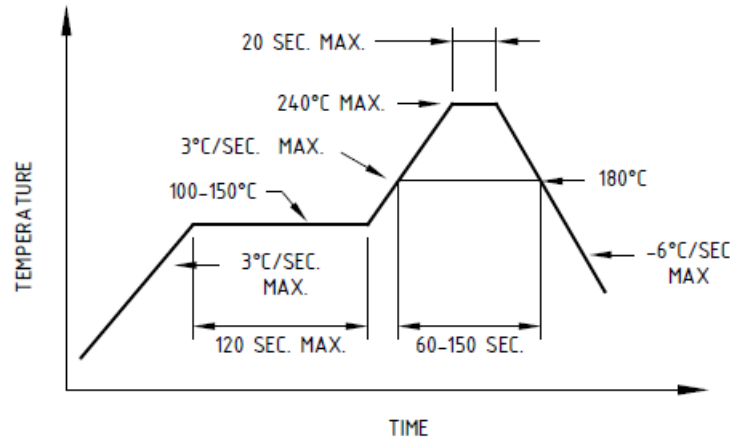
1. All dimensions in mm.
2. Electrical connection between all cathodes is recommended.



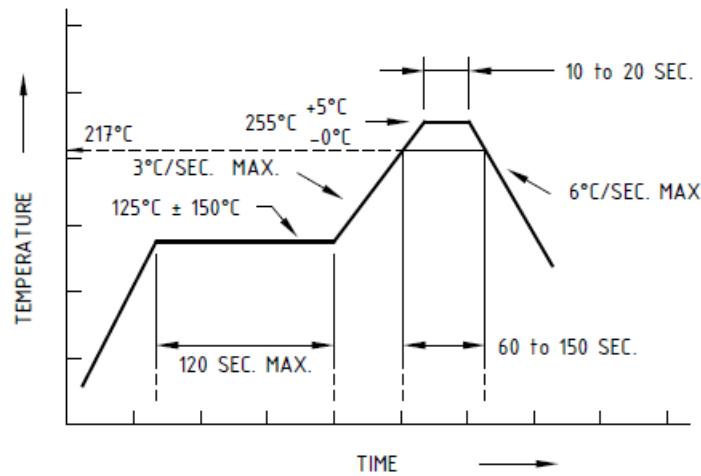
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SOLDERING CONDITIONS

SOLDERING CONDITIONS



Recommended reflow soldering profile



Recommended Pb-free reflow soldering profile

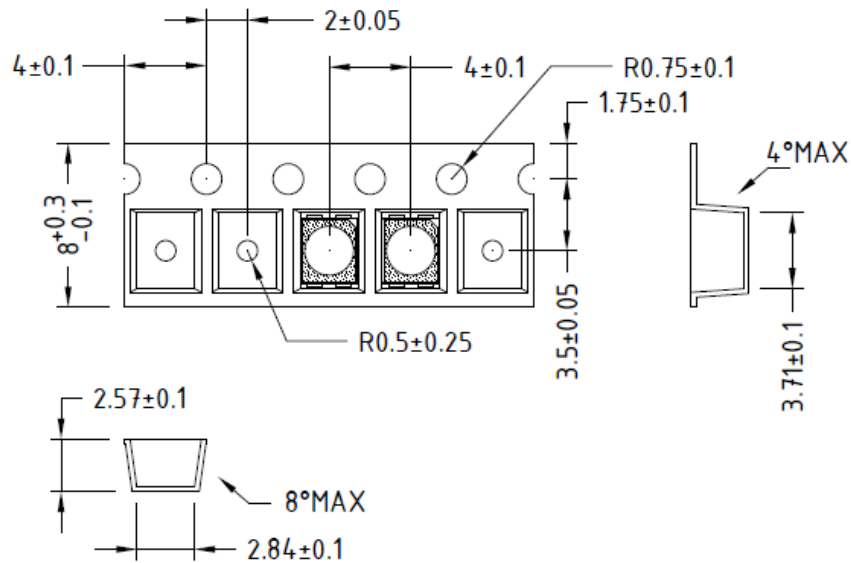
- Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the Characteristics of the LEDs will or will not be damaged by repairing.
- Reflow soldering should not be done more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



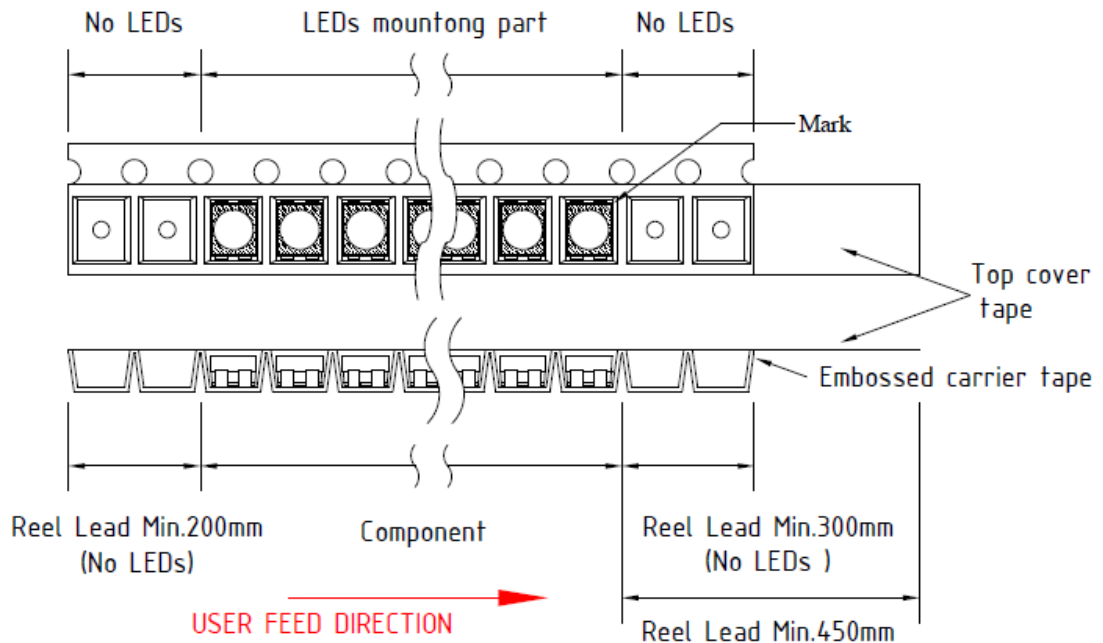
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REEL PACKAGING

TAPE DIMENSION



TAPE LEADER AND TRAILER DIMENSION



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