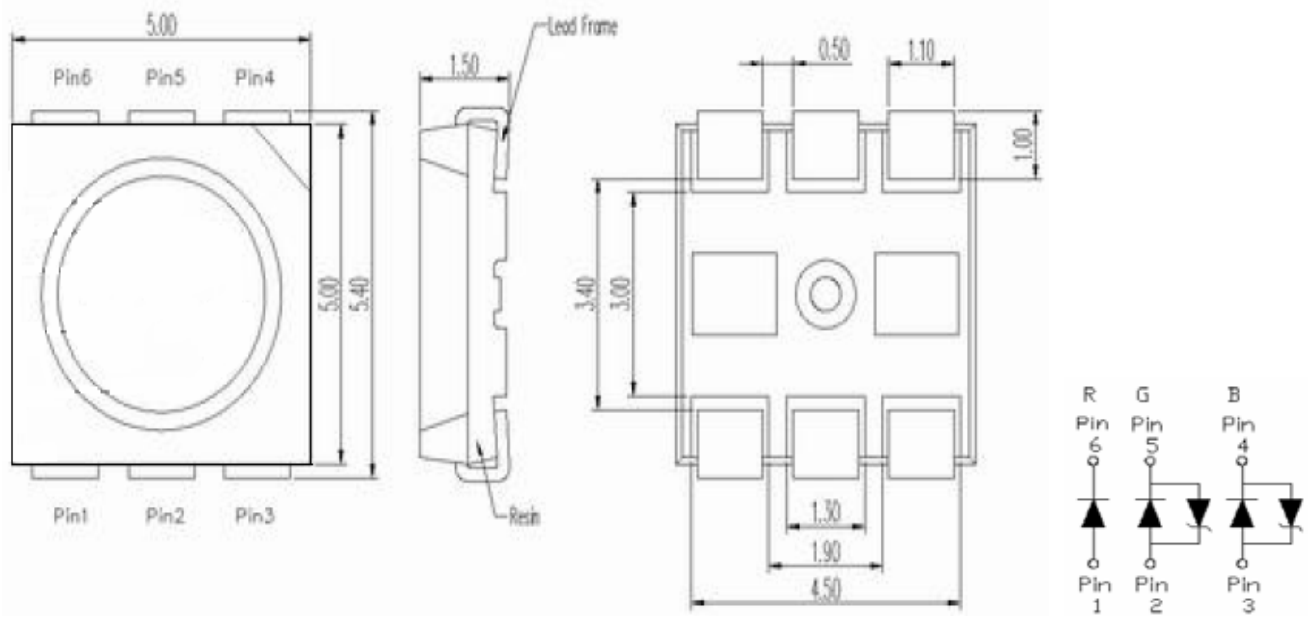


**SPECIFICATIONS** **CSPU55RGB2ZC**
**PACKAGE OUTLINES**

**Notes:**

1. All dimensions are in millimeter (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
CSPU55RGB2ZC	InGaAlP	Red	Water Clear	120°
	InGaN	Green		
	InGaN	Blue		



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**ABSOLUTE MAXIMUM RATINGS**
**(TA=25°C)**

Parameter	Symbol	Max Rating		Unit
Forward Current	I <sub>F</sub>	30		mA
Reverse Voltage	V <sub>R</sub>	5		V
Power Dissipation	P <sub>d</sub>	R	78	mW
		G	120	
		B	120	
Operating Temperature Range	T <sub>OP</sub>	-25~+80		°C
Storage Temperature Range	T <sub>STG</sub>	-40~+100		°C
Peak Pulsing Current (1/10 duty f = 10KHz)	I <sub>FP</sub>	100		mA
Soldering Temperature	T <sub>SOL</sub>	Max 260°C for 5 sec Max		

**OPTICAL-ELECTRICAL CHARACTERISTICS**
**(TA=25°C)**

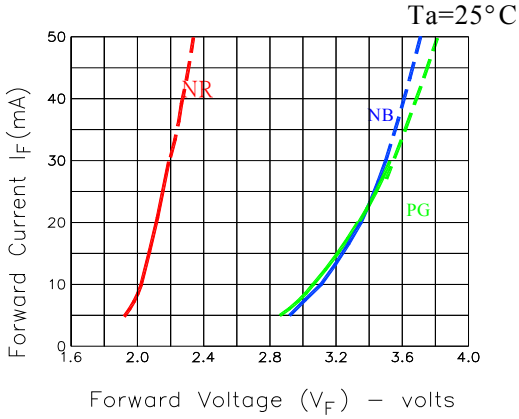
Parameter	Symbol	Test Condition	Color	Value			Unit
				Min	Typ	Max	
Dominant Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	R	615	-	630	nm
			G	520	-	535	
			B	455	-	470	
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	R	460	560	-	mcd
			G	1000	1300	-	
			B	140	240	-	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	R	-	2.2	2.8	V
			G	-	3.2	3.8	
			B	-	3.2	3.8	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V		-	-	50	μA
Viewing Angle at 50% I <sub>v</sub>	2θ1/2	I <sub>F</sub> = 20mA		120			Deg

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

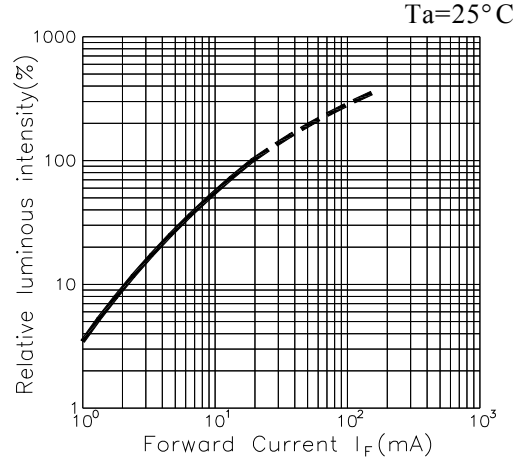

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## OPTICAL CHARACTERISTIC CURVES

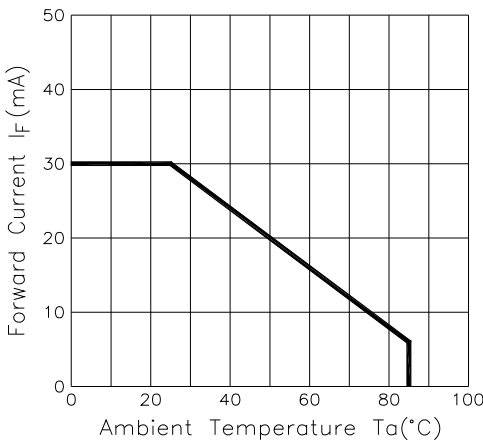
Forward Current Vs. Forward Voltage



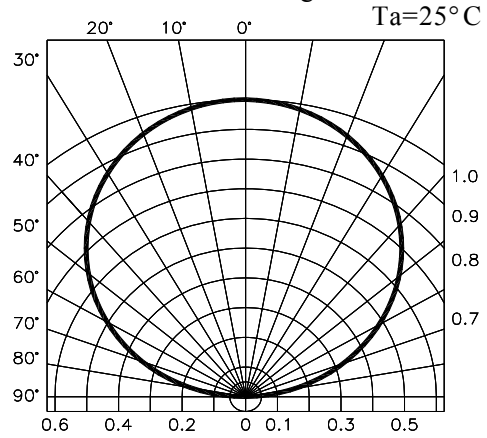
Luminous Intensity Vs. Forward Current



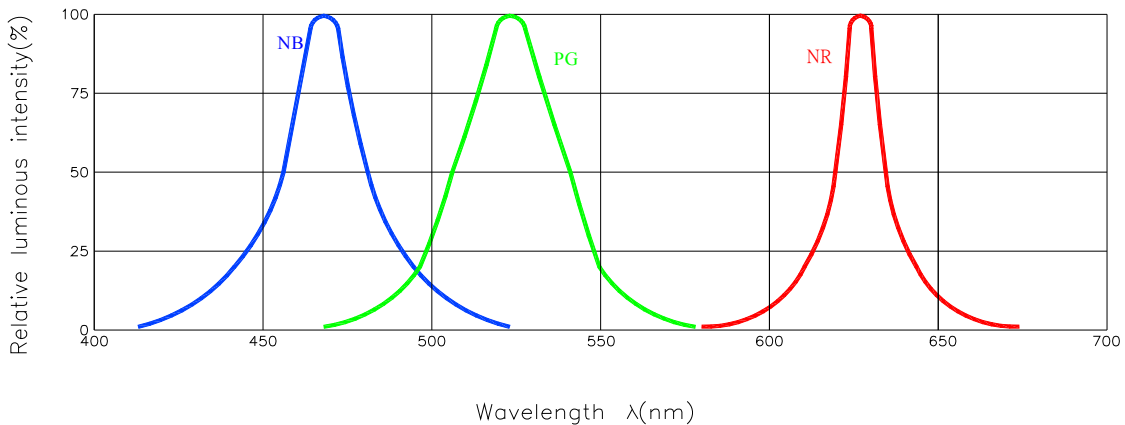
Forward Current Derating Curve



Radiation Diagram



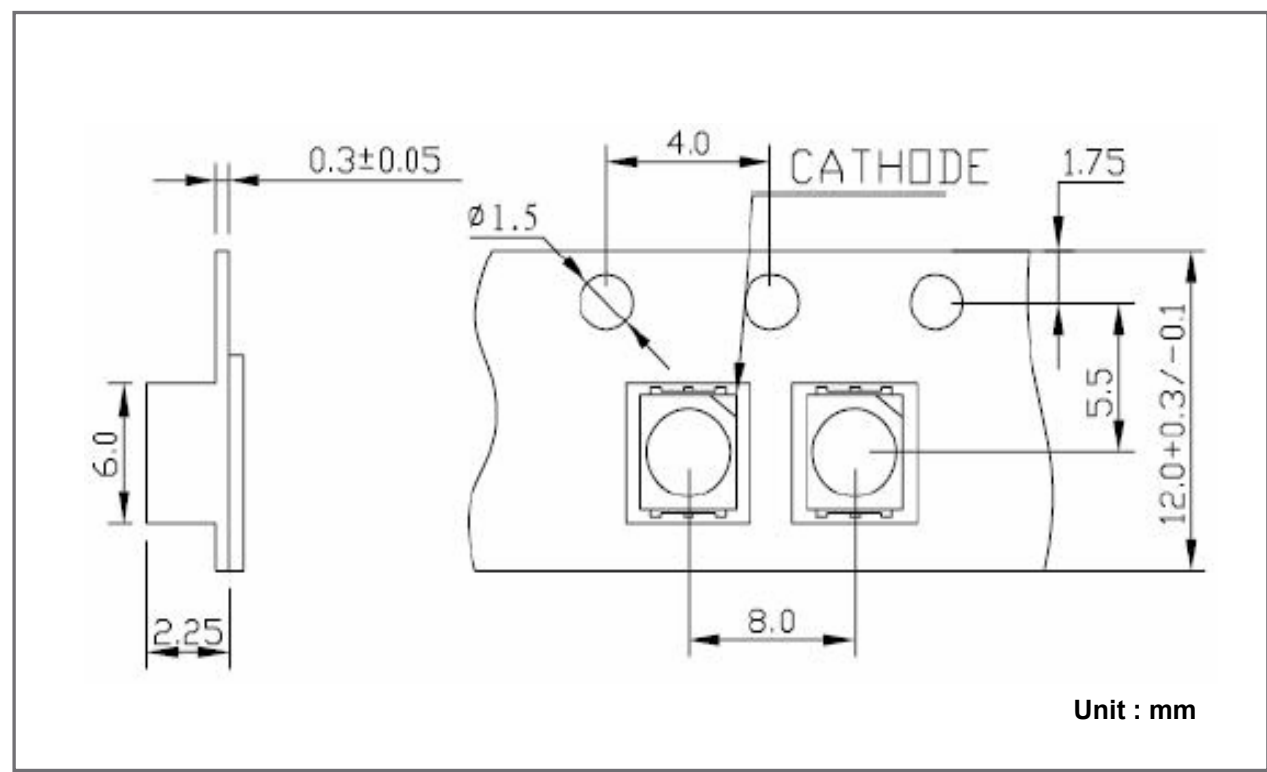
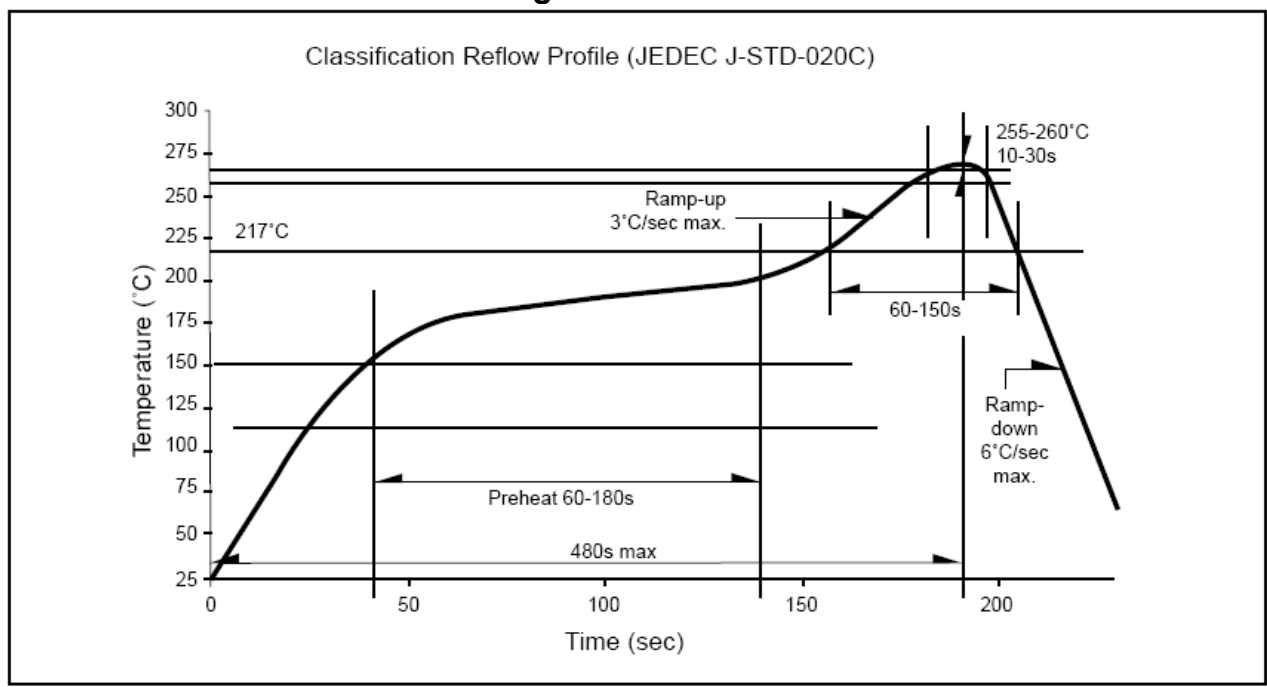
Spectrum Distribution



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## SOLDERING CONDITIONS & CARRIER TAPE

### RECOMMENDED Pb-Free Soldering Profile



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