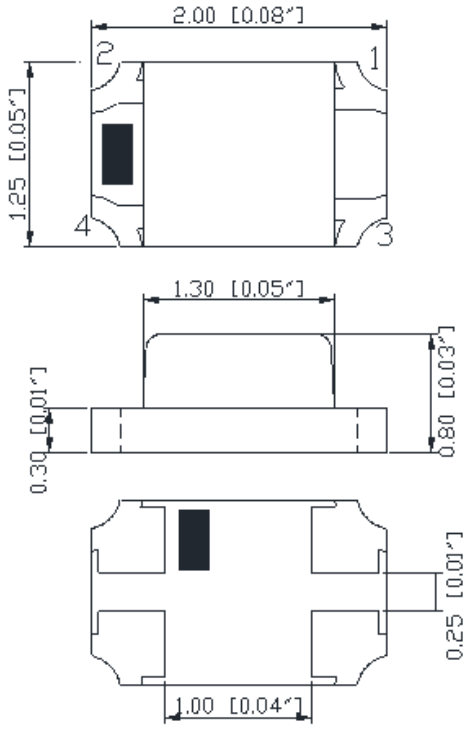
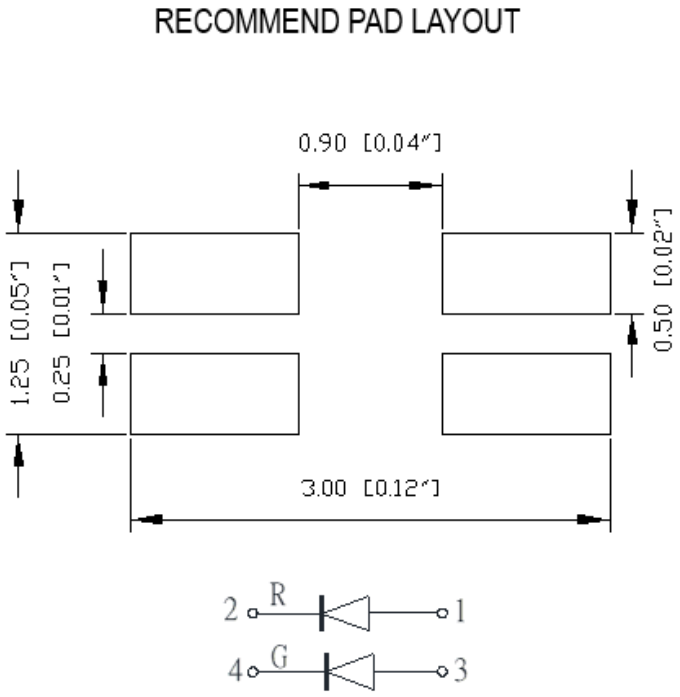
SPECIFICATIONS CSB85BR2GT2C

OUTLINES DIMENSIONS





Notes:
1. All Dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CSB85BR2GT2C	InGaAlP/InGaN	Red/Green	Water Clear	140°

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ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Color	Max Rating	Unit
Power Dissipation	P_D	Red	75	mW
		Green	111	
Pulse Current Forward Current	I_{FP}	Red	125	mA
		Green	125	
Continuous Forward Current	I_F	Red	30	mA
		Green		
Reverse Voltage	V_R	5		V
Operating Temperature Range	T_{OPR}	-40~+80		°C
Storage Temperature Range	T_{STG}	-40~+85		°C
I_{FP} = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec				

OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Test Condition	Color	Value			Unit
				Min	Typ	Max	
Luminous Intensity	Iv	I_F = 20mA	Red	63	200	-	mcd
			Green	250	400	-	
Forward Voltage	V_F	I_F = 20mA	Red	-	2.0	2.5	V
			Green	-	3.1	3.7	
Reverse Leakage Current	I_R	V_R = 5V	Red	-	-	10	μA
			Green	-	-	10	
Viewing Angle	2θ1/2	I_F = 20mA	Red	-	140	-	deg
			Green	-	140	-	
Peak Wavelength	λP	I_F = 20mA	Red	-	640	-	nm
			Green	-	515	-	
Dominant Wavelength	λD	I_F = 20mA	Red	625	630	635	nm
			Green	515	520	525	

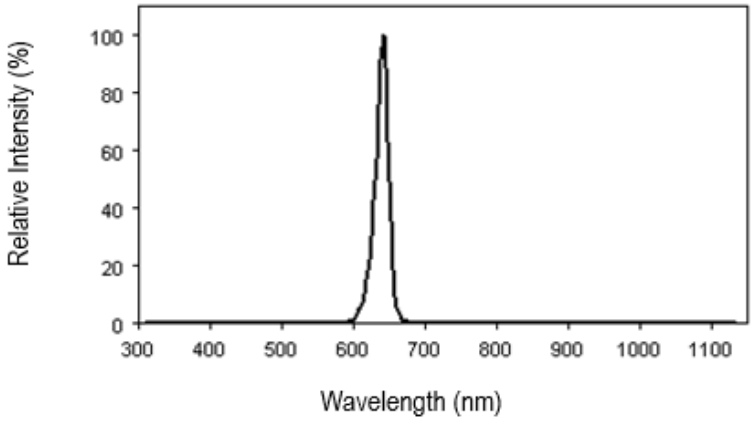
*Tolerance of viewing angle: -10 / +5 deg.

RoHS Compliant Lead Free

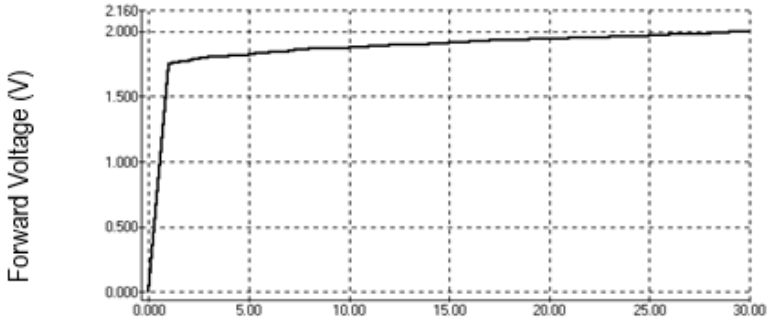
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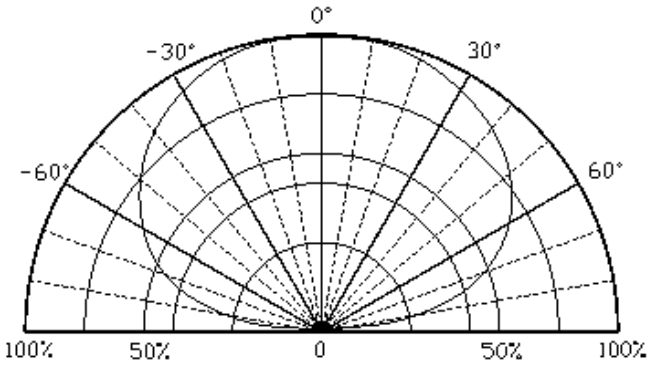
OPTICAL CHARACTERISTIC CURVES (RED)

Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

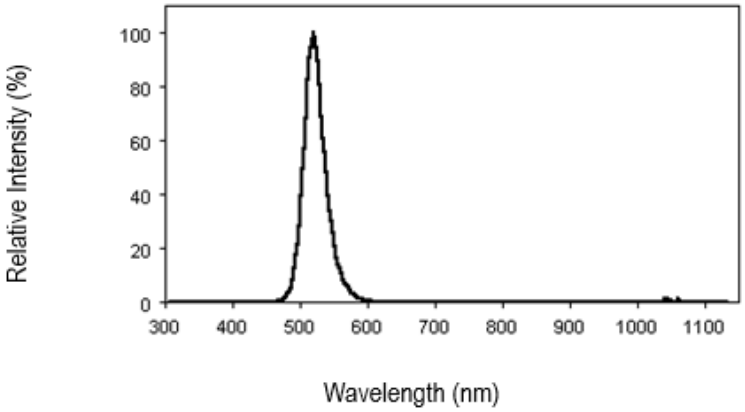




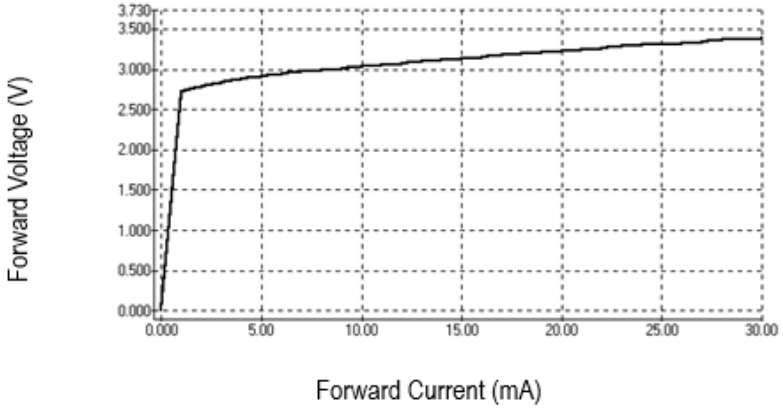
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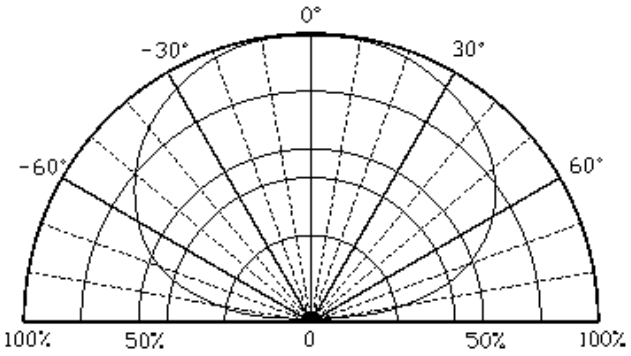
OPTICAL CHARACTERISTIC CURVES (GREEN)

Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

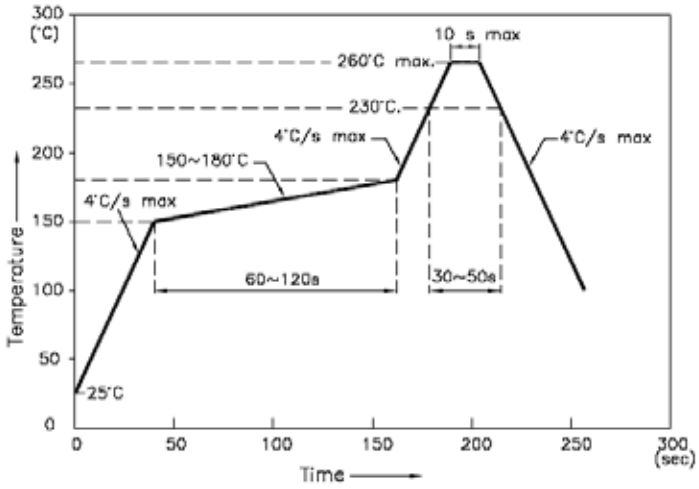




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SOLDERING CONDITIONS – LAMP TYPE LED

REFLOW PROFILE



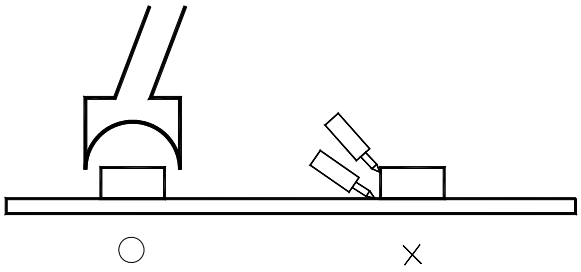
NOTES:

1. We recommend the reflow temperature 245°C (±5°C). The maximum soldering temperature should be limited to 260°C.
2. Do not cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

- Soldering iron
- Basic spec is ≤ 5sec when 260°C. If temperature is higher, time should be shorter
- (+10°C → -1sec). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable .Surface temperature of the device should be under 230°C.

Rework

1. Customer must finish rework within 5 sec under 260°C.
2. The head of iron cannot touch copper foil
3. Twin-head type is preferred.

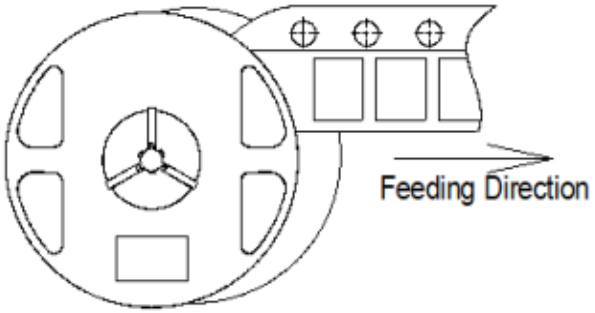


RoHS Compliant
Lead Free

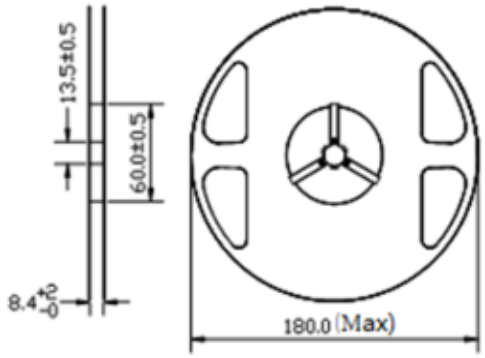
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PACKAGING SPECIFICATIONS

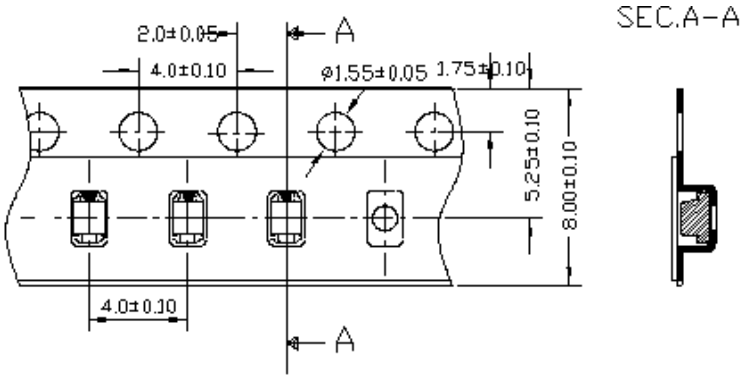
- **Feeding Direction**



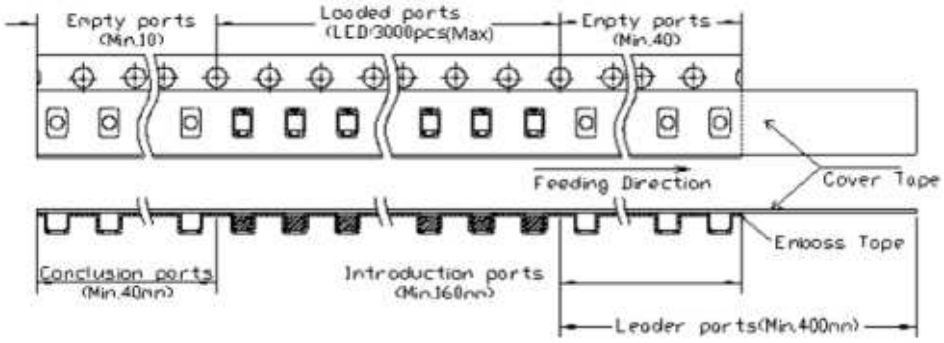
- **Dimensions of Reel (Unit: mm)**



- **Dimensions of Tape (Unit: mm)**



- **Arrangement of Tape**



Notes:

1. Empty component pockets are sealed with top cover tape
2. The maximum number of missing lamps is two
3. The cathode is oriented towards the tape sprocket hole
4. 3,000(Max) pcs/Reel

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