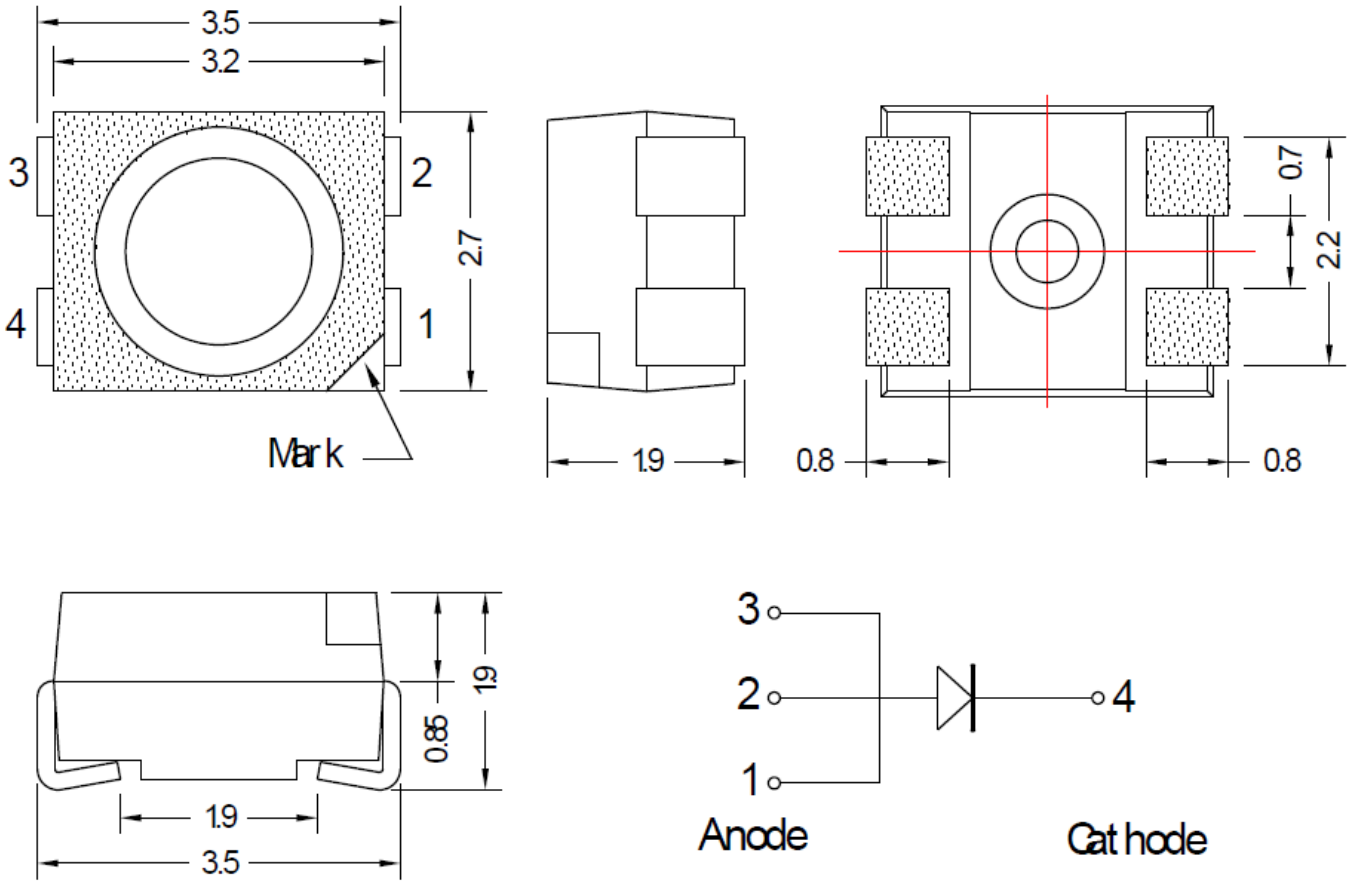
SPECIFICATION CSP1311B2C-4

PACKAGE OUTLINES



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

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CSP1311B2C-4	InGaN	Blue	Water Clear	120°

ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	I_F	30	mA
Reverse Current @ 5V	V_R	10	μA
Power Dissipation	Pd	108	mW
Operating Temperature Range	T_{OP}	-30~+100	°C
Storage Temperature Range	T_{STG}	-40~+100	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	I_{FP}	100	mA
Soldering Temperature	T_{SOL}	Max 260°C for 10 sec Max	

OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	Iv	I_F = 50mA	240	340	-	mcd
Forward Voltage	V_F	I_F = 50mA	-	3.2	3.6	V
Reverse Leakage Current	I_R	V_R = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	I_F = 50mA	-	120	-	Deg
Peak Wavelength	λ_P	I_F = 50mA	-	465	-	nm
Dominant Wavelength	λ_D	I_F = 50mA	460	470	480	nm

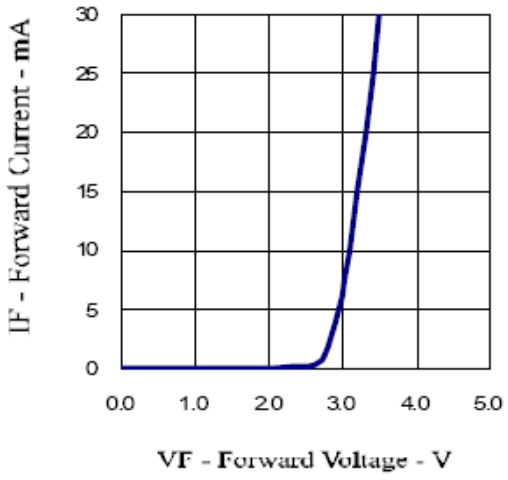
*Tolerance of viewing angle: -10 / +5 deg.

RoHS Compliant Lead Free

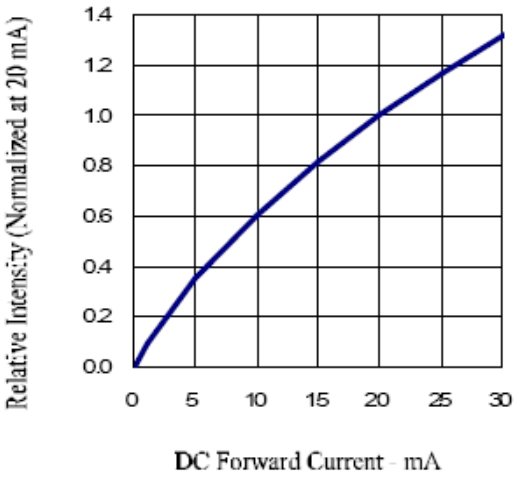
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

OPTICAL CHARACTERISTIC CURVES

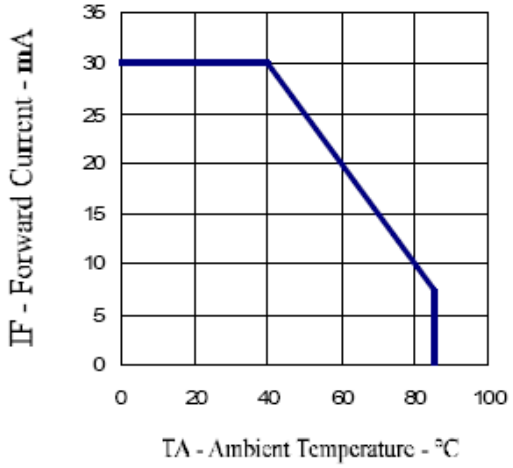
Forward Current vs. Forward Voltage



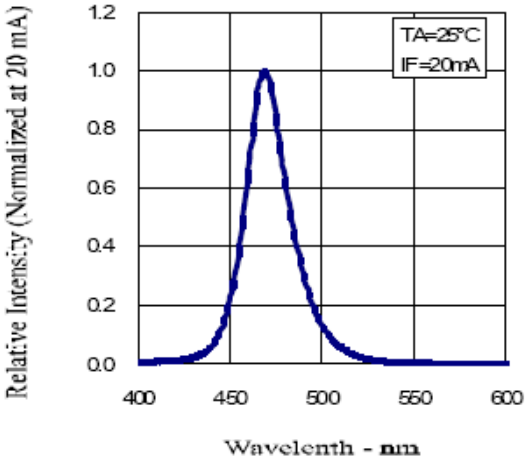
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature

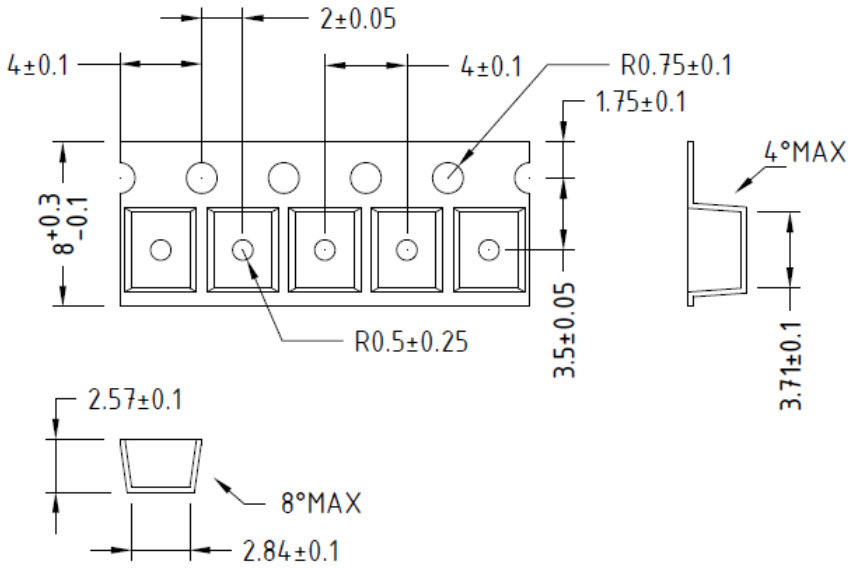


Relative Intensity vs. Wavelength

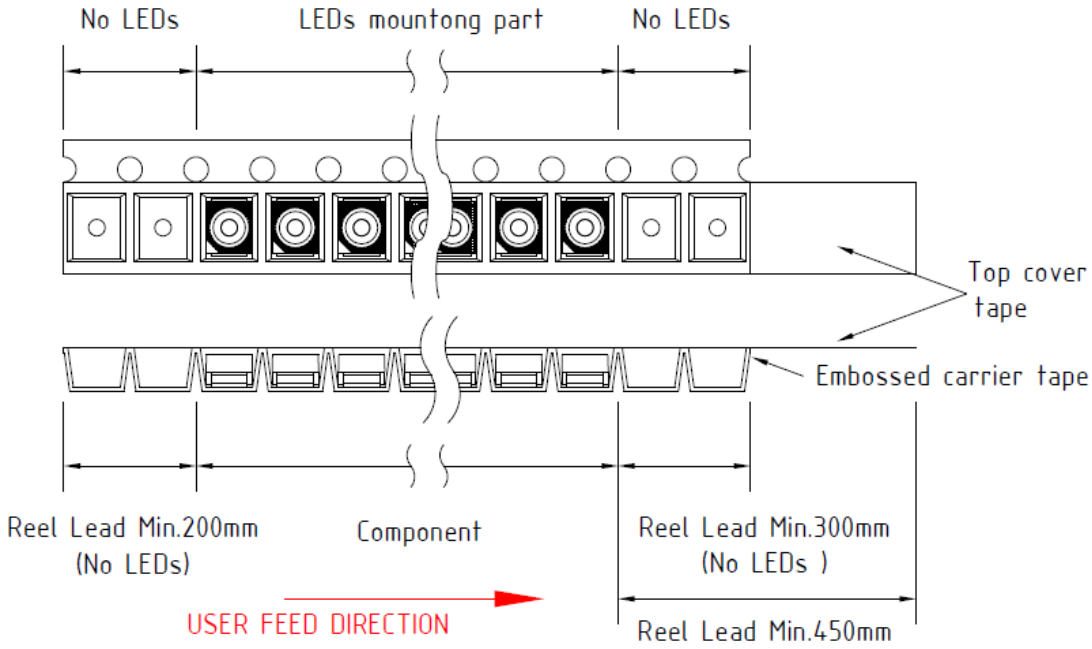


PACKAGING SPECIFICATION

TAPE DIMENSION



TAPE LEADER AND TRAILER DIMENSION

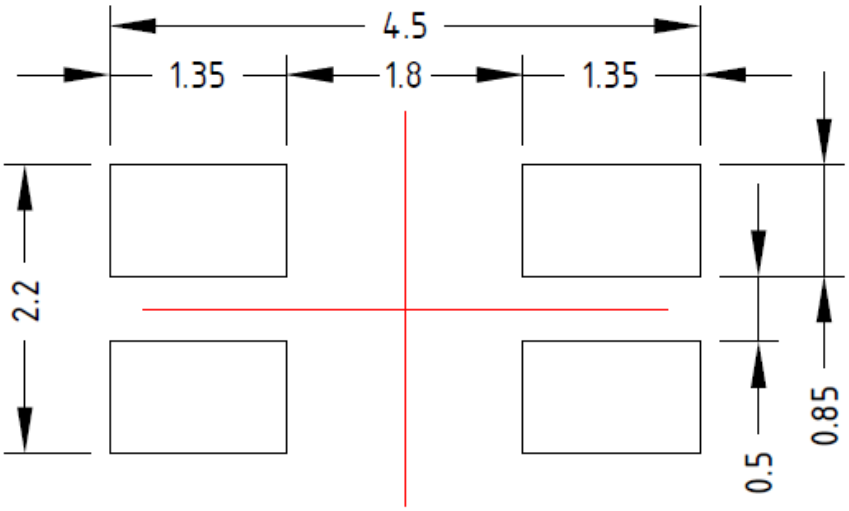


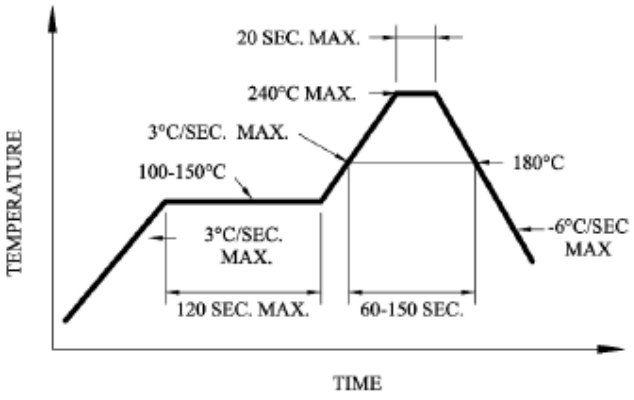
Notes:
1. Empty component pockets are sealed with top cover tape
2. The maximum number of missing lamps is two.
3. 2000 pcs/reel

RoHS Compliant Lead Free

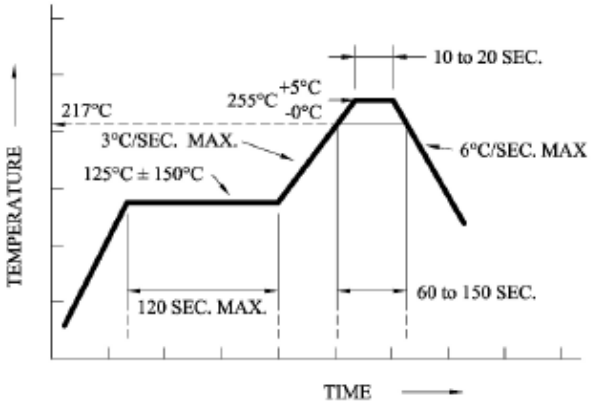
SOLDERING CONDITIONS

RECOMMENDED SOLDERING PAD PATTERN





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