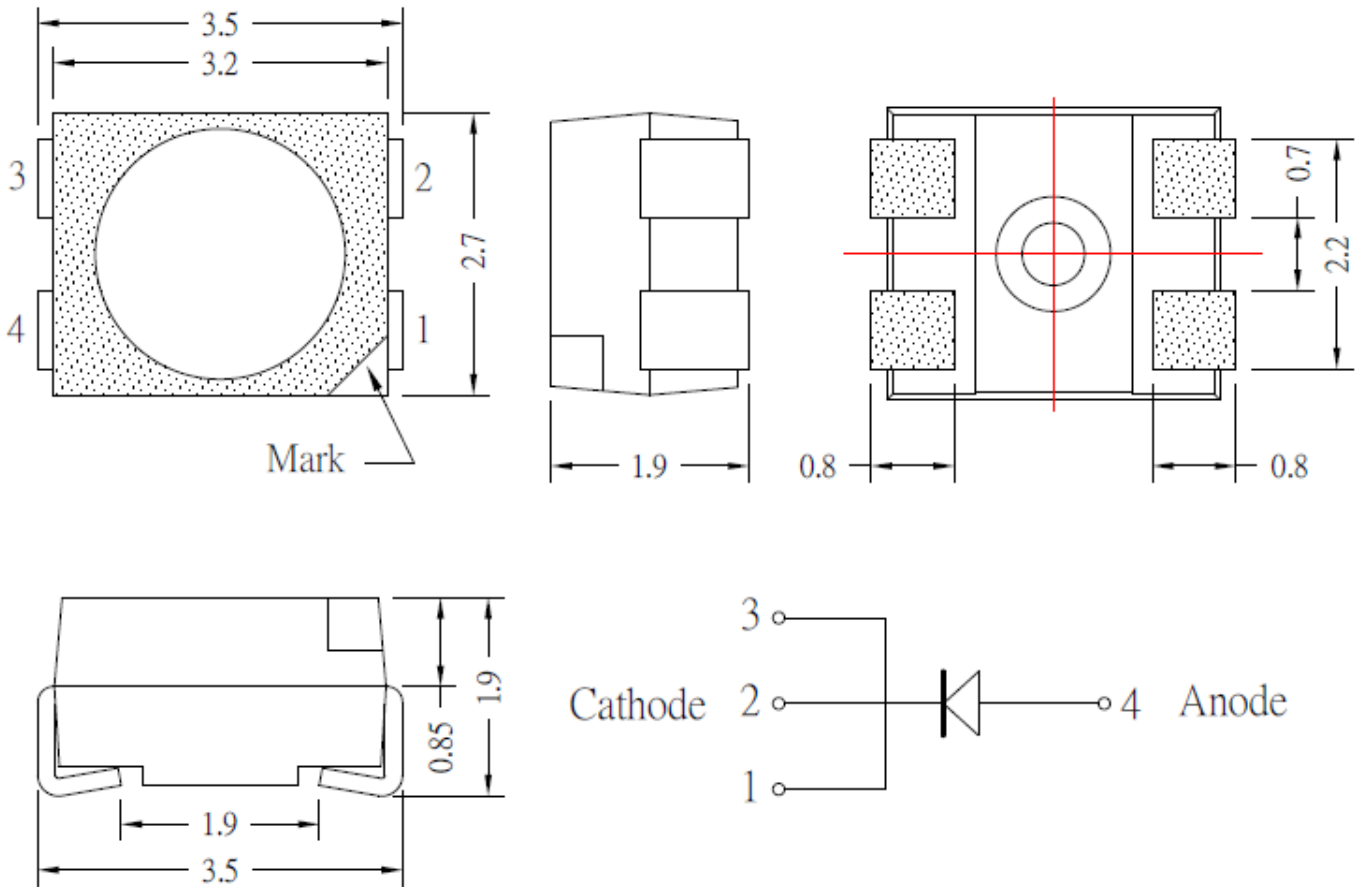


**SPECIFICATION**
**CSP1311Y3C-4**
**PACKAGE OUTLINES**

**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
CSP1311Y3C-4	InGaAlP	Yellow	Water Clear	120°



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

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	50	mA
Reverse Current @ 5V	IR	10	μA
Power Dissipation	Pd	125	mW
Operating Temperature Range	TOP	-30~+100	°C
Storage Temperature Range	TSTG	-40~+100	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	IFP	100	mA
Soldering Temperature	TSOL	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	IF = 50mA	900	1680	-	mcd
Forward Voltage	VF	IF = 50mA	-	2.5	3.0	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	IF = 50mA	-	120	-	Deg
Peak Wavelength	λP	IF = 50mA	-	593	-	nm
Dominant Wavelength	λD	IF = 50mA	585	590	595	nm

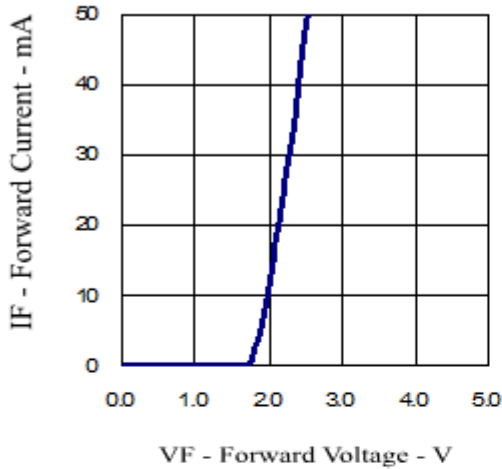
\*Tolerance of viewing angle: -10 / +5 deg.



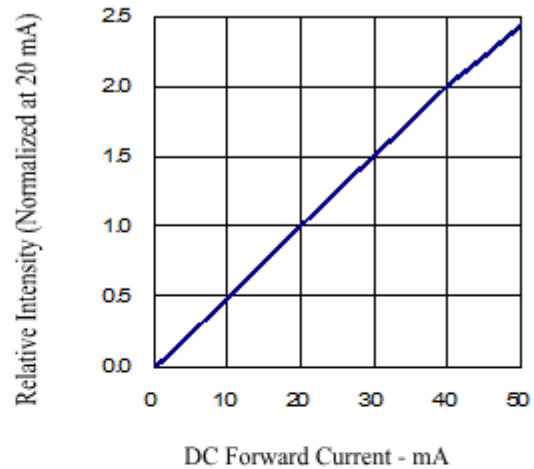
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## OPTICAL CHARACTERISTIC CURVES

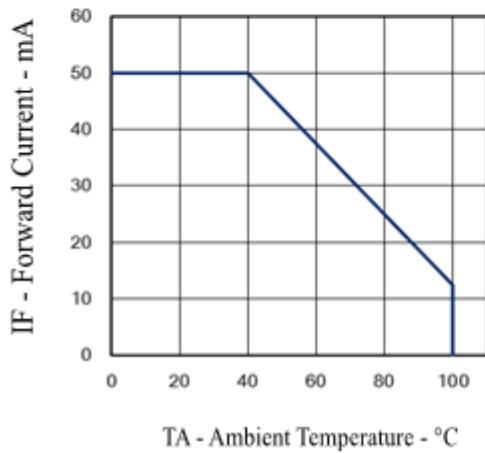
Forward Current vs. Forward Voltage



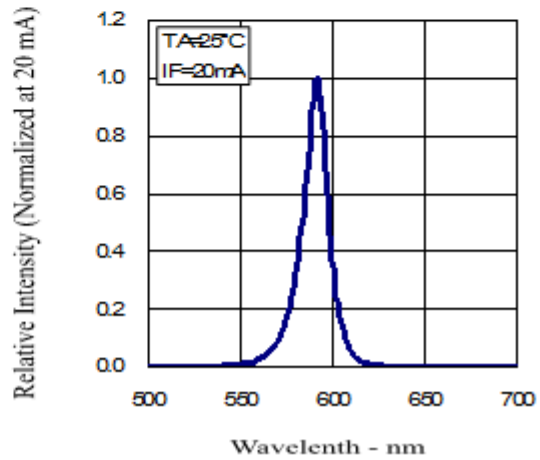
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature



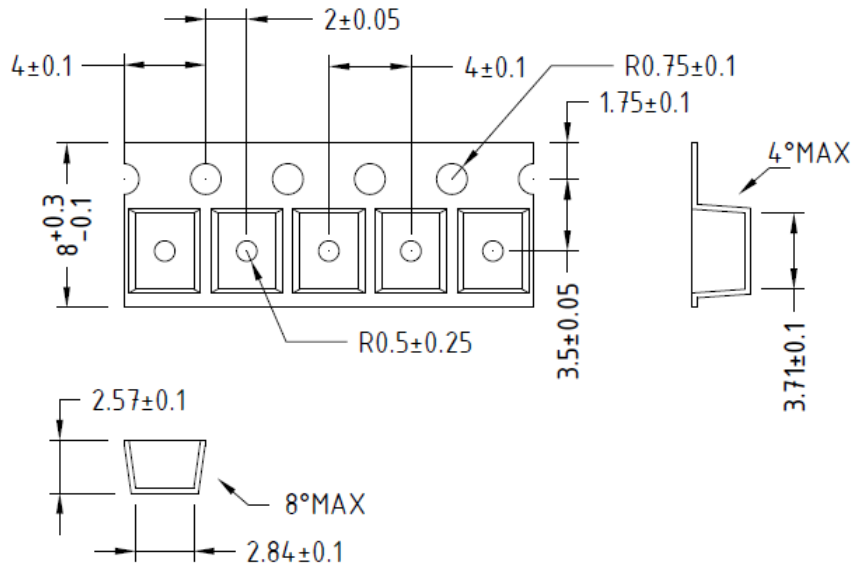
Relative Intensity vs. Wavelength



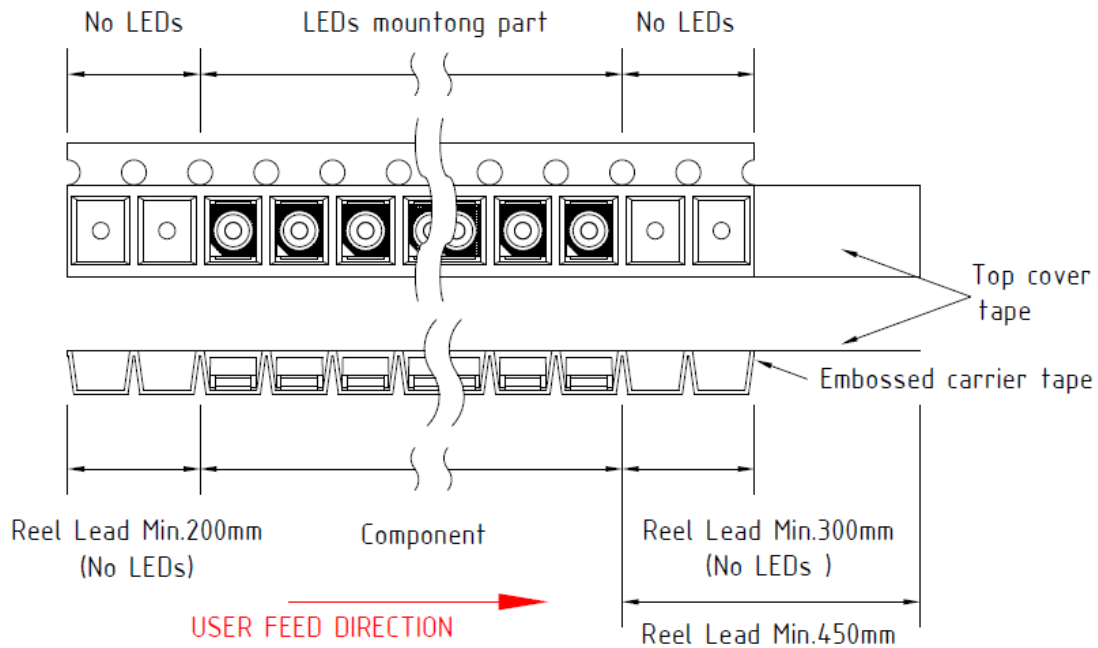
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## PACKAGING SPECIFICATION

### TAPE DIMENSION



### TAPE LEADER AND TRAILER DIMENSION

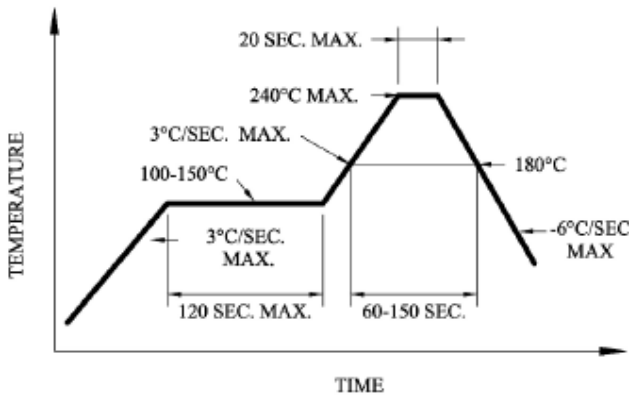
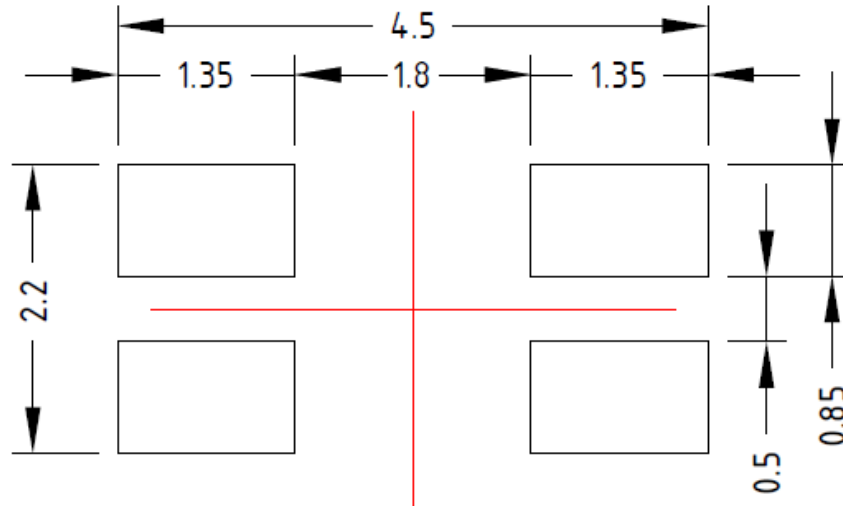
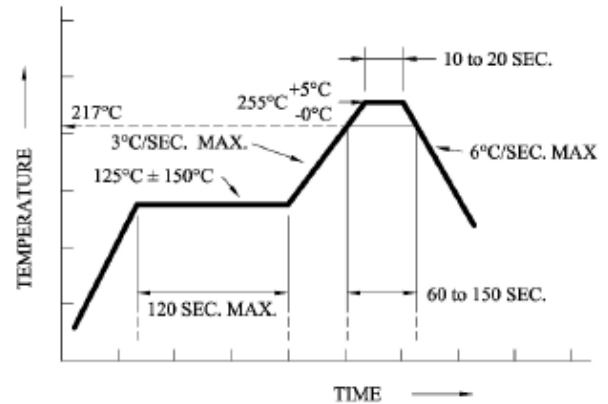


#### Notes:

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



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**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



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