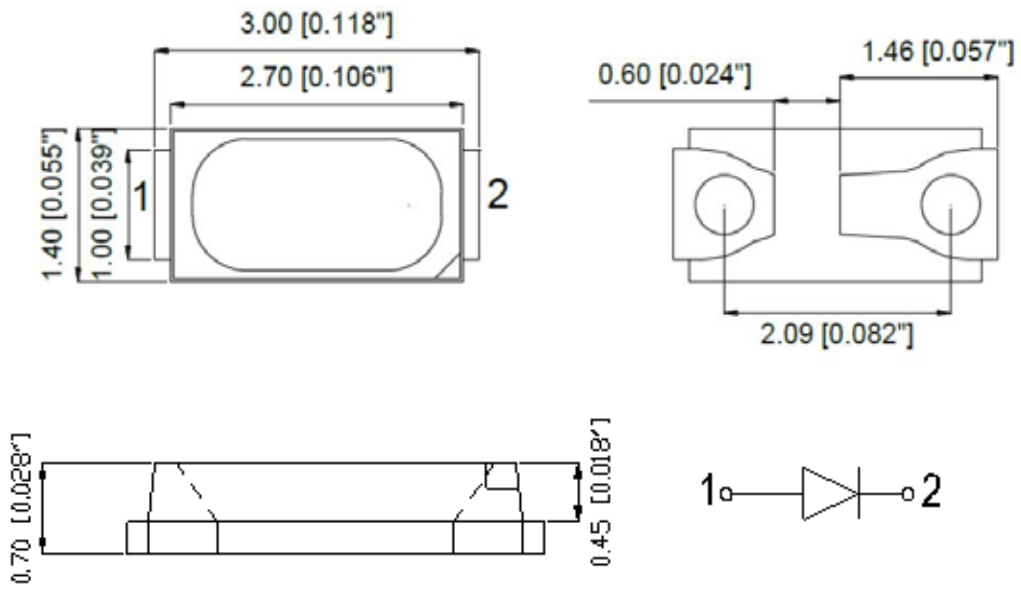
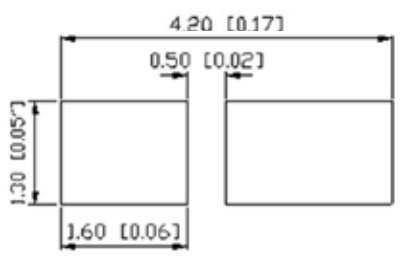


**SPECIFICATION** **CSP125B2C**
**PACKAGE OUTLINES**

**RECOMMENDED PAD LAYOUT**


ITEM	MATERIALS
Resin	Silicon
Lens Color	Water Transparent
Dice	InGaN
Emitted Color	Blue

- 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
CSP125B2C	InGaN	Blue	Water Clear	120°



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

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	30	mA
Reverse Current @ 5V	IR	10	μA
Operating Temperature Range	TOP	-40~+80	°C
Storage Temperature Range	TSTG	-40~+85	°C
Peak Pulsing Current (1/8 duty f = 1KHz)	IFP	125	mA
Soldering Temperature	TSOL	Max 260°C for 5 sec Max	

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

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	Iv	IF = 20mA	63	105	-	Mcd
Forward Voltage	VF	IF = 20mA	-	3.1	3.4	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	IF = 20mA	-	120	-	Deg
Peak Wavelength	λP	IF = 20mA	-	465	-	nm
Dominant Wavelength	λD	IF = 20mA	465	470	475	nm
Spectral Half Bandwidth	Δλ	IF = 20mA	-	25	-	nm

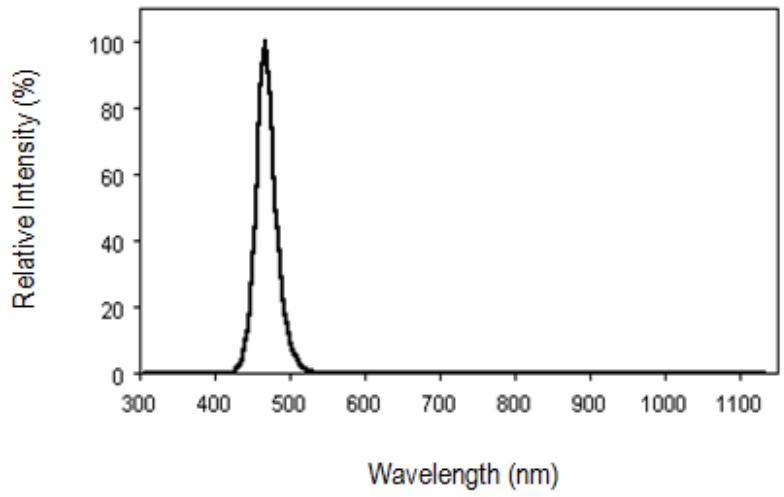
\*Tolerance of viewing angle: -10 / +5 deg.



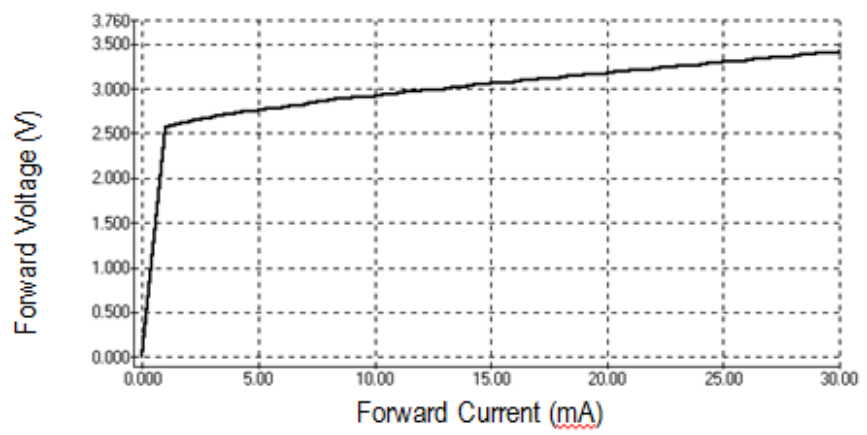
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**OPTICAL CHARACTERISTIC CURVES**

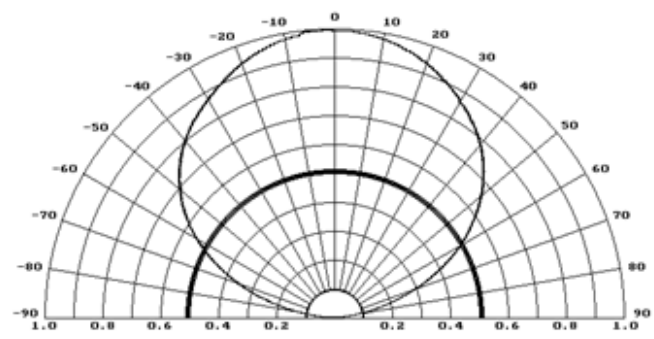
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics



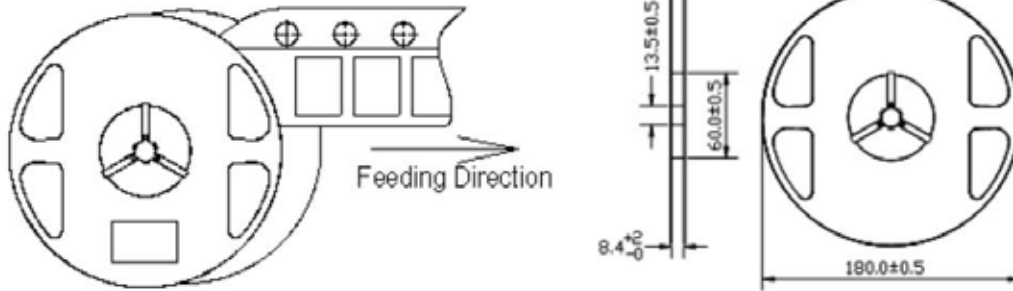
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## PACKAGING SPECIFICATION

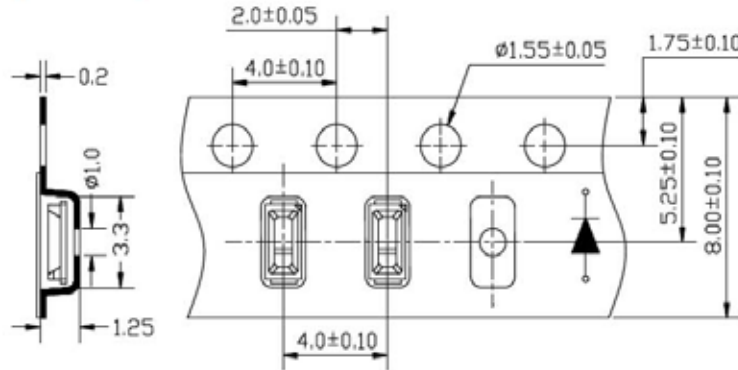
### PACKAGING SPECIFICATION

Feeding Direction

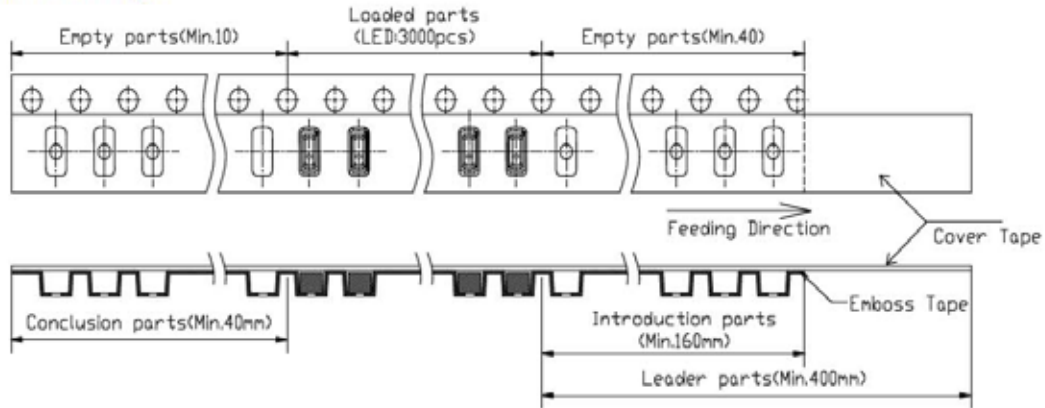
Dimensions of Reel (Unit: mm)



Dimensions of Tape (Unit: mm)



Arrangement of Tape



Notes:

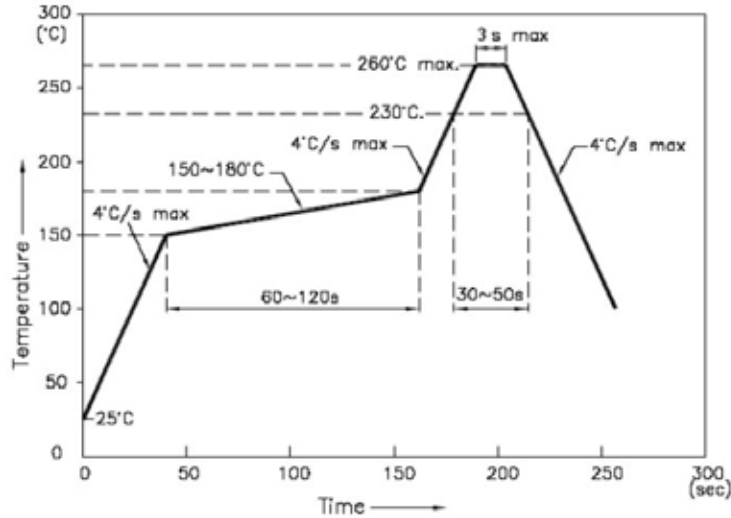
1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole.
4. 3,000pcs/Reel



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## SOLDERING CONDITIONS

### REFLOW PROFILE



#### NOTES:

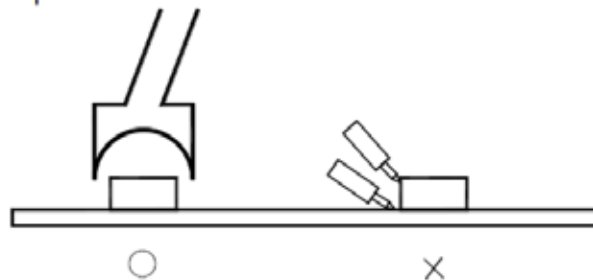
1. We recommend the reflow temperature 245°C (±5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

### 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.



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