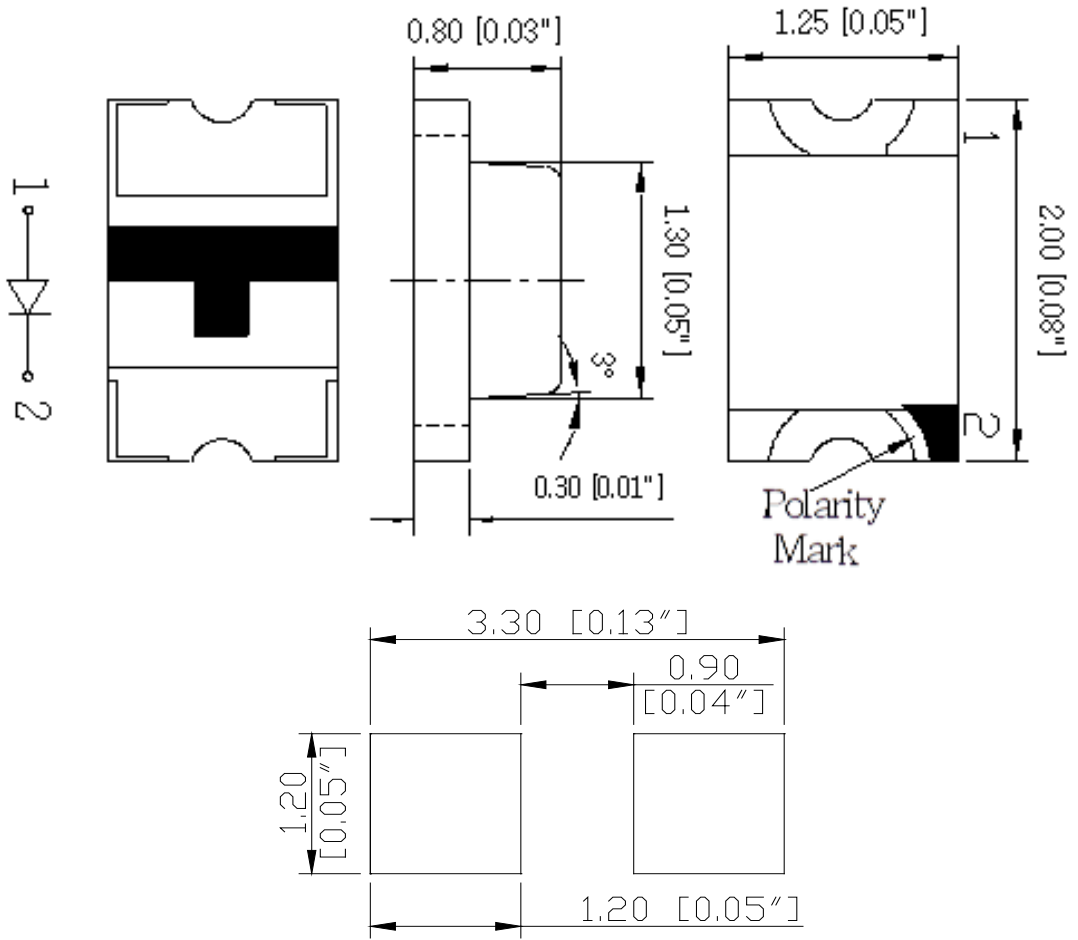


**SPECIFICATION** **CS85BW3C**
**PACKAGE OUTLINES**


- 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
CS85BW3C	InGaN	White	Yellow Diffused	140°



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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
Power Dissipation	Pd	111	mW
Operating Temperature Range	TOP	-40~+85	°C
Storage Temperature Range	TSTG	-40~+90	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	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	200	390	-	mcd
Forward Voltage	VF	IF = 20mA	-	3.1	3.7	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	IF = 20mA	-	140	-	Deg
Chromaticity Coordinates	X	IF = 20mA	-	0.28	-	nm
Chromaticity Coordinates	Y	IF = 20mA	-	0.29	-	nm

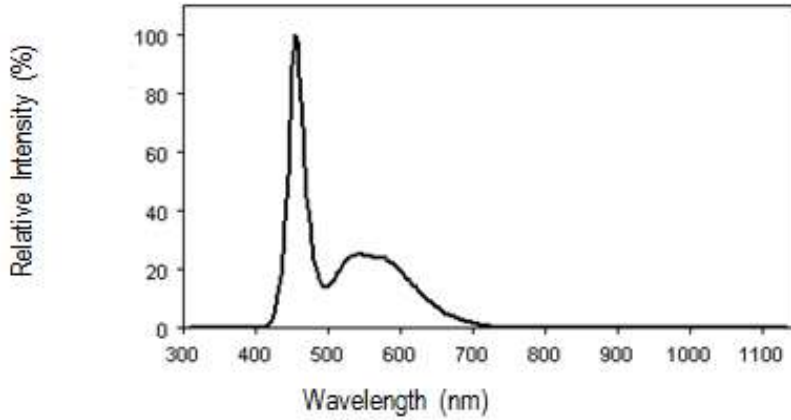
\*Tolerance of viewing angle: -10 / +5 deg.



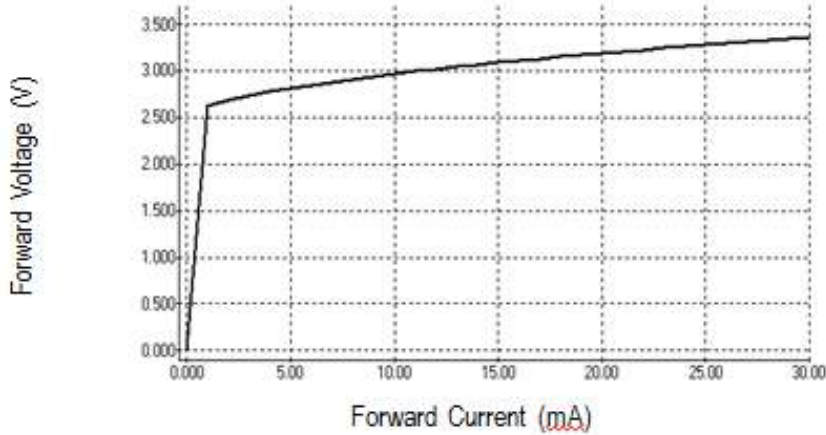
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**OPTICAL CHARACTERISTIC CURVES**

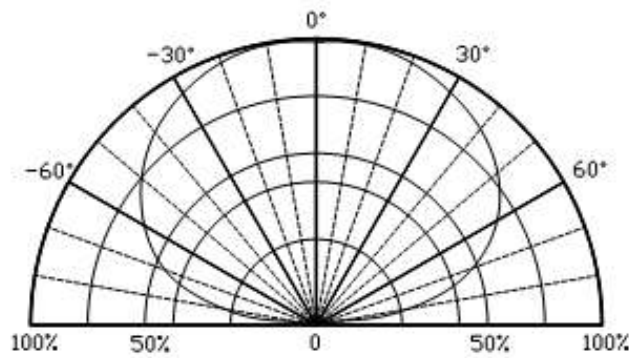
Relative Intensity vs. Wavelength



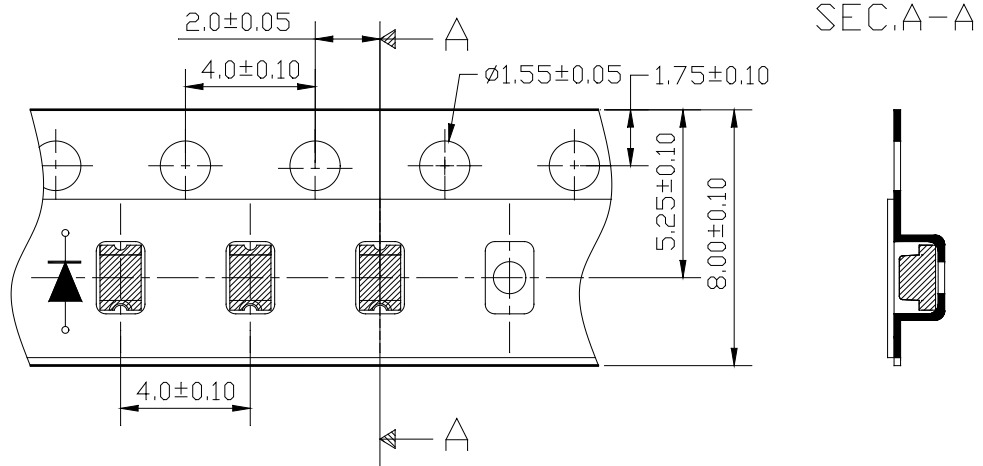
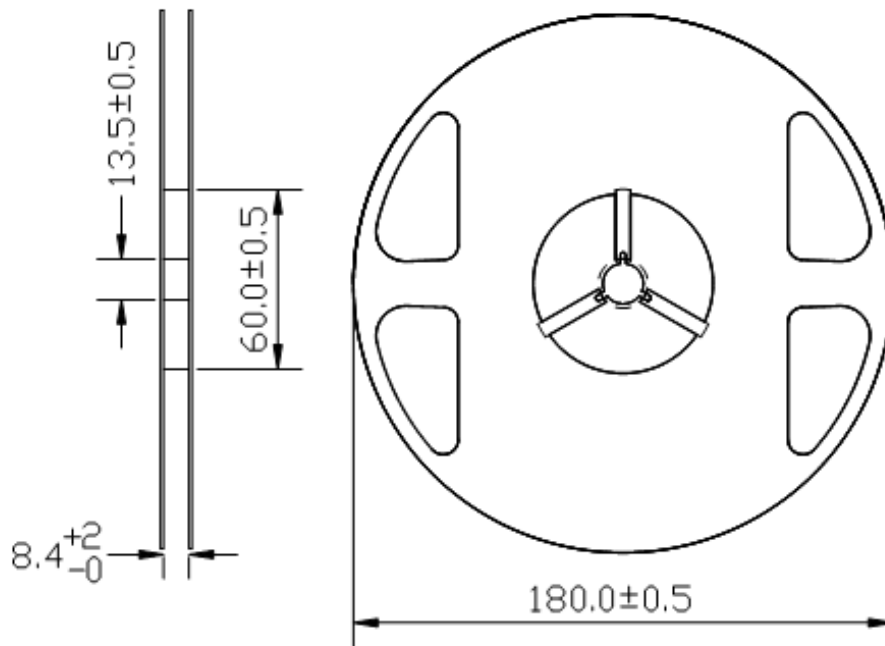
Forward Current vs. Forward Voltage



Directive Characteristics



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**PACKAGING SPECIFICATION**
**DIMENSIONS OF TAPE (UNIT: MM)**

**REEL DIMENSIONS**

**Notes:**

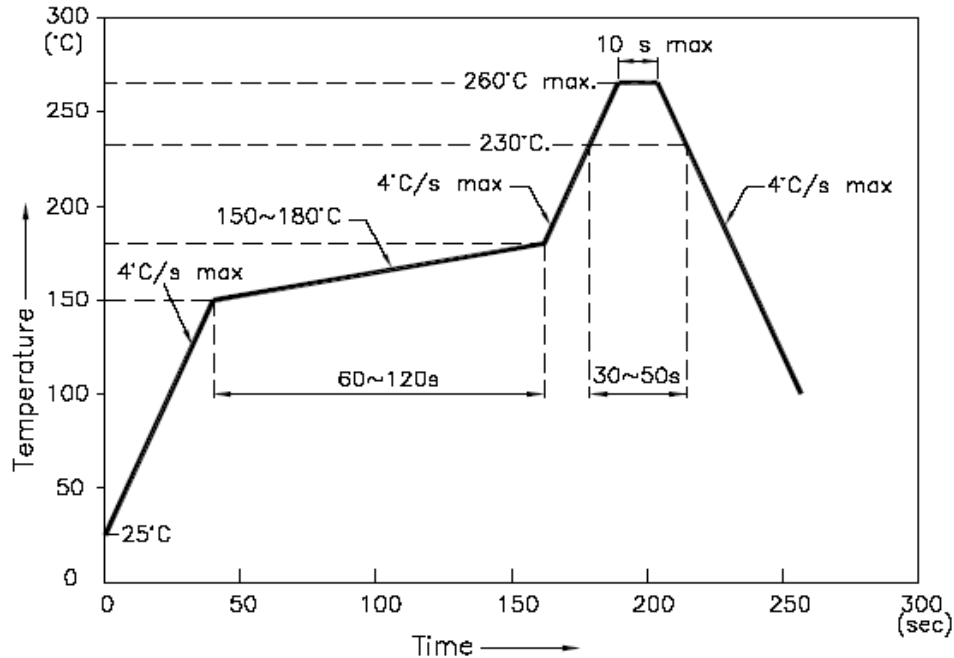
1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole.
4. 3,000 pcs/Reel



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## SOLDERING CONDITIONS

### REFLOW TEMP/TIME



#### 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 ≤ 5 sec when 260°C. If temperature is higher, time should be shorter (+10°C -> -1 sec). 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
    - Customer must finish rework within 5 sec under 260°C
    - The head of iron cannot touch copper foil
    - Twin-head type is preferred.
  - Avoid rubbing or scraping the resin by any object during high temperature, for example reflow, solder etc.



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