

**Preliminary**  
**SS0335BCN-181**  
**DATA SHEET**

## 1. SPECIFICATIONS

### (1) Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	MAX.	Unit
Continuous Forward Current	If	20	mA
Pulse Forward Current*	Ifp	100	mA
Reverse Voltage	Vr	5	V
Power Consumption	Pc	75	mW
Operating Temperature Range	Topr	-40 ~ +85	°C
Storage Temperature Range	Tstg	-40 ~ +100	°C
Electrostatic Discharge	ESD	150	V
Soldering Temperature	Tsld	Reflow Soldering:240°C/10sec Hand Soldering:350°C/3sec	

\*Duty 1/10 @ 1KHZ

### (2) Electrical / Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage*	Vf	2.8	/	3.8	V	If=20mA
Luminous intensity*	Iv	130	350	/	mcd	If=20mA
Dominant Wavelength	$\lambda_d$	/	465	/	nm	If=20mA
Spectrum Radiation Bandwidth	$\Delta\lambda$	20	25	30	nm	If=20mA
Reverse Current	Ir	/	/	10	$\mu$ A	VR=5V
Viewing Angle	$2\theta_{1/2}$	/	110	/	Deg	*

\*Forward voltage measurement allowance is  $\pm 0.1V$ .

\*Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

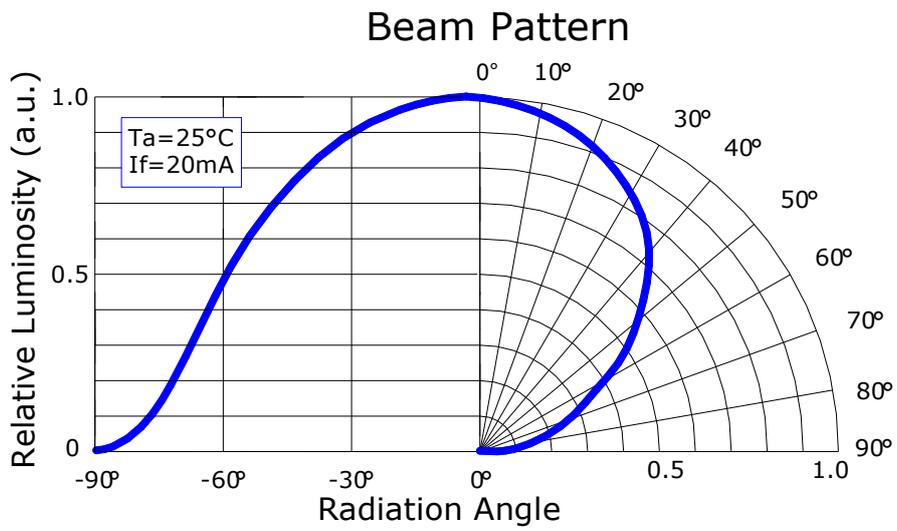
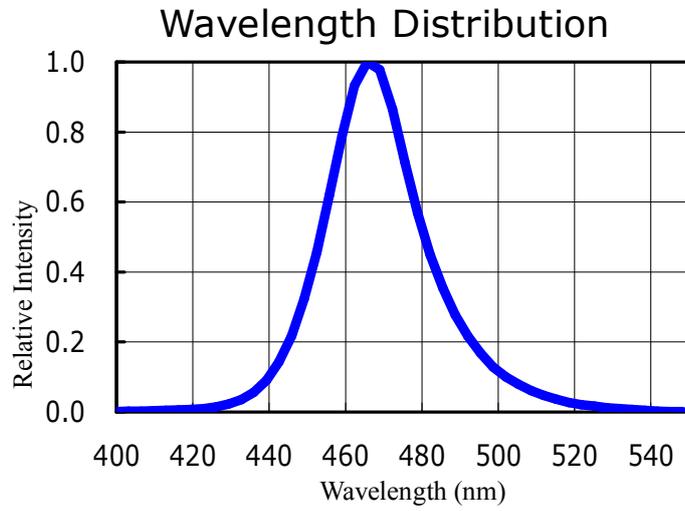
\*Luminous Intensity Measurement Allowance is  $\pm 10\%$ .

\*Dominant Wavelength measurement allowance is  $\pm 1nm$ .

\* $2\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

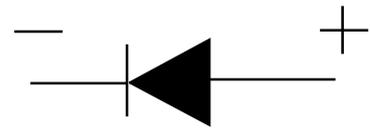
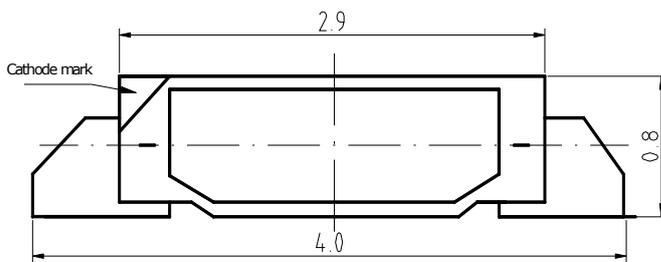
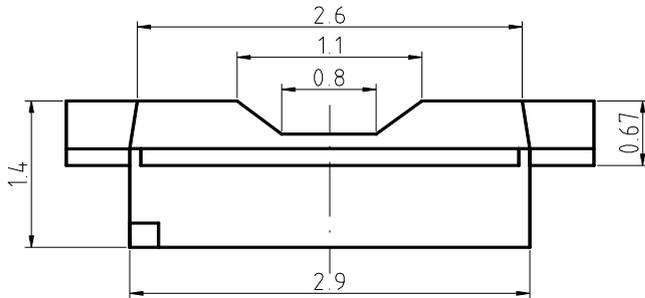
\*Please see attachments for BIN classifications.

**(3) Typical Electrical / Optical Characteristics Curves**

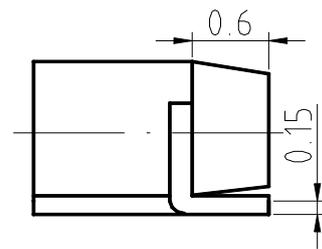
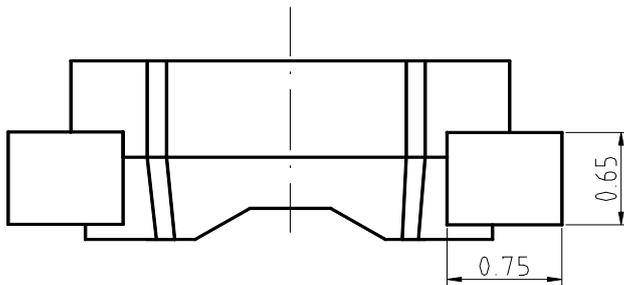


**2. Package**

**(1) Outline Dimension (unit= mm)**

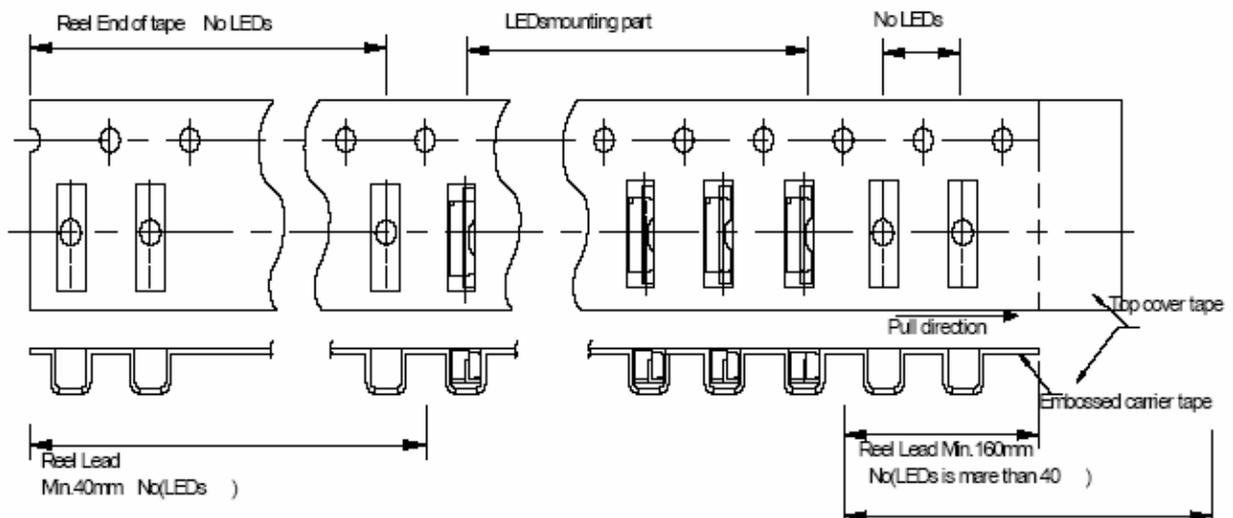
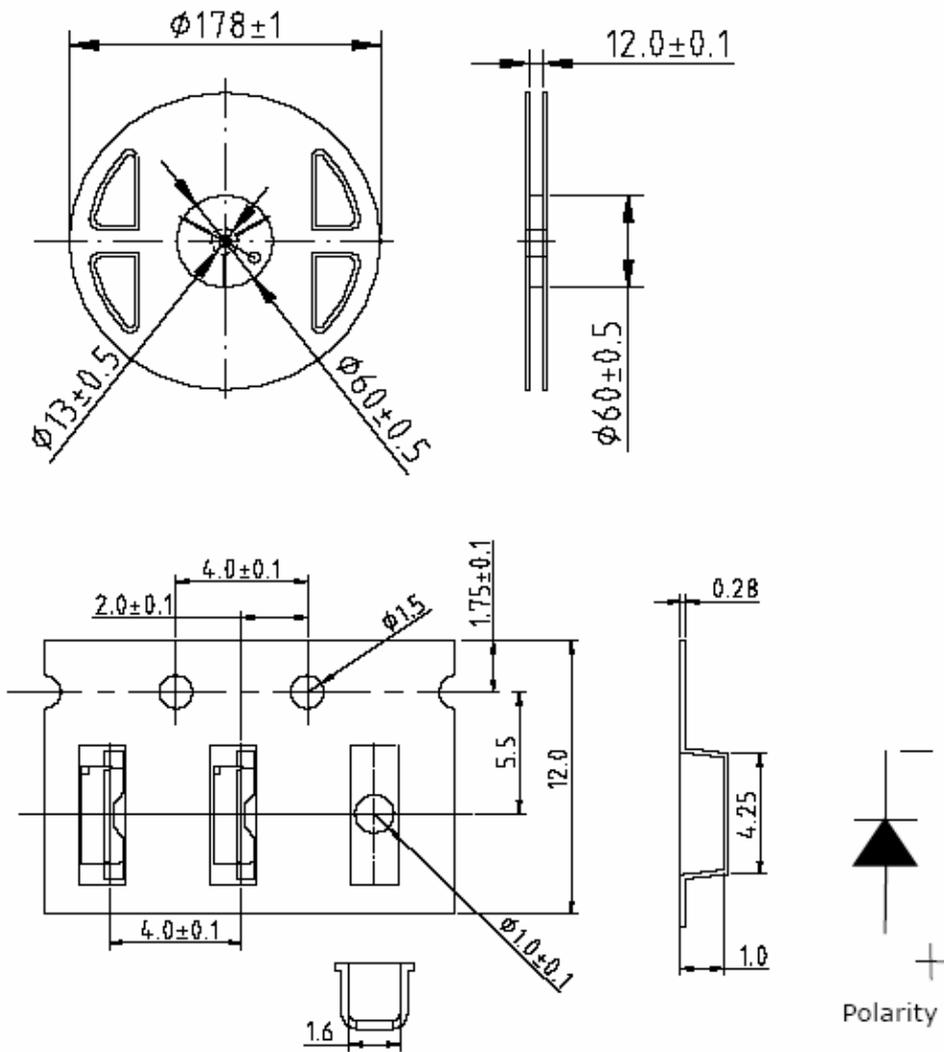


Polarity



1. All dimensions are in millimeters.
2. Tolerances are  $\pm 0.1$  mm, unless

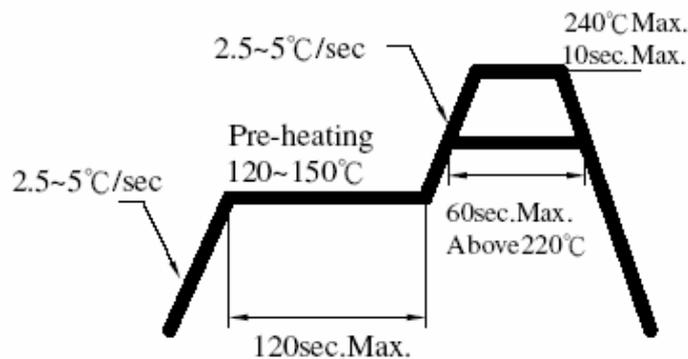
**(2) Taping Dimension (unit= mm)**



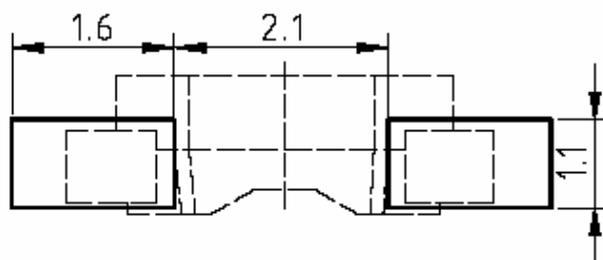
### **3. Handling Precaution**

#### **1. Recommended soldering conditions**

##### **1.1 Reflow solder temperature profile**



##### **1.2 Recommended Soldering pad design (unit= mm)**



##### **1.3 Soldering conditions**

- Reflow soldering should not be done more than twice.
- When soldering, do not stress on LEDs during heating.
- After soldering, do not warp the circuit board.

#### **(2) Repairing**

- Repair should not be done after the LEDs have been soldered. When repair is unavoidable, double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will be damaged by repair or not.

#### **(3) Cleaning**

- It is recommended to use isopropyl alcohol as a solvent to clean the LEDs. When using other solvents, it should be confirmed beforehand whether the solvents will dissolve the package and the resin or not.

#### **(4) Advice on Device Usage**

- It is recommended that user should complete the use of the whole package within 8 hours upon unsealing. In the event of incomplete usage, it is advised that user preheat the remaining devices at 60°C for 8 hours prior to use.