



### SPECIFICATION

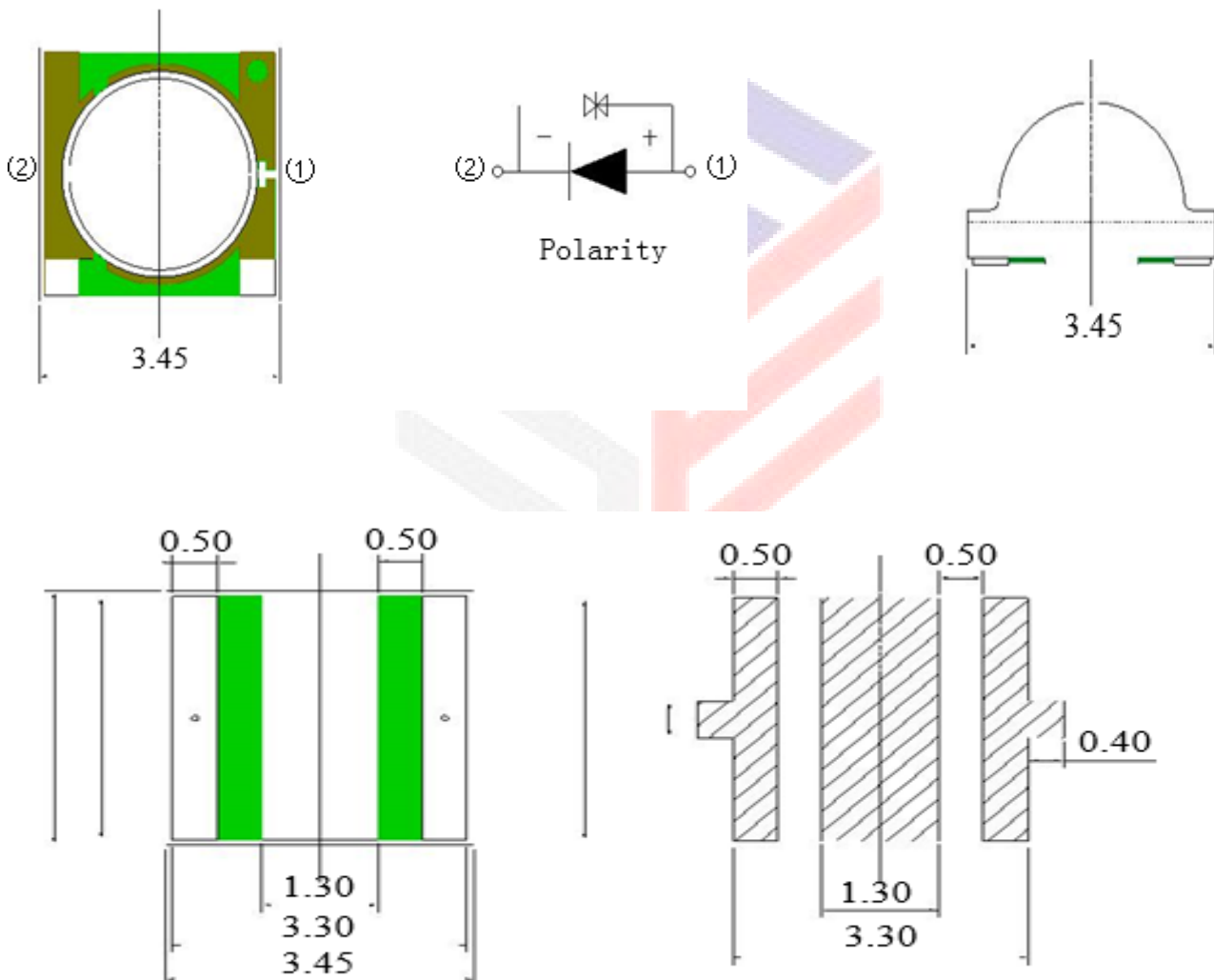
#### Features

- Size (mm): 3.45x3.45x1.95
- Half angle:  $\pm 65$  deg
- High reliability
- Pb-Free reflow soldering application
- RoHS compliant: RoHS
- Package: 1000 pcs/reel

#### Application

- Flower production
- Tissue culture
- Plant factory
- Refreshment

#### Outline Dimension



**Absolute Maximum Ratings (Ta = 25°C)**

Power Dissipation (Pd), W	1-2
Forward Current (Ifm), mA	500(Green/Amber) 700(Royal Blue/Blue/Red/Crimson/IR)
Pulse Forward Current (If), mA	150
Reverse Voltage, (VR), V	5
Operating Temperature (Topr), °C	up -40 to +85
Storage Temperature (Tstg), °C	up -40 to +100

**Typical Electrical & Optical Characteristics (IF=350mA, Ta=25°C)**

Color	Part Number	Dominant Wavelength (nm)	Forward Voltage (V)			Luminous Flux (lm) or Radiometric Power (mW)		
			Min.	Max.	Typ.	Min.	Max.	Typ.
Royal Blue	SE-3535-RB445-3V350	435-450	3.0	3.6	3.2	355mW	-	500mW
Blue	SE-3535-BL460-3V350	450-480	3.0	3.6	3.2	355mW	-	500mW
Green	SE-3535-GR520-3V350	510-530	3.0	-	3.4	80lm	-	100lm
Amber	SE-3535-AM590-3V350	580-600	2.0	-	2.2	35lm	-	50lm
Red	SE-3535-RE620-3V350	610-630	2.0	-	2.2	45lm	-	60lm
Crimson	SE-3535-CR660-2V350	650-670	2.0	-	2.2	224mW	-	310mW
IR	SE-3535-IR735-2V350	725-745	1.8	-	2	224mW	-	310mW

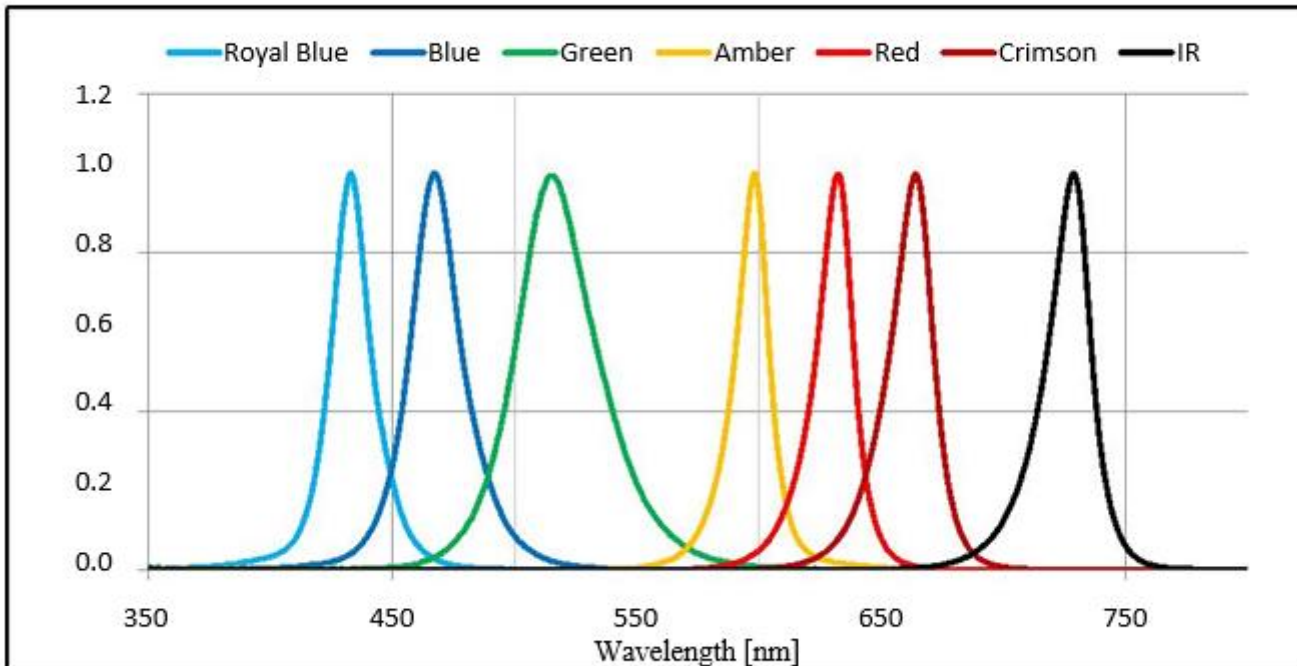
**Note**

- Tolerance of measurement of Luminous Flux or Radiometric Power:  $\pm 10\%$
- Tolerance of measurement of wavelength:  $\pm 2\text{nm}$
- Tolerance of measurement of forward voltage  $\pm 0.05\text{V}$

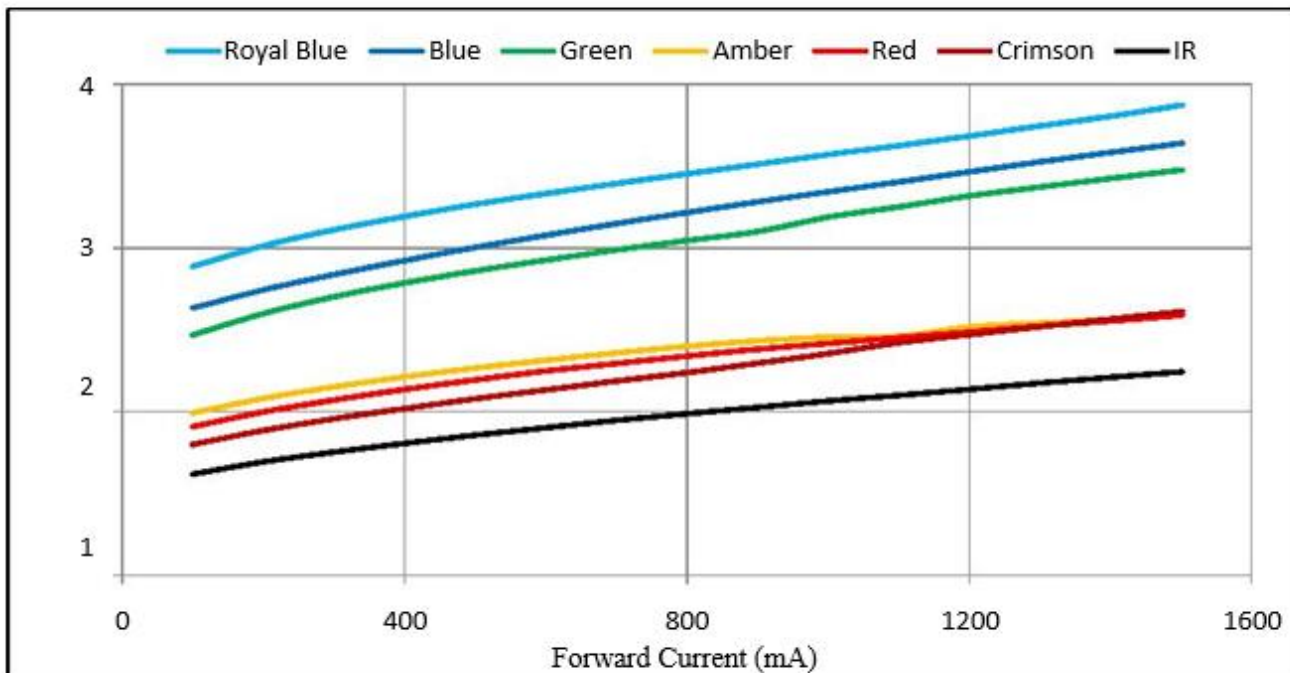


Typical Characteristics Curves

Spectrum Distribution

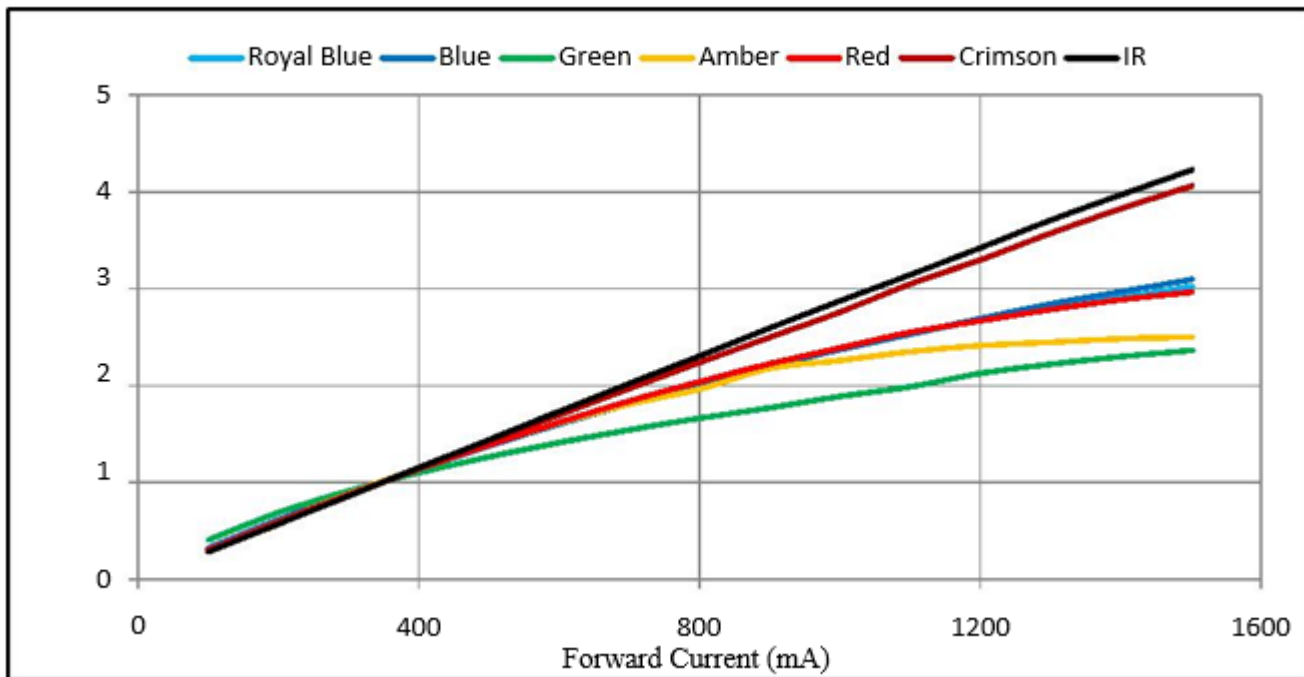


Forward Voltage Vs. Forward Current

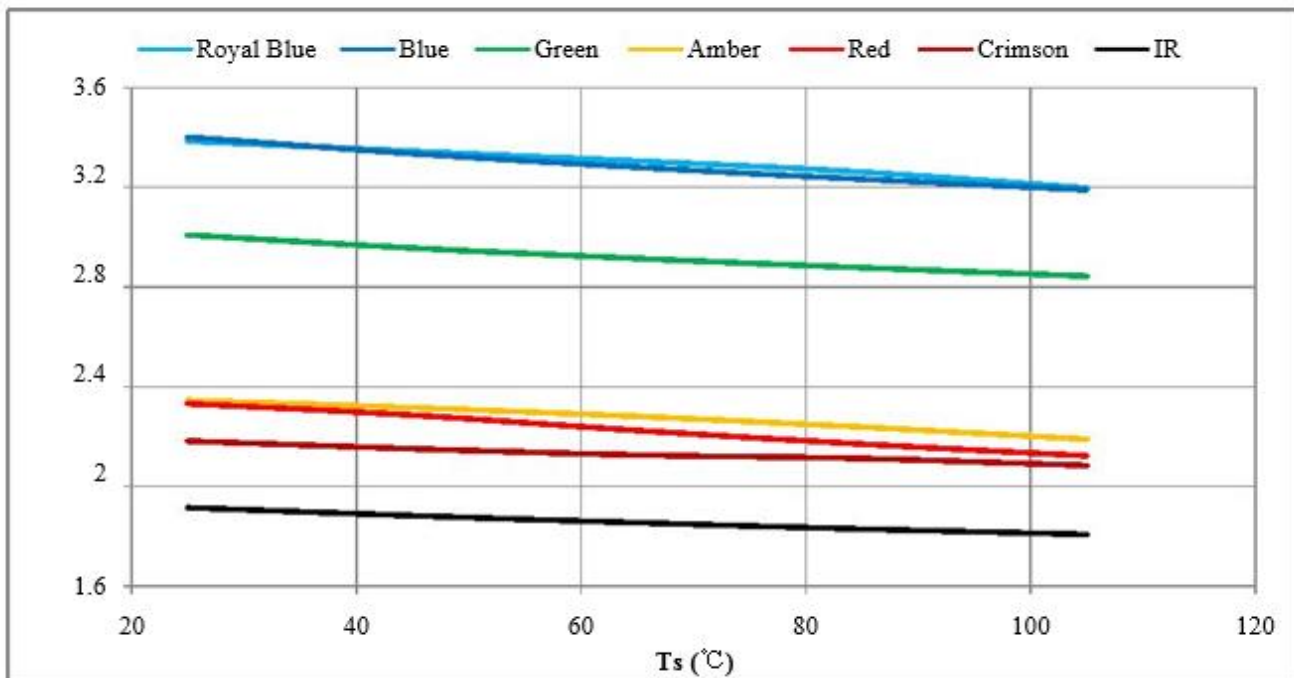




Forward Current Vs. Relative Intensity

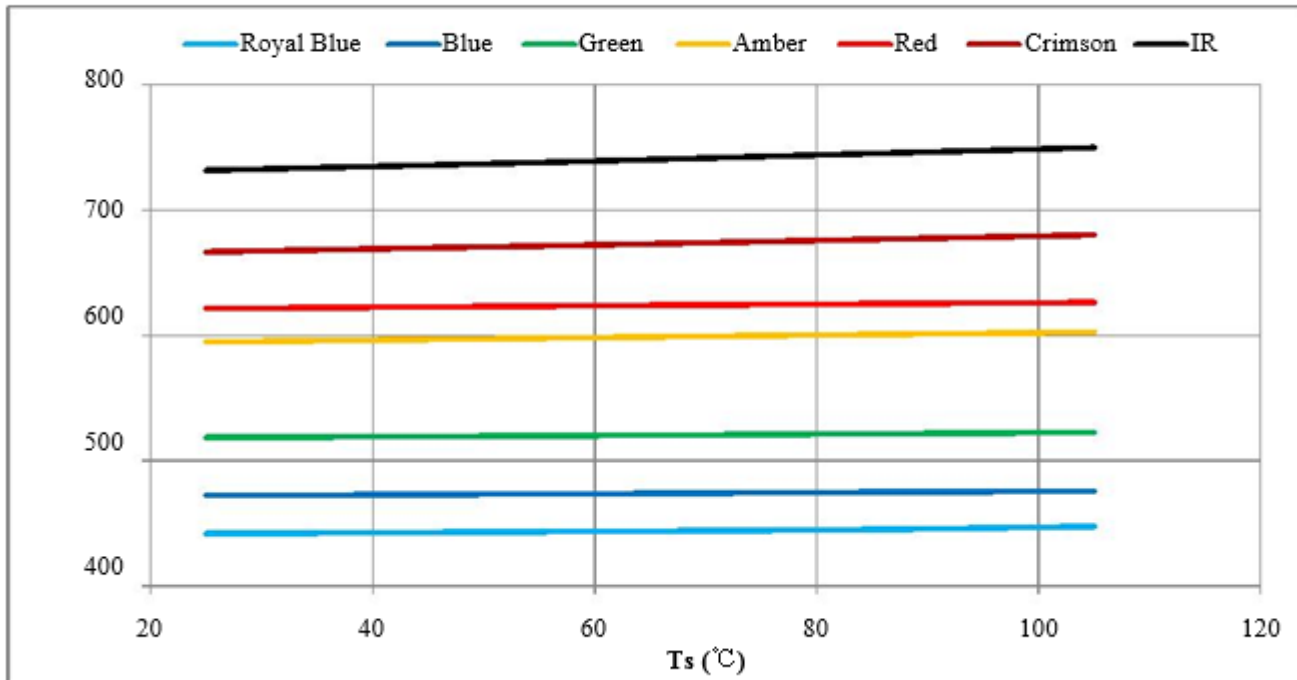


Solder Temperature Vs. Forward Voltage

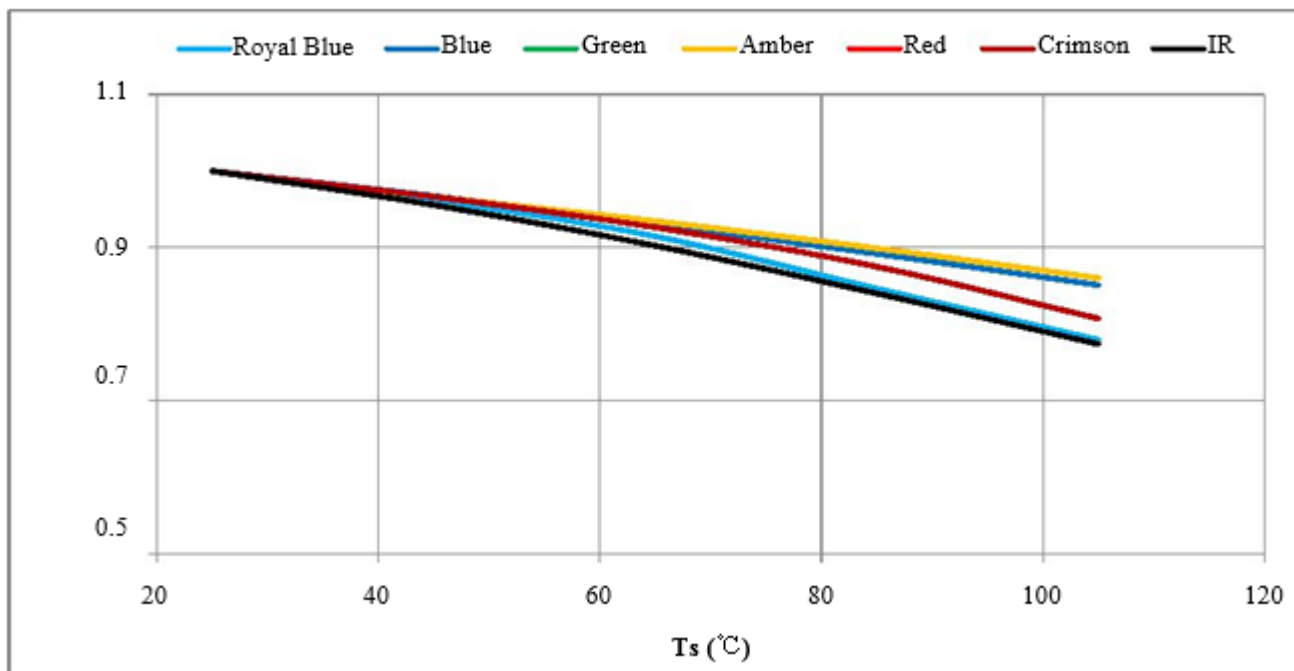




Solder Temperature Vs. Wavelength



Solder Temperature Vs. Relative Intensity





Reliability Test Items Conditions

Test Items	Reference Criterion	Test Conditions	Time	Quantity	Criterion
High Temperature Storage	JESD22-A103	Ta=100°C	1000H	11	0/11
Low Temperature Storage	JESD22-A119	Ta=-40°C	1000H	11	0/11
Room Temperature Operating Life	JESD22-A108	Ta=25°C IF=500-700mA	1000H	11	0/11
High Temperature High Humidity Life Test	JESD22-A101	Ta=60°C, RH=90% IF=500-700mA	1000H	11	0/11
Thermal Shock	JESD22-A104	-40°C (15min) ↔ 100°C (15 min)	300 cycles	11	0/11
Temperature Cycle	JESD22-A104	-40°C (30min) ← (5min) → 100°C (30min)	300 cycles	11	0/11
Resistance to Soldering Heat	JESD22-B106	Tsld=260°C, 10sec	3 times	11	0/11



Criteria for Judging Damage

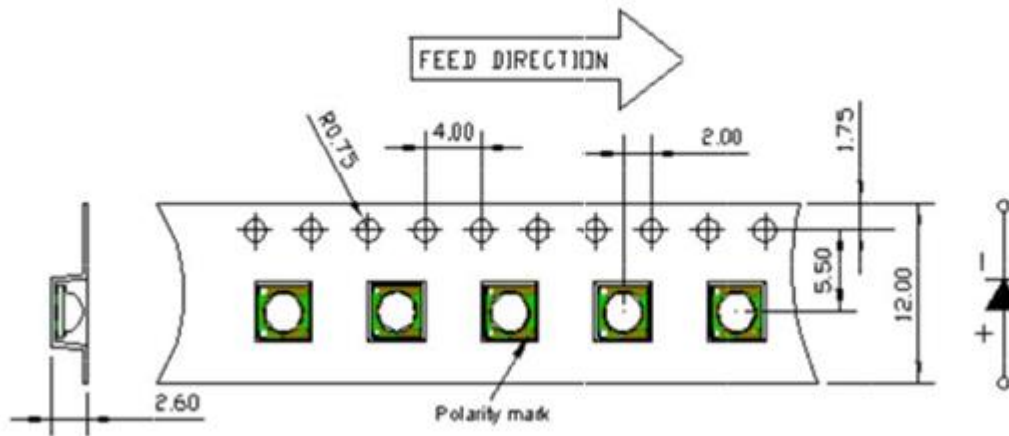
Test Items	Symbol	Test Conditions	Criteria for Judgment
Forward Voltage	V <sub>F</sub>	IF =500-700mA	Initial Data ± 10%
Reverse Current	I <sub>r</sub>	VR=5V	IR ≤ 10µA
Luminous flux /Radiometric Power	Φ/Φ <sub>e</sub>	IF=500-700mA	Φ/Φ <sub>e</sub> ≤ 30% Average Φ/Φ <sub>e</sub> degradation rate ≤ 30%

The technical information shown in the datasheets are limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.

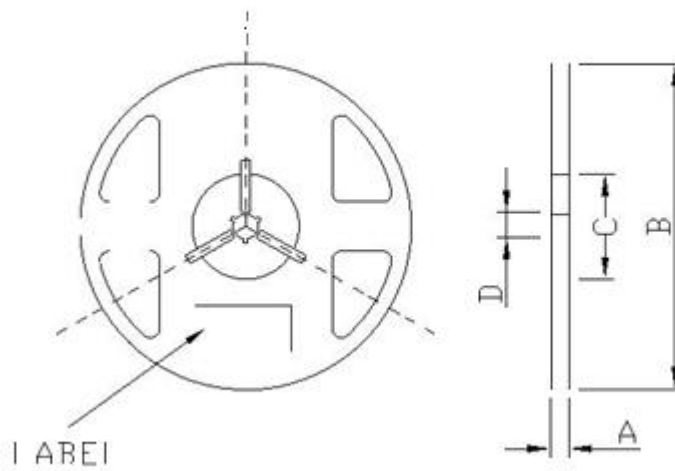


Packaging Specifications

1. Carrier Tape Dimensions



2. Reel Dimension



Note

The tolerances unless mentioned  $\pm 0.1$  mm. Unit: mm