



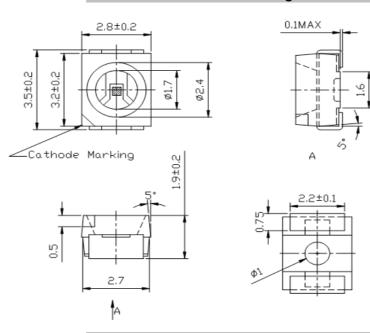




### **Applications**

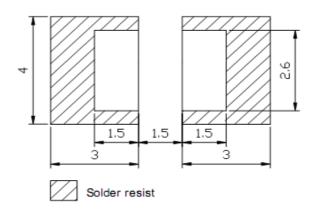
- Interior automotive lighting
  - Optical indicators
- Communication Products
  - Backlighting
    - Toys

### **Technical Drawing**





## **Recommended Soldering Pattern**



### Notes:

All dimensions in mm tolerance is  $\pm 0.1$ mm unless otherwise noted.

PL	CC2
E	Blue

Part No.: **M11A1002** 

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## **Absolute Maximum Ratings**

Ta=25°C

Item	Symbol		Unit
Power Dissipation	$P_{D}$	100	mW
DC Forward Current	I <sub>F</sub>	25	mA
Plused Forward Current	I <sub>FP</sub> *	100	mA
Reverse Voltage	$V_R$		V
Operating Temperature	T <sub>OP</sub>	-40 to 85	°C
Storage Temperature	T <sub>ST</sub>	-40 to 100	°C

<sup>\* 0.1</sup> msec pulse, 10% duty cycle

## Electrcal / Optical Characteristics

I<sub>F</sub>=20mA Ta=25°C

Ermitting Color		Blue			
Material					
Forward Voltage	typ.	2.8	$V_{F}$		
i orwaru voitage	max.	3.2	$V_{F}$		
Wavelength	λD	465	nm		
	λP	470	nm		
typ.	Δλ		nm		
Color Temperature	min.		K		
Color remperature	max.		K		
Luminous Intensity *	min.	288	mcd		
Lummous intensity	typ.	350	mcd		
Reverse Current	max.	50	μA		
Viewing Angle	2Θ1/2	120			

<sup>\*</sup> Per NIST standards

#### **Ranks Combination**

 $I_F=20mA$ 

Rank	P2	Q1	Q2	
Luminous Intensity	288~360	360~450	450~563	mcd

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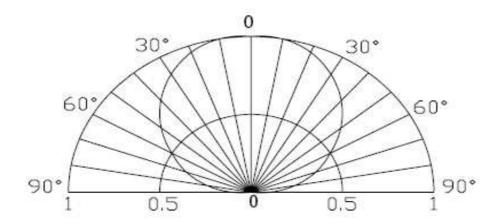








## **Directive Characteristics**



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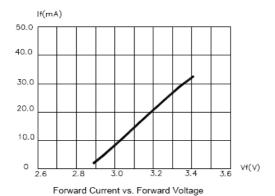


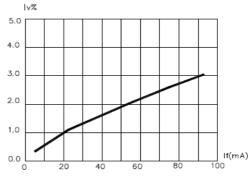




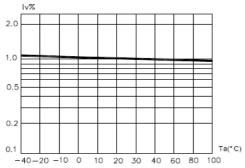


### **Curvs**

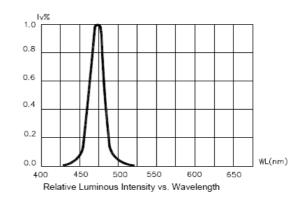


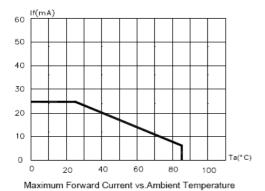


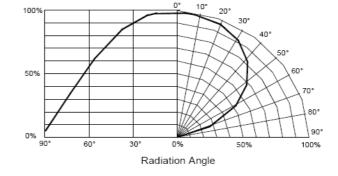
Relative Luminous Intensity vs. Forward Current



Relative Luminous Intensity vs. Ambient Temperature







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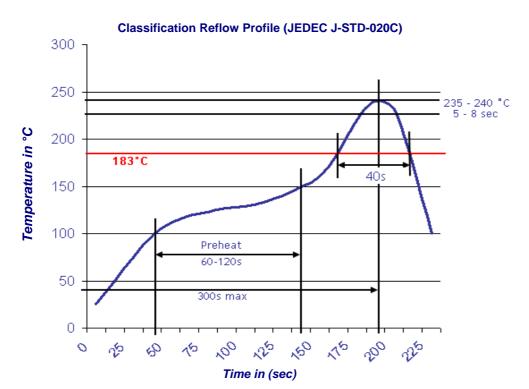






## **Solder Condition**

### Lead Free Solder



PLCC2
Blue

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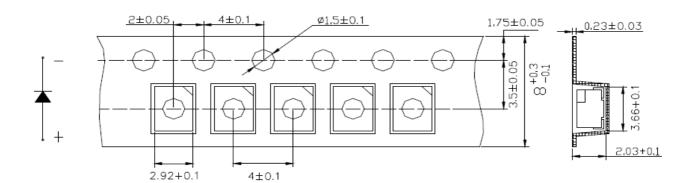




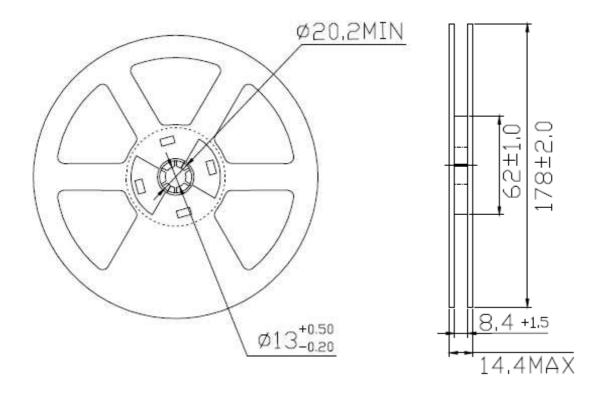




### **Packing Specifications**



## **Reel Specifications**



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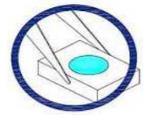




### **Handling Precautions**

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although ist characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force. As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might leads to damage and premature failure of th LED.

1. Handle the component along the side surfaces by using forceps or appropriate tools



2. Do not directly touch or handle the silicone lens surfance. It may damage the internal circuitry.





3. Do not stack together assembled PCBs containing exposed LEDs. Outside impact may scratch the silicone lens or damage the internal circuitry.



## PLCC2 Blue

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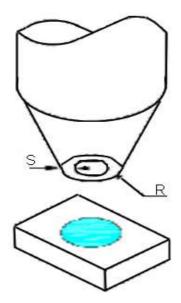








- 4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible.
- 5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.
- 6. The dimensions of the component must be accurately programmed in the pick-and-place machine to insure precise pickup and avoid damage during production.



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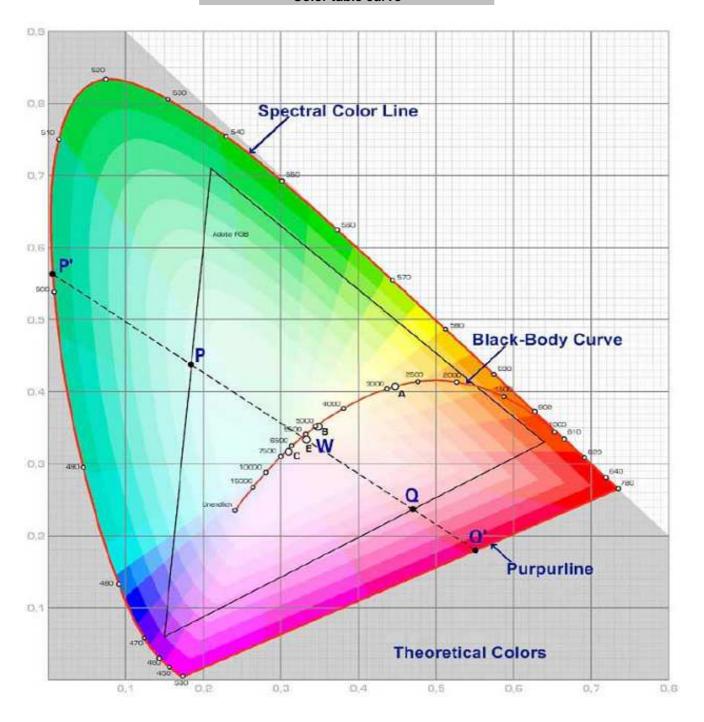








## Color table curve



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