

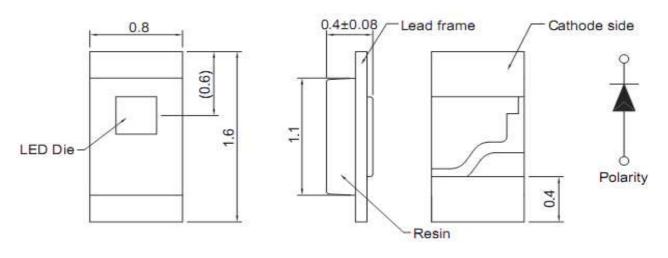


### Applications

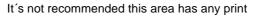
Interior automotive lighting

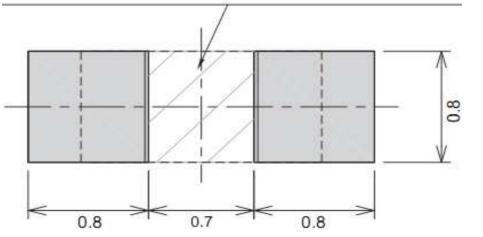
 Optical indicators
 Communication Products
 Backlighting
 Toys

#### **Technical Drawing**



### **Recommended Soldering Pattern**





Notes	: All dimensions ± 0.1mm unles		SMT Top View LED White				
					Part No.	.: M110	D8010
					Custome	er:	
DRW:	Wang	CHKD	Wung	MATL:	Chui	DATE	03.12.2009
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# **Absolute Maximum Ratings**

Ta=25°C

Item	Symbol	InGaN	Unit
Power Dissipation	PD	117	mW
DC Forward Current	I <sub>F</sub>	30	mA
Plused Forward Current	I <sub>FP</sub> *	120	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>OP</sub>	-30 to 80	°C
Storage Temperature	T <sub>ST</sub>	-40 to 85	°C

\* 0.1 msec pulse, 10% duty cycle

# Electrcal / Optical Characteristics

I<sub>F</sub>=5mA Ta=25°C

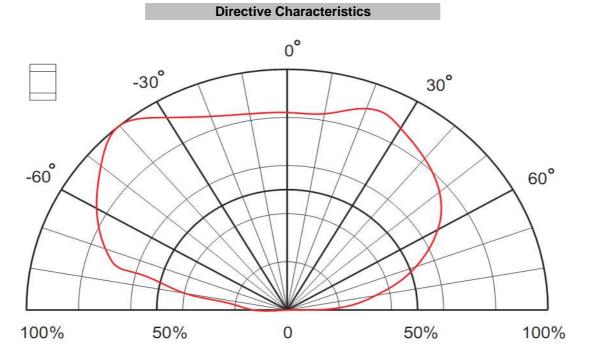
Ermitting Color	White					
Material	InGaN					
Forward Voltage	typ.	2.8	V <sub>F</sub>			
Torward Voltage	max.	3.15	V <sub>F</sub>			
Wavelength	λD	x = 0.29 y = 0.32	nm			
-	λP		nm			
typ.	Δλ		nm			
Color Temperature	min.		K			
Color remperature	max.		K			
Luminous Intensity *	min.	36	mcd			
Lummous intensity	typ.	90	mcd			
Reverse Current	max.		μA			
Viewing Angle	2Θ1/2	140				

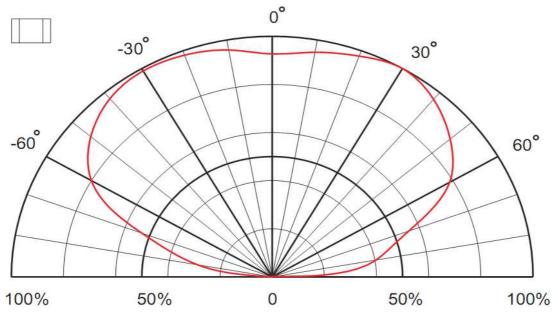
\* Per NIST standards

					SMT Top View LED White			
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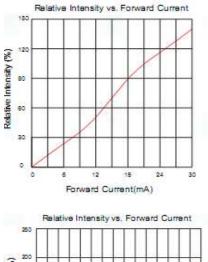
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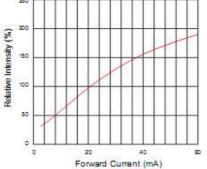
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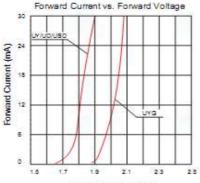




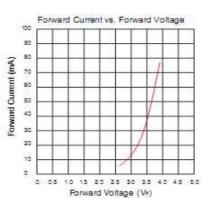
Curvs

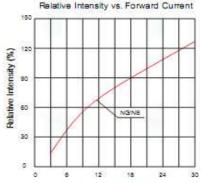




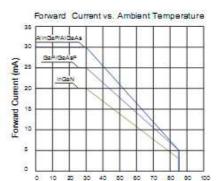


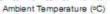


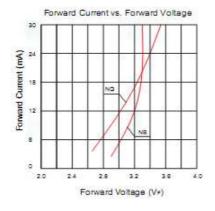












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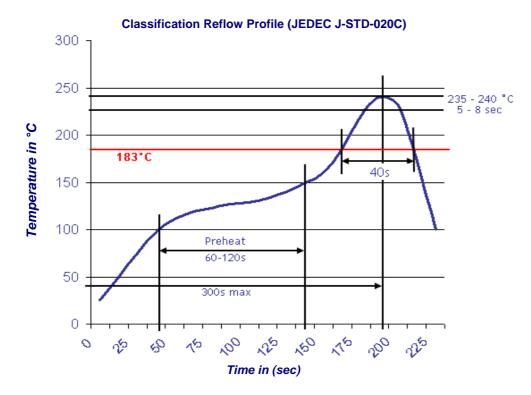
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### **Solder Condition**

## Lead Free Solder



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Wang

Ping

CHKD

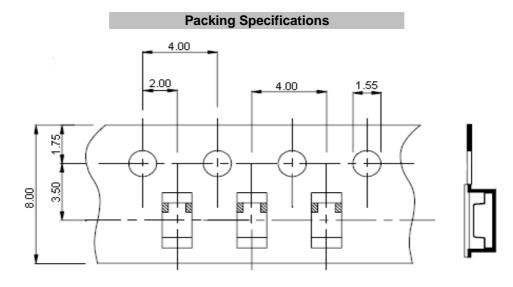
DRW:

APPD:

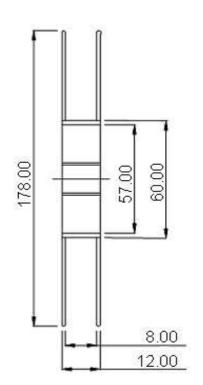
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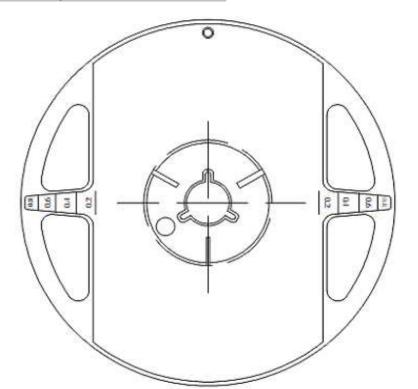






**Reel Specifications** 





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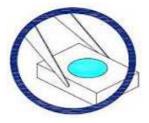




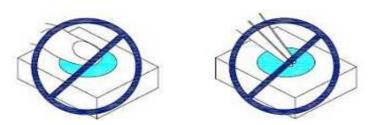
### Handling Precautions

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.



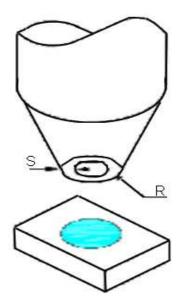
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					Part No.: <b>M11D8010</b>		D8010
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- 4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as 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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Wang

Ping

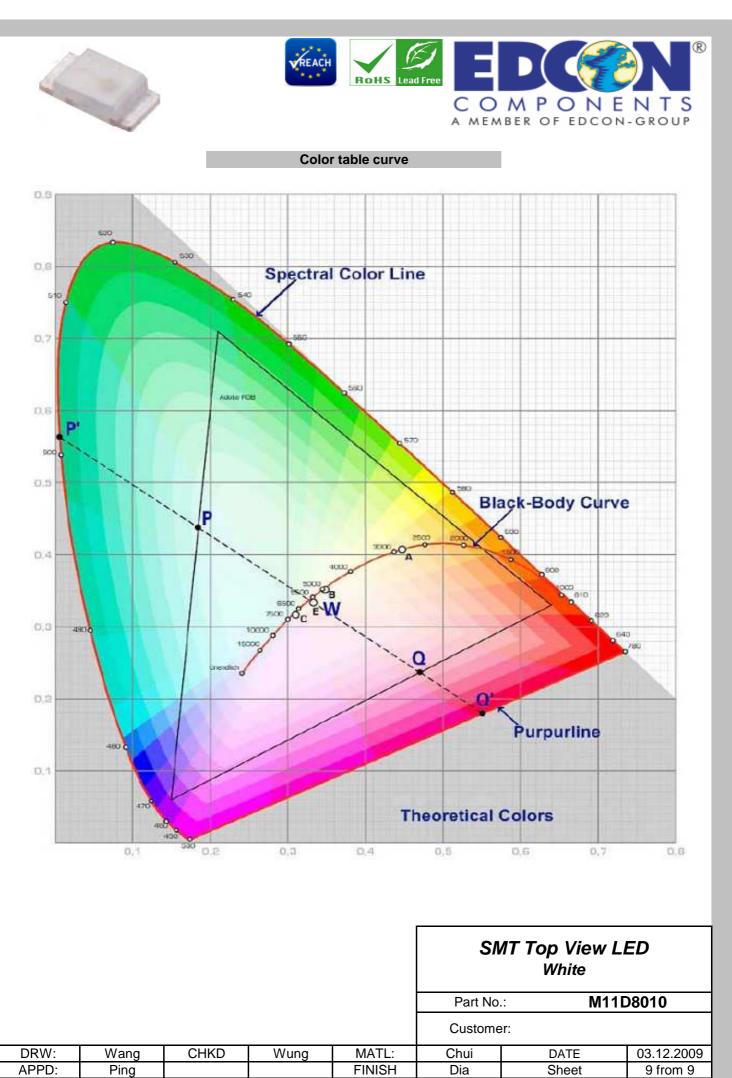
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