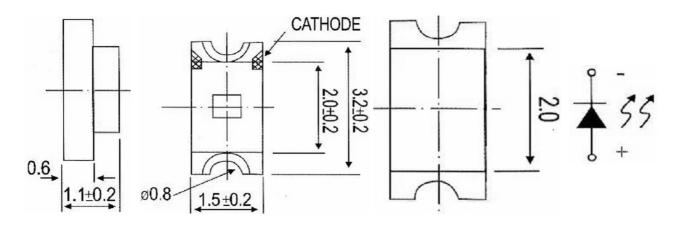




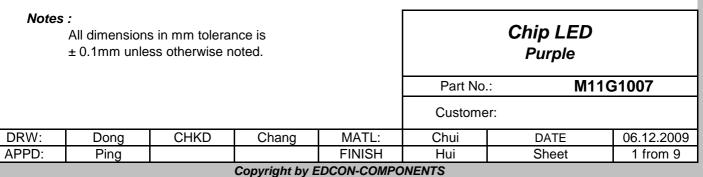
#### **Applications**

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

#### **Technical Drawing**



**Recommended Soldering Pattern** 



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## **Absolute Maximum Ratings**

Ta=25°C

Item	Symbol	GaN	Unit
Power Dissipation	PD		mW
DC Forward Current	I <sub>F</sub>	20	mA
Plused Forward Current	I <sub>FP</sub> *		mA
Reverse Voltage	V <sub>R</sub>		V
Operating Temperature	T <sub>OP</sub>		°C
Storage Temperature	T <sub>ST</sub>	-55 to 100	°C

\* 0.1 msec pulse, 10% duty cycle

# Electrcal / Optical Characteristics

I<sub>F</sub>=20mA Ta=25°C

Ermitting Color		Purple					
Material	GaN						
Forward Voltage	typ.	3.6	V <sub>F</sub>				
Forward voltage	max.	4.0	V <sub>F</sub>				
Wavelength	λD		nm				
-	λP		nm				
typ.	Δλ		nm				
Color Temperature	min.		K				
Color remperature	max.		K				
Luminous Intensity *	min.	100	mcd				
Lumnous intensity	typ.	160	mcd				
Reverse Current	max.		μA				
Viewing Angle	201/2	130					

\* Per NIST standards

				Chip LED Purple							
					Part No.	.: M110	G1007				
					Custome	er:					
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009				
APPD:	Ping			FINISH	Hui	Sheet	2 from 9				
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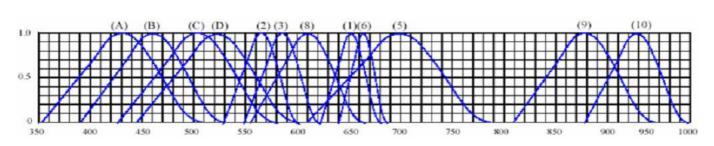
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Curve



Wavelength (nm)

# **Relative Intensity vs Wavelength**

(1)	GaAsP / GaAs 655nm Red	(9)	GaAlAs 880nm
(2)	GaP	(10)	GaAs & GaAlAs
	568nm Yellow Green		940nm
(3)	GaAsP / GaP	(A)	GaN
	585nm Yellow		430nm Blue
(4)	GaAsP / GaP	(B)	InGaN
	635nm Orange & Red		470nm Blue
(5)	GaP	(C)	InGaN
	700nm Red		502nm Green
(6)	GaAlAs / GaAs	(D)	InGaN
	660nm Red		523nm Green
(8)	GaAsP / GaP		
	610nm Red		

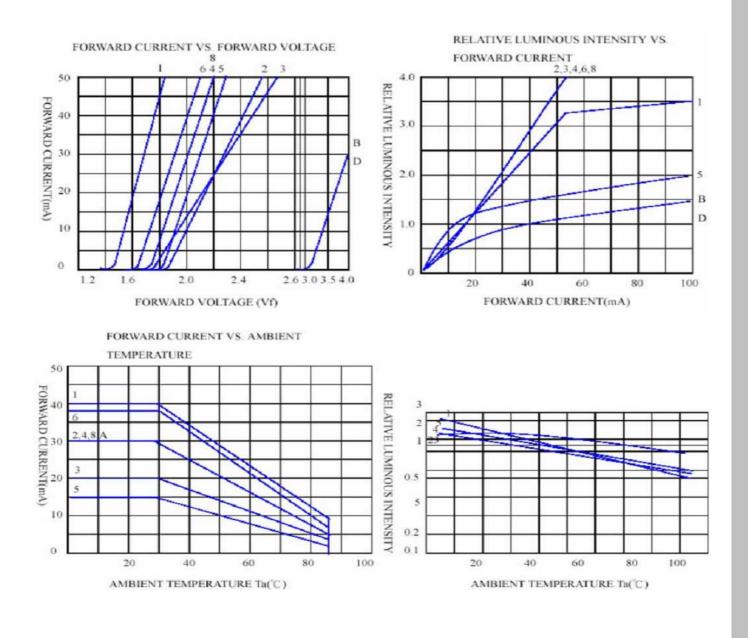
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					Part No.: <b>M11G1007</b>		
					Customer:		
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Curve



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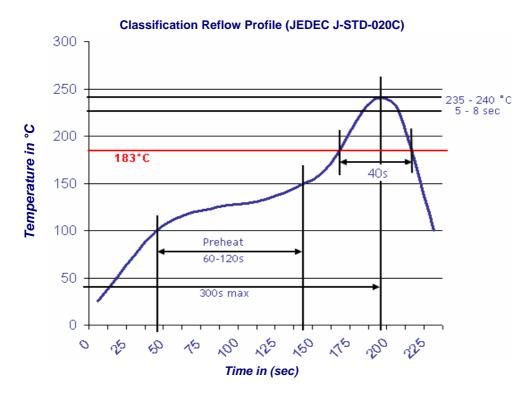
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### **Solder Condition**

### Lead Free Solder



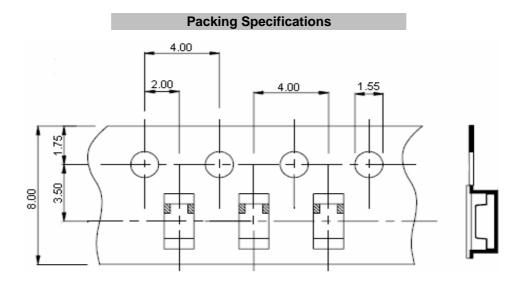
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				Part No.: <b>M11G1007</b>			
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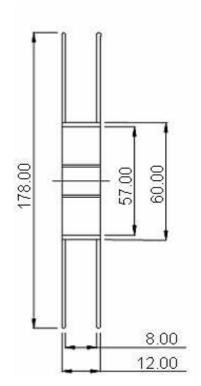
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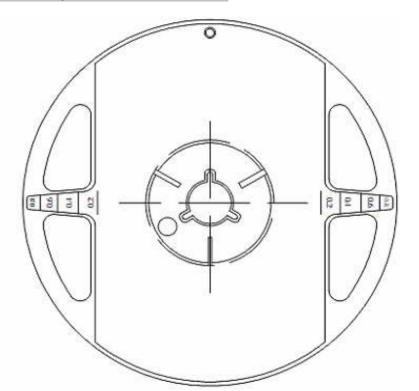






**Reel Specifications** 





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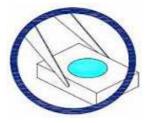




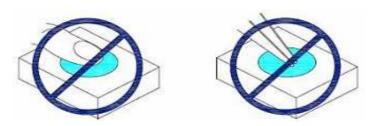
### Handling Precautions

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.



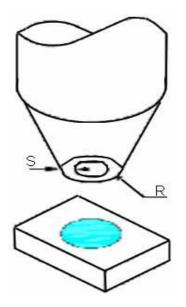
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					Part No.	: M110	G1007	
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- 4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as 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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			Part No.: <b>M11G1007</b>			
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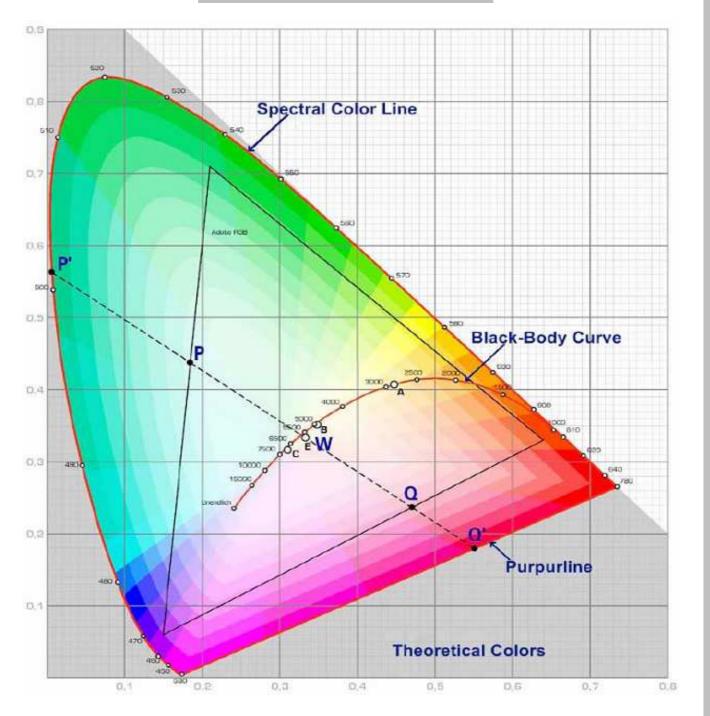
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Color table curve



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