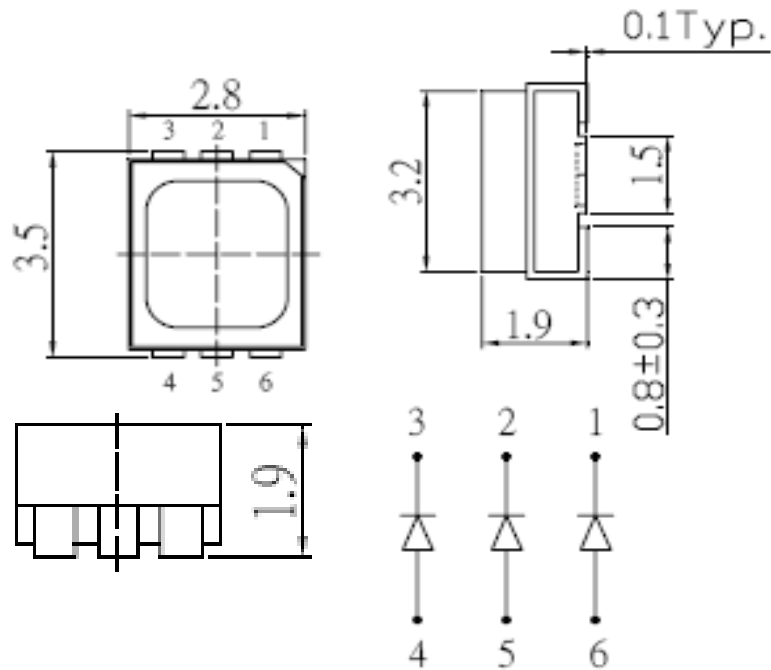




Applications

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

Technical Drawing



Notes :

All dimensions in mm tolerance is ± 0.1mm unless otherwise noted.

SMT Top View LED	
Blue	Green
Red	
Part No.:	M11D3003
Customer:	

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	19.11.2010
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Absolute Maximum Ratings

Item	Symbol	Blue / Green	Red	Unit
Power Dissipation	P _D	180	182	mW
DC Forward Current	I _F	50	70	mA
Pulsed Forward Current	I _{FP} *	120	120	mA
Reverse Voltage	V _R	5		V
Operating Temperature	T _{OP}	-30 ~ 85		°C
Storage Temperature	T _{ST}	-40 ~ 100		°C

* 0.1 msec pulse, 10% duty cycle

Electrical / Optical Characteristics

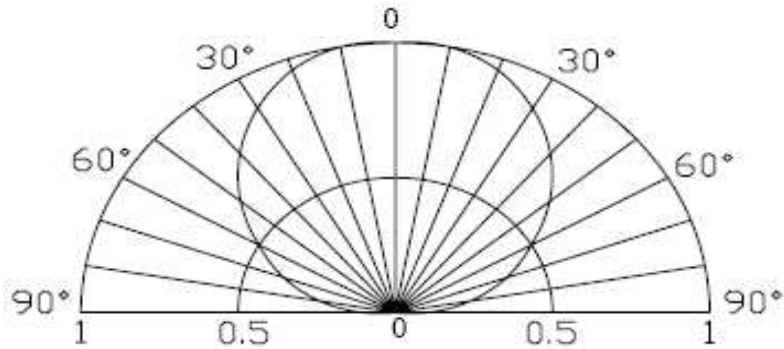
Ermitting Color	Blue		Green		Red	
Material	---		---		---	
Forward Voltage	typ.	3.1	3.1	2.1	V _F	
	max.	3.6	3.6	2.6	V _F	
Wavelength typ.	λ _D	465 ~ 475	520 ~ 530	620 ~ 630	nm	
	λ _P	---	---	---	nm	
	Δλ	---	---	---	nm	
Color Temperature	min.	---	---	---	K	
	max.	---	---	---	K	
Luminous Intensity *	min.	220	1120	500	mcd	
	typ.	400	1560	750	mcd	
Reverse Current	max.	---			μA	
Viewing Angle	2Θ1/2	120				

* Per NIST standards

SMT Top View LED							
Blue		Green			Red		
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Customer:							
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Directive Characteristics

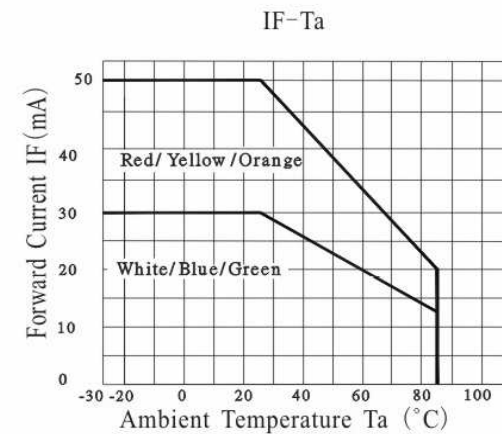
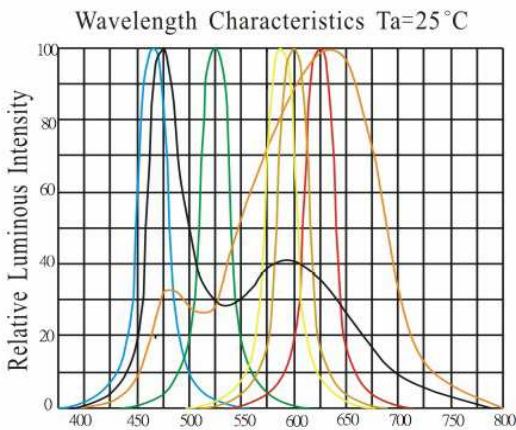
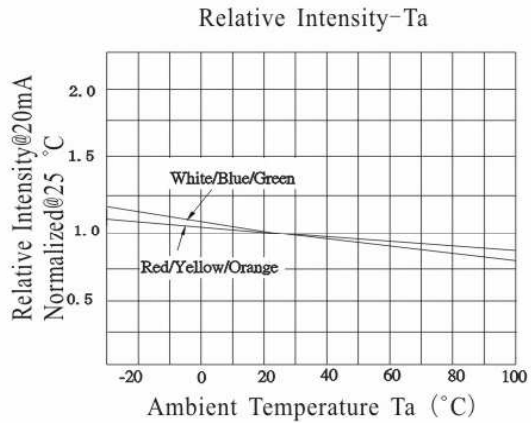
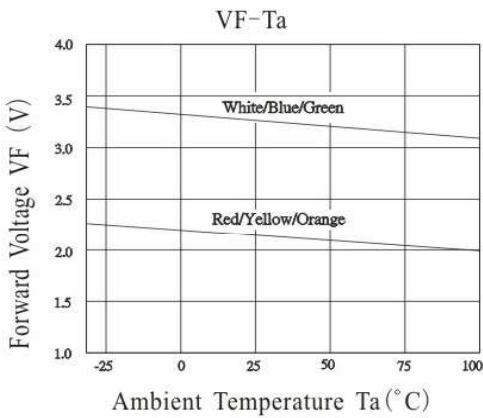
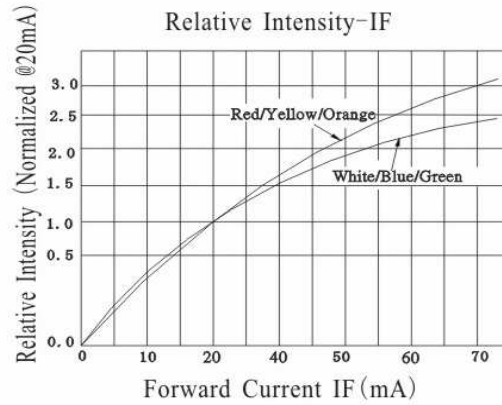
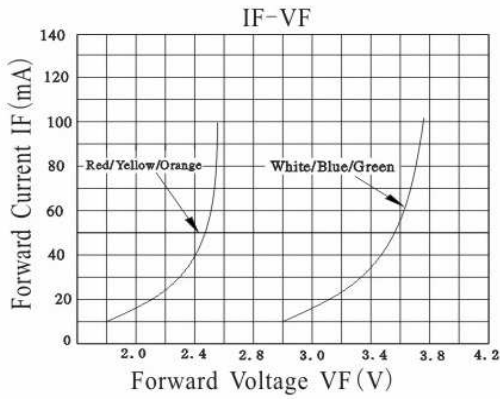


SMT Top View LED	
<i>Blue</i>	<i>Green</i>
<i>Red</i>	
Part No.:	M11D3003
Customer:	

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Typical Characteristics



SMT Top View LED			
Blue	Green	Red	
Part No.:			M11D3003
Customer:			

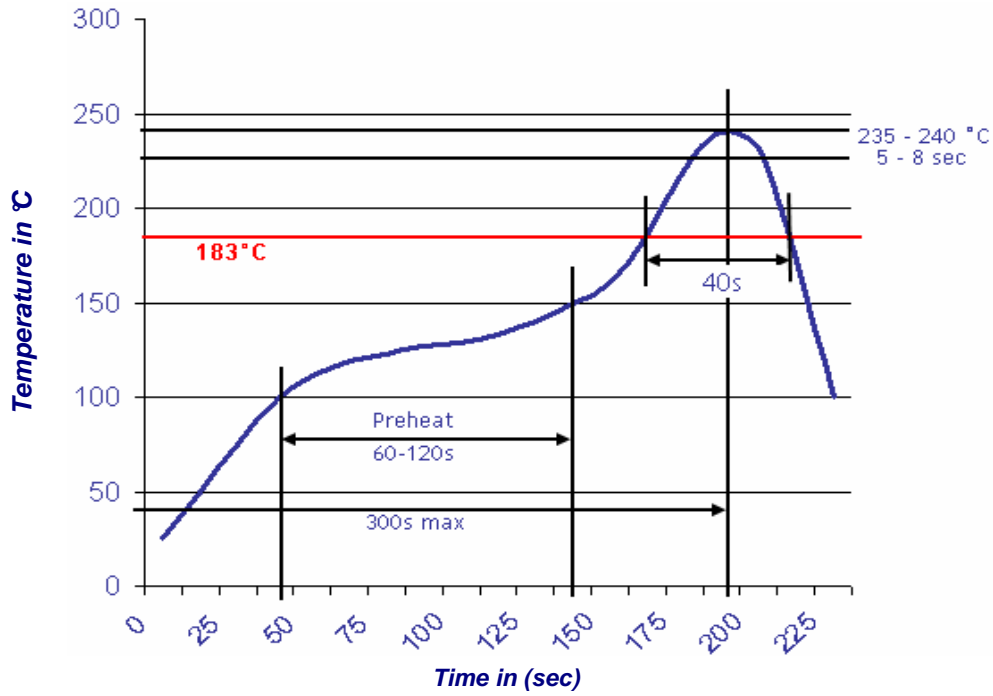
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	19.11.2010
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Solder Condition

Lead Free Solder

Classification Reflow Profile (JEDEC J-STD-020C)

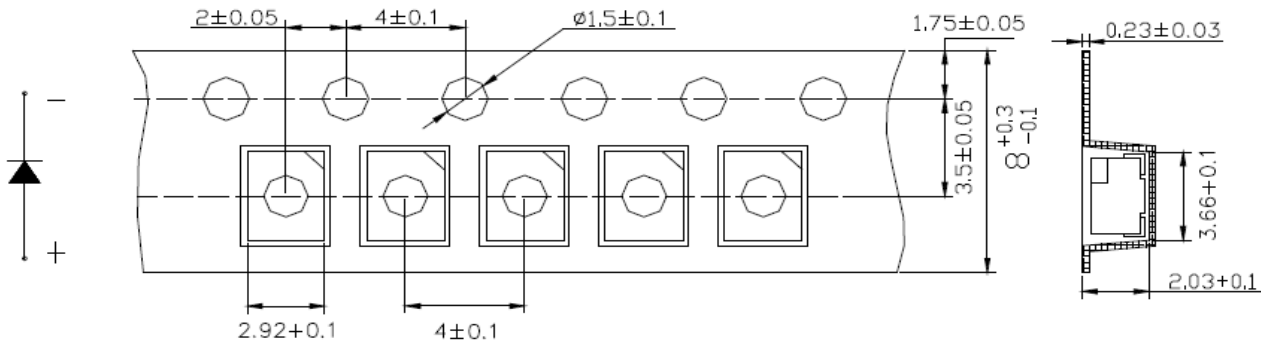


SMT Top View LED	
<i>Blue</i>	<i>Green</i>
<i>Red</i>	
Part No.:	M11D3003
Customer:	

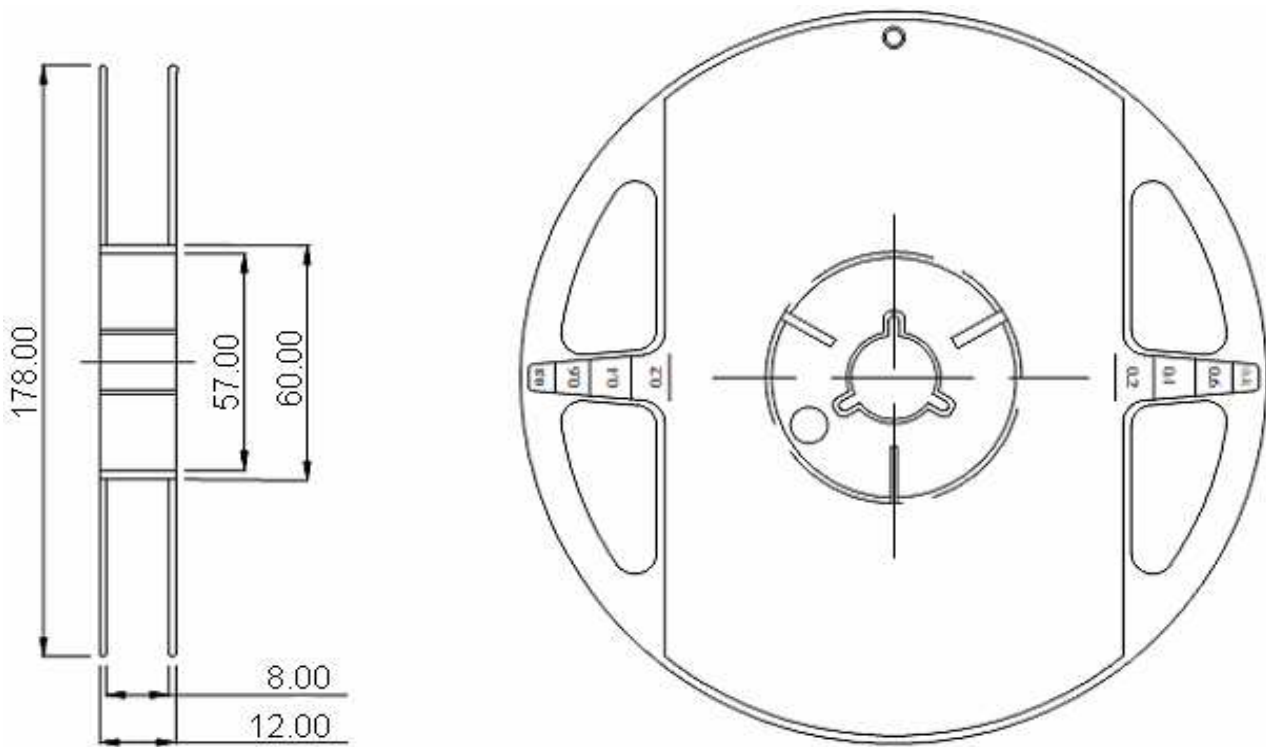
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Packing Specifications



Reel Specifications



SMT Top View LED		
<i>Blue</i>	<i>Green</i>	<i>Red</i>
Part No.:		M11D3003
Customer:		

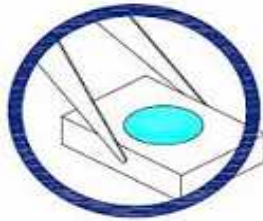
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Handling Precautions

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its 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 lead to damage and premature failure of the 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 surface. 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.

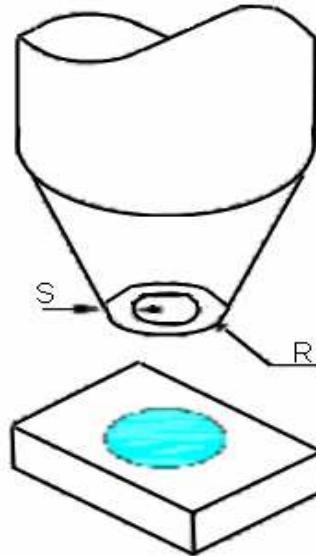


SMT Top View LED			
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Part No.:			M11D3003
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4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be 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.

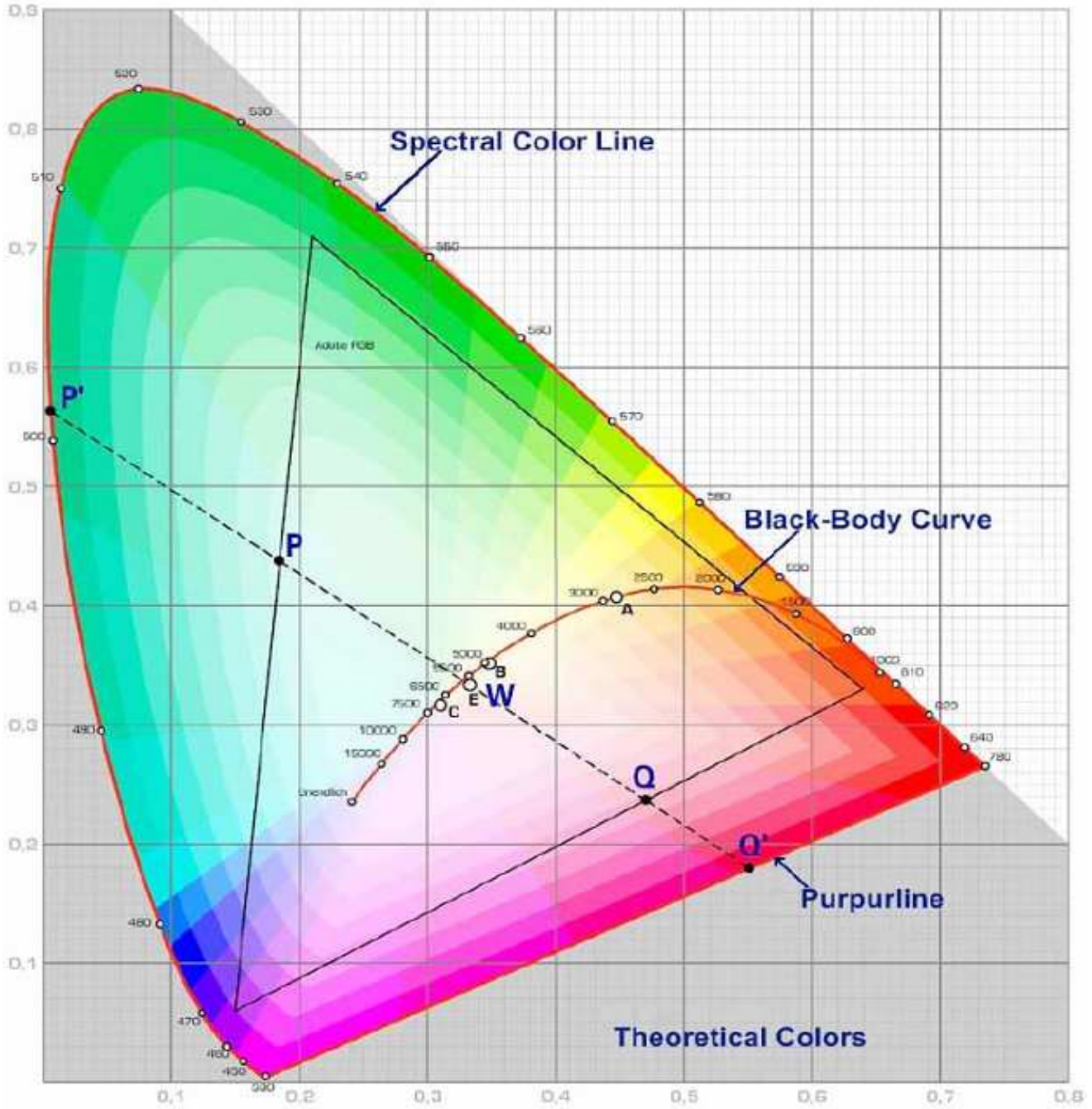


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Color table curve



SMT Top View LED		
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