

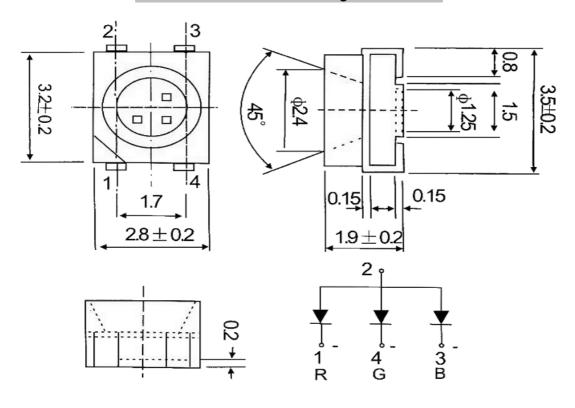




Applications

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

Technical Drawing



Recommended Soldering Pattern

Notes:

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

	SMT	Top	View LED	
Blue			Green	Red

Part No.: **M11H5003**

Customer:

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	03.05.2010
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DRW:

APPD:

Dong

Ping

CHKD





Absolute Maximum Ratings

Ta=25°C

Item	Symbol	Blue	Green	Red	Unit
Power Dissipation	P_{D}	90	90	70	mW
DC Forward Current	I _F	30	30	30	mA
Plused Forward Current	I _{FP} *	100	100	70	mA
Reverse Voltage	V_R		5		V
Operating Temperature	T _{OP}	-3	0°C ~ 85°C		°C
Storage Temperature	T _{ST}	-4	0°C ~ 90°C		°C

^{* 0.1} msec pulse, 10% duty cycle

Electrcal / Optical Characteristics

 $I_F=20mA$

Ermitting Color		Blue	Green	Red	
Material					
Forward Voltage	typ.				V_{F}
Forward voitage	max.	3.6	3.6	2.6	V_{F}
Wayalangth	λD	468	525	624	nm
Wavelength	λP	470	530	630	nm
typ.	Δλ	30	30 35		nm
Color Temperature	min.				K
Color remperature	max.				K
Luminous Intensity *	min.				mcd
Luminous intensity	typ.	200	500	280	mcd
Reverse Current	max.		10		μA
Viewing Angle	2Θ1/2	120			

^{*} Per NIST standards

 SMT Top View LED

 Blue
 Green
 Red

 Part No.:
 M11H5003

 Customer:

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 03.05.2010

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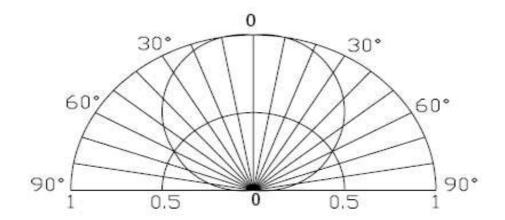
Chang







Directive Characteristics



SMT Top View LED
Blue Green Red

Part No.: **M11H5003**

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Curvs

SMT Top View LED
Blue Green Red

Part No.: **M11H5003**

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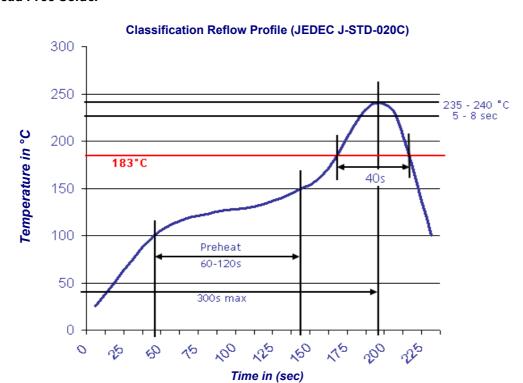






Solder Condition

Lead Free Solder



	SMT Top View LED									
	В	lue	Green	Red						
	Par	t No.:	M11H	5003						
	Cus	tomer:								
T	ΜΔΤΙ ·	Chui	DATE	03 05 2010						

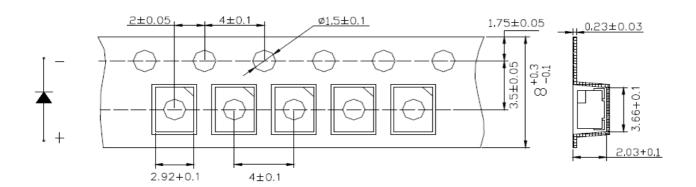
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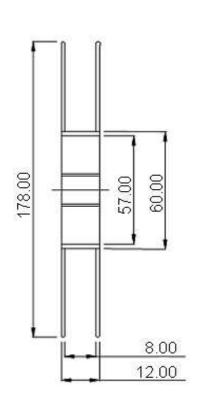


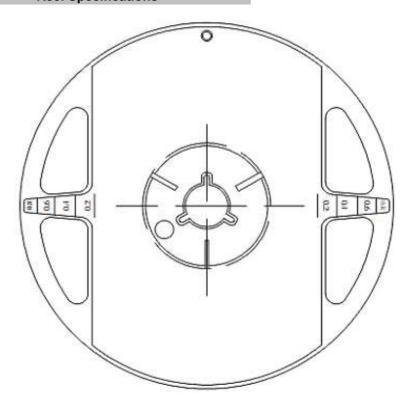


Packing Specifications



Reel Specifications





SMT	Top View LED	
Blue	Green	Red

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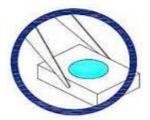




Handling Precautions

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.



SMT Top View LED Blue Green Red

Part No.: **M11H5003**

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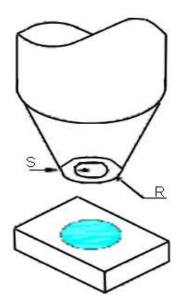
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- 4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible.
- 5. A pliable material is suggested for the nozzle tip to avoid scratching 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.



	SMT To	p View LED	
В	lue	Green	Red
_		0.00	
Pai	rt No.:	M11H	5003
Cus	tomer:		
MATI ·	Chui	DATE	03 05 2010

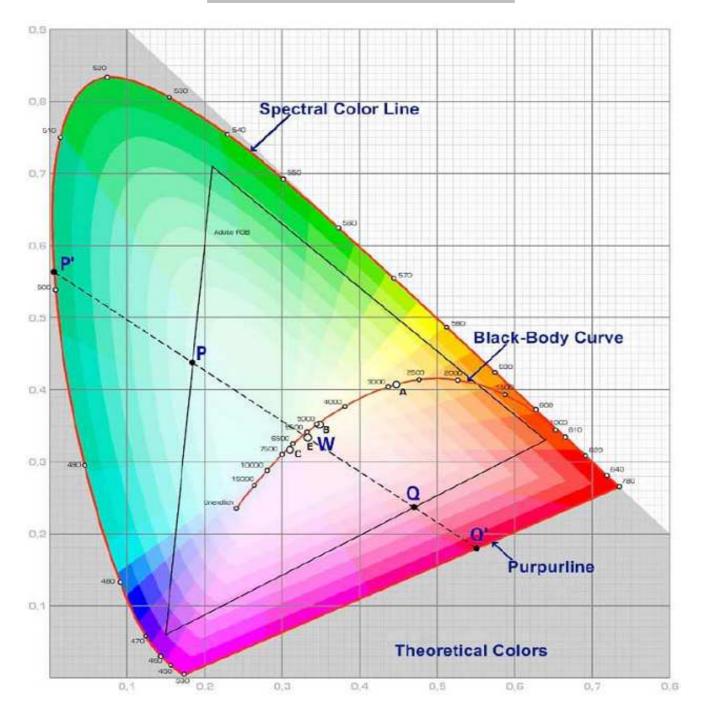
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Color table curve



SMT Top View LED							
Blue		Green	Red				
Par	t No.:	M11H5003					
	tomer:	1911111	5003				
MATL:	Chui	DATE	03.05.2010				
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