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C O M P O N E N T S
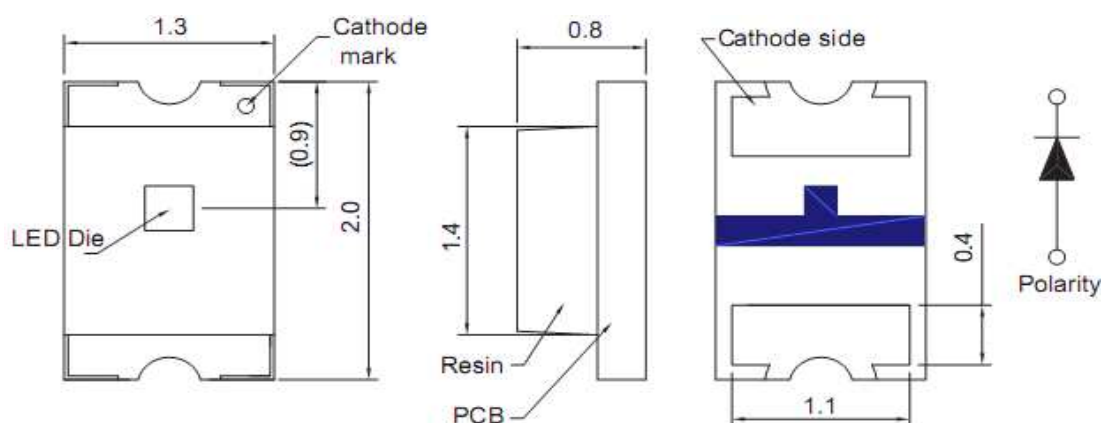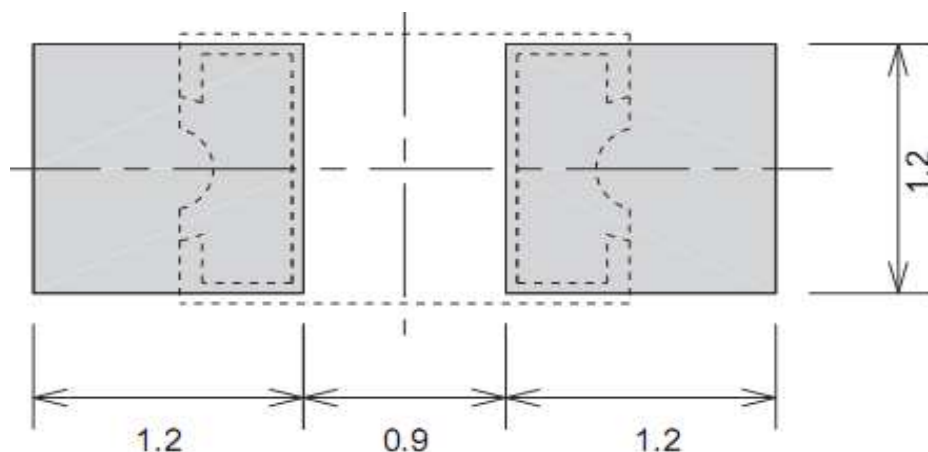A MEMBER OF EDCON-GROUP

Applications

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

Technical Drawing

Recommended Soldering Pattern

Notes :

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

				SMT Top View LED Amber			
				Part No.:	**M11B6003**		
				Customer:			
DRW:	Wang	CHKD	Wung	MATL:	Chui	DATE	03.12.2009
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Absolute Maximum Ratings

Ta=25°C

Item	Symbol	GaAsP	Unit
Power Dissipation	P_D	65	mW
DC Forward Current	I_F	25	mA
Plused Forward Current	I_{FP}*	100	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{OP}	-30 to 80	°C
Storage Temperature	T_{ST}	-40 to 85	°C

* 0.1 msec pulse, 10% duty cycle

Electrcal / Optical Characteristics

I_F=20mA   Ta=25°C

Ermitting Color		Amber	
Material		GaAsP	
Forward Voltage	typ.	2.1	V_F
	max.	2.6	V_F
Wavelength typ.	λD	608	nm
	λP	610	nm
	Δλ	35	nm
Color Temperature	min.	---	K
	max.	---	K
Luminous Intensity *	min.	5.6	mcd
	typ.	9	mcd
Reverse Current	max.	---	µA
Viewing Angle	2Θ1/2	140	

* Per NIST standards

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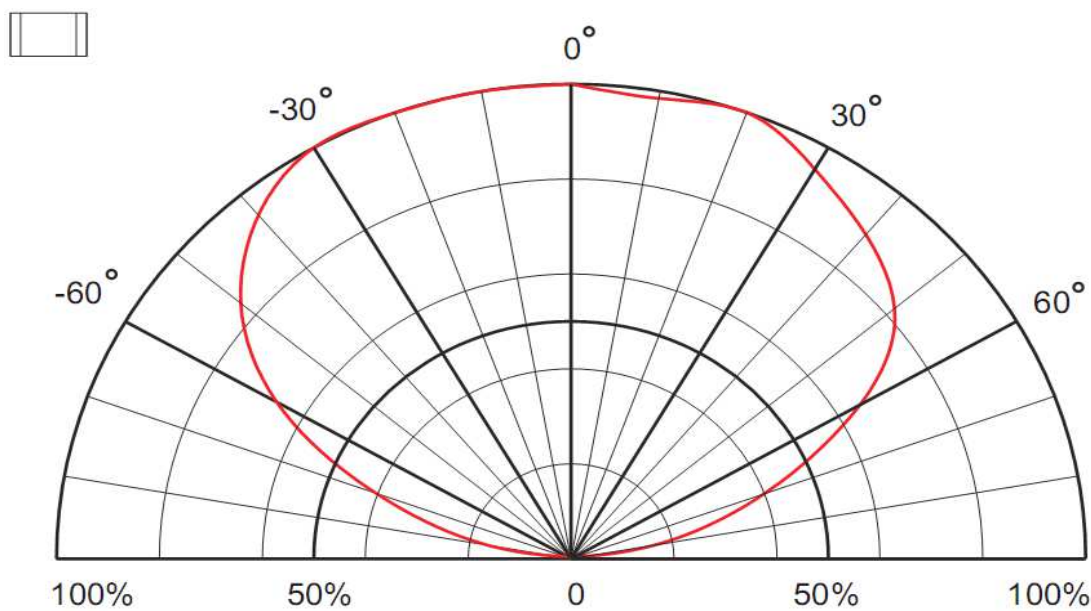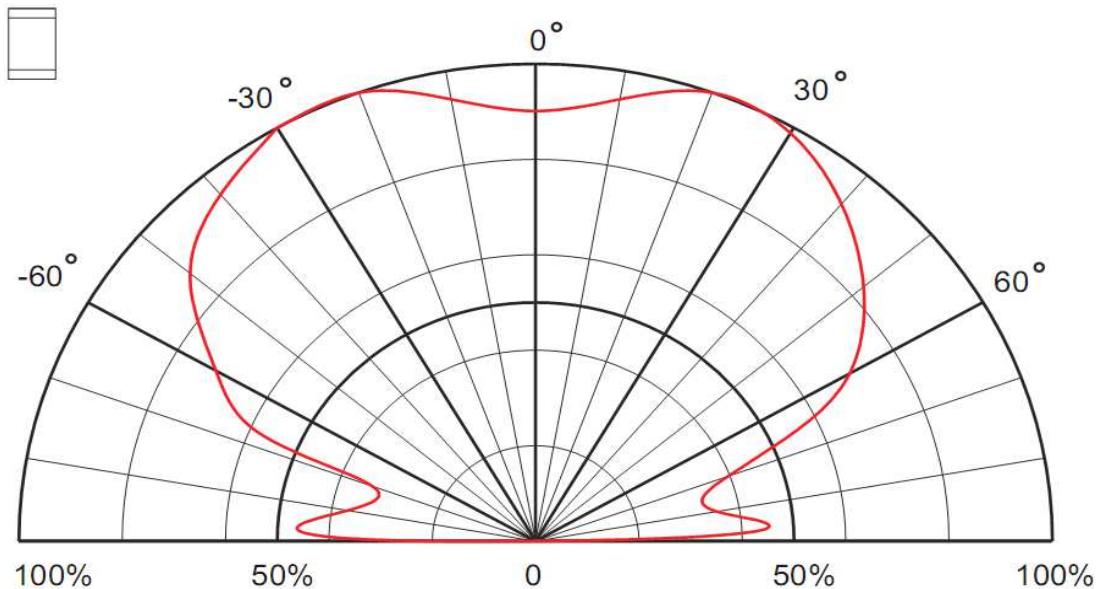
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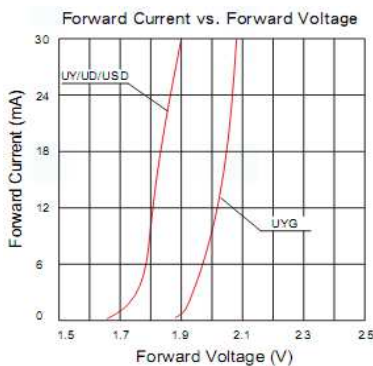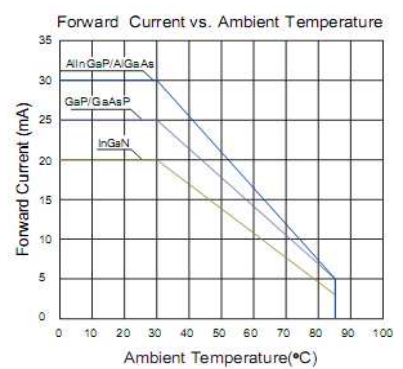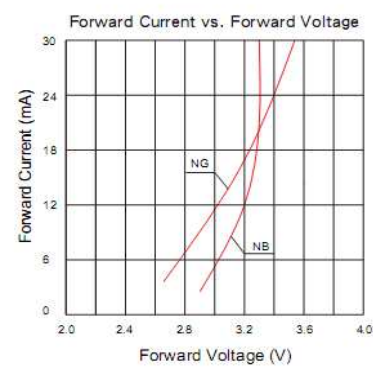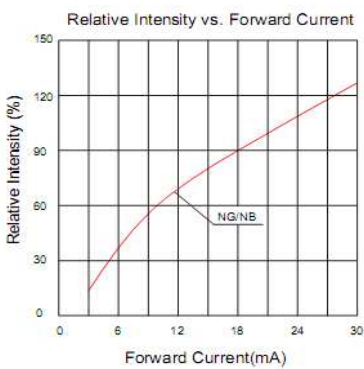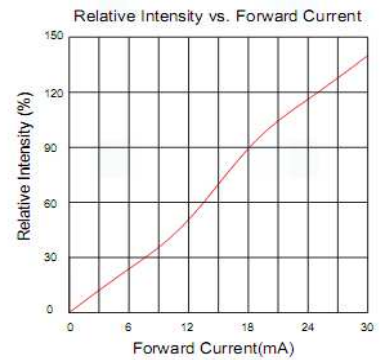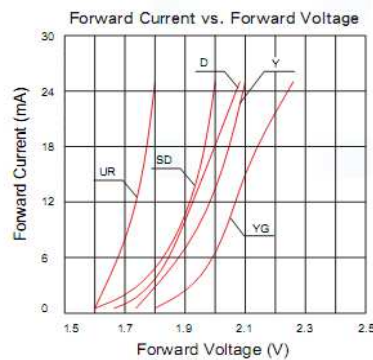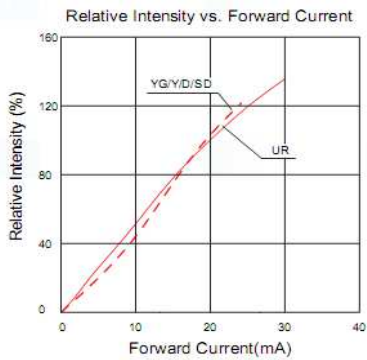
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Curvs

Relative Intensity vs. Forward Current

Forward Current vs. Forward Voltage

Relative Intensity vs. Forward Current

Relative Intensity vs. Forward Current

Forward Current vs. Forward Voltage

Forward Current vs. Ambient Temperature

Forward Current vs. Forward Voltage

SMT Top View LED
Amber

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Solder Condition

Lead Free Solder
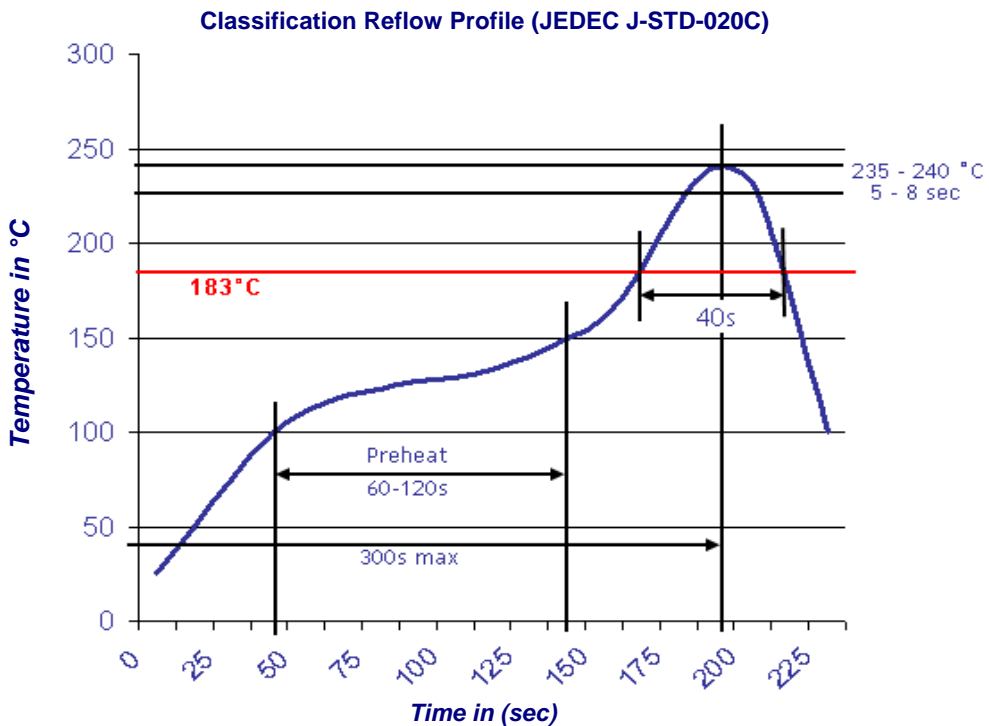
Classification Reflow Profile (JEDEC J-STD-020C)

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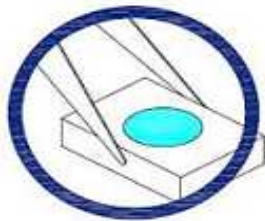
2. Do not directly touch or handle the silicone lens surfance. It may damage the
   internal circuitry.

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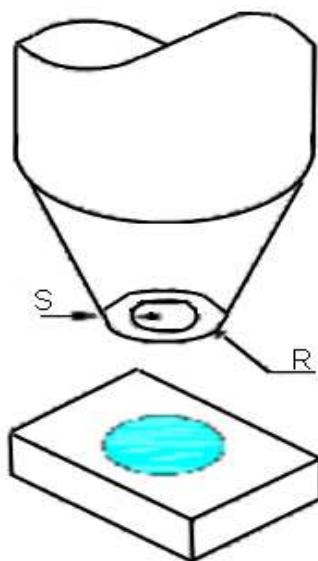   may scratch the silicone lens or damage the internal circuitry.

					SMT Top View LED		
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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
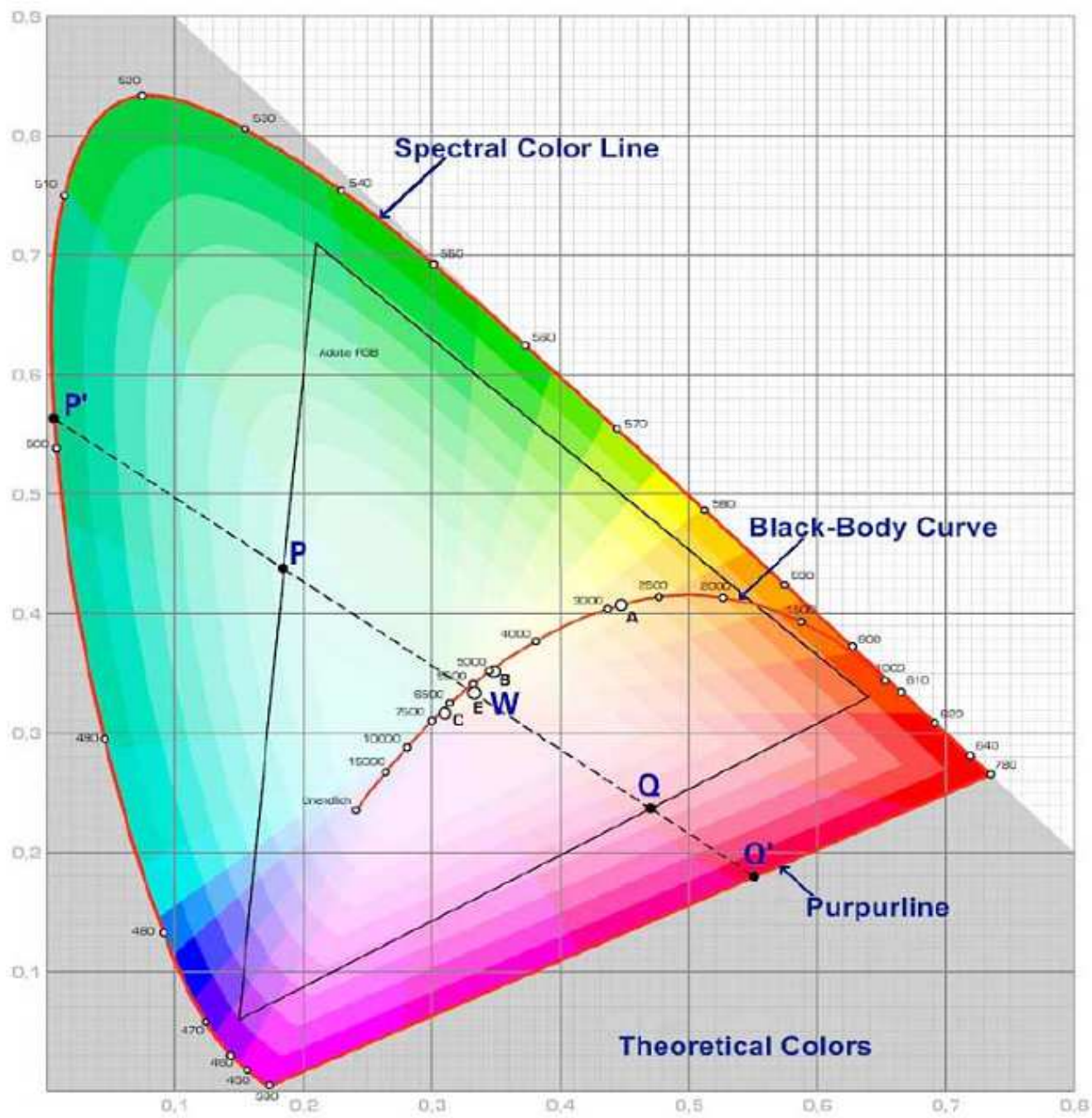   pick-and-place machine to insure precise pickup and avoid damage during production.

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Color table curve

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