







#### **Features**

Single Color Suitable for all SMT assembly and solder process Available on TAPE and REEL Package: 2000PCS / Reel

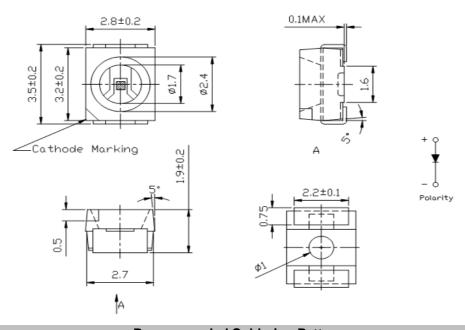
### **Discription / Application**

The Yellow source color devices are made with Gallium Phosphide on Gallium Phosphide Yellow Light Emitting Diode

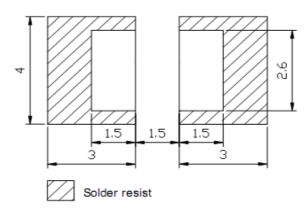
It is recommended to use a wrist band or antielectrostatic glove handling the Leds. All devices, equipment and machinery must be

electrically grounded

### **Technical Drawing**



# **Recommended Soldering Pattern**



#### Notes:

DRW:

APPD:

All dimensions in mm tolerance is  $\pm 0.1$ mm unless otherwise noted.

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# Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	min.	typ.	max.	units	test conditions
	Dominant Wavelength	Yellow	515	520		nm	IF=20mA
VF	Forward Voltage	Yellow	3	3,2		V	IF=20mA
IR	Reverse Current	Yellow		5		μΑ	VR=5V
С	Capacitance			100		PF	VF=0V, f=1MHZ

# Absolute Maximum Ratings at = 25°C

Parameter	White	Unts		
Power dissipation	120	mW		
DC Forward Current	30	mA		
Peak Forward Current (1)	100	mA		
Reverse Voltage	5	V		
Operating / Storage Temperature	40°C to + 85°C			

### **Selection Guide**

Dort No.	Diec	Long Type	IV (mcd) @ 20mA		Viewing Angle	
Part-No.	Dice	Lens Type	Min	Тур.	2Ø <sub>1/2</sub>	
M11A1331	Green (InGaN)	Water Clear		1000	120	

Rank ( IF=20mA)	Code				
Luminious Intensity (mod)	L15	L16	L17		
Luminious Intensity (mcd)	580 ~ 810	810 ~ 1135	1135 ~ 1590		
Forward Voltage (V)	V8	V9	V10		
Forward voltage (v)	2,8 ~ 3,0	3,0 ~ 3,2	3,2 ~ 3,4		
Dominant Wavelength (nm)	G2	G3	G4		
Dominant wavelength (nin)	518 ~ 521	521 ~ 524	524 ~ 527		

Tolerance of measurement of forward voltage is  $\pm 0.1V$ 

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DRW:

APPD:

Tolerance of measurement of luminious intensity or flux is ± 15%

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Tolerance of measurement of dominant wavelength is ± 1nm

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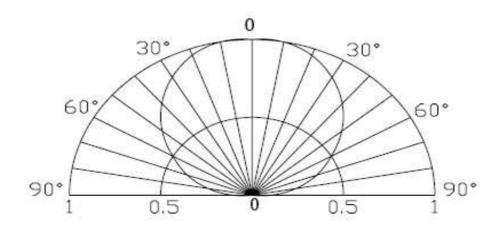




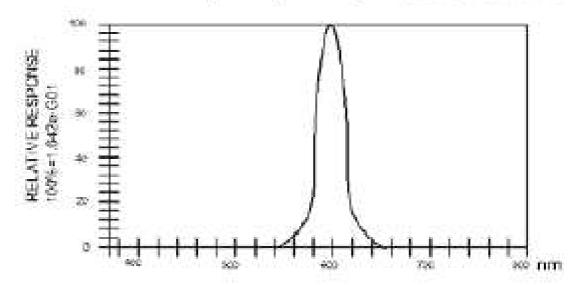




# **Directive Characteristics**



# Luminous Spertrum(Ta≃25°U) SPECTRAL RADIANCE



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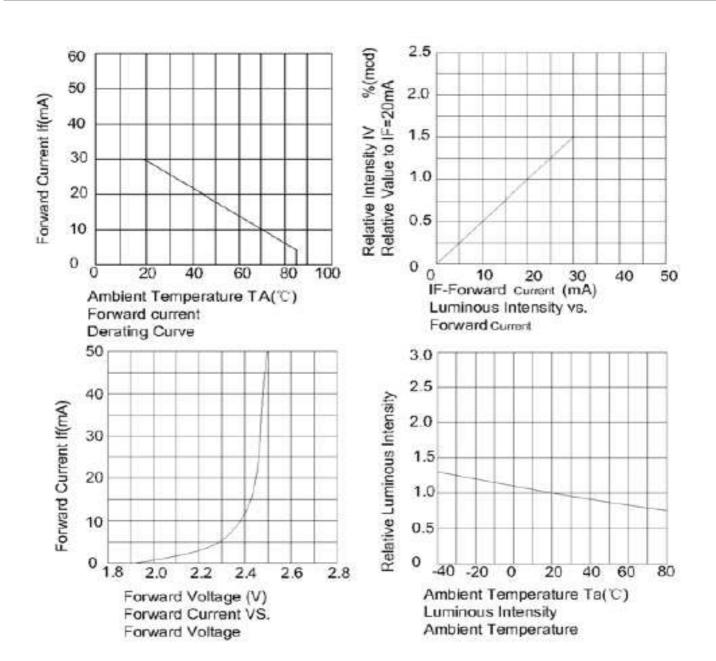








#### Curve



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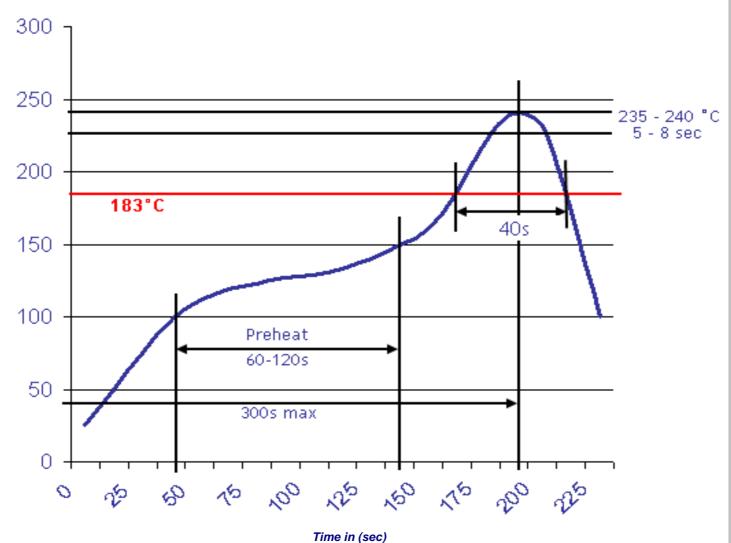




# **Solder Condition**

#### Lead Free Solder

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



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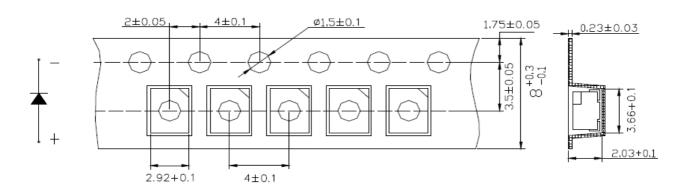




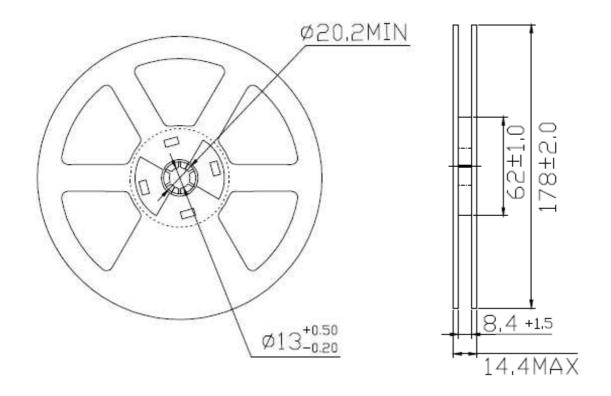




# **Packing Specifications**



# **Reel Specifications**



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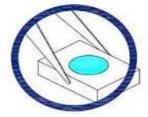




# **Handling Precautions**

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.



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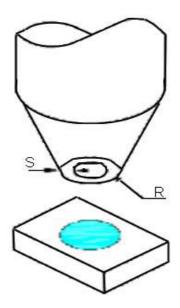






### **Handling Precautions**

- 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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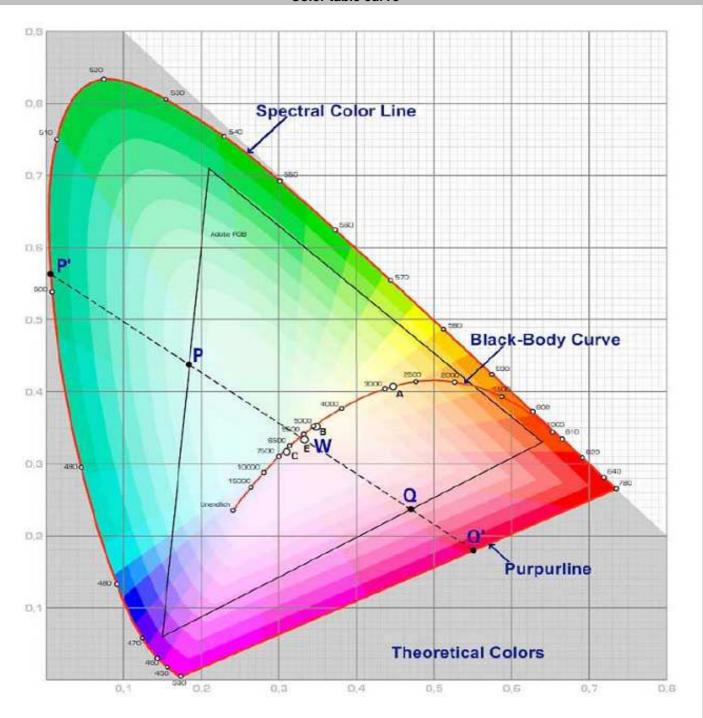








# Color table curve



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