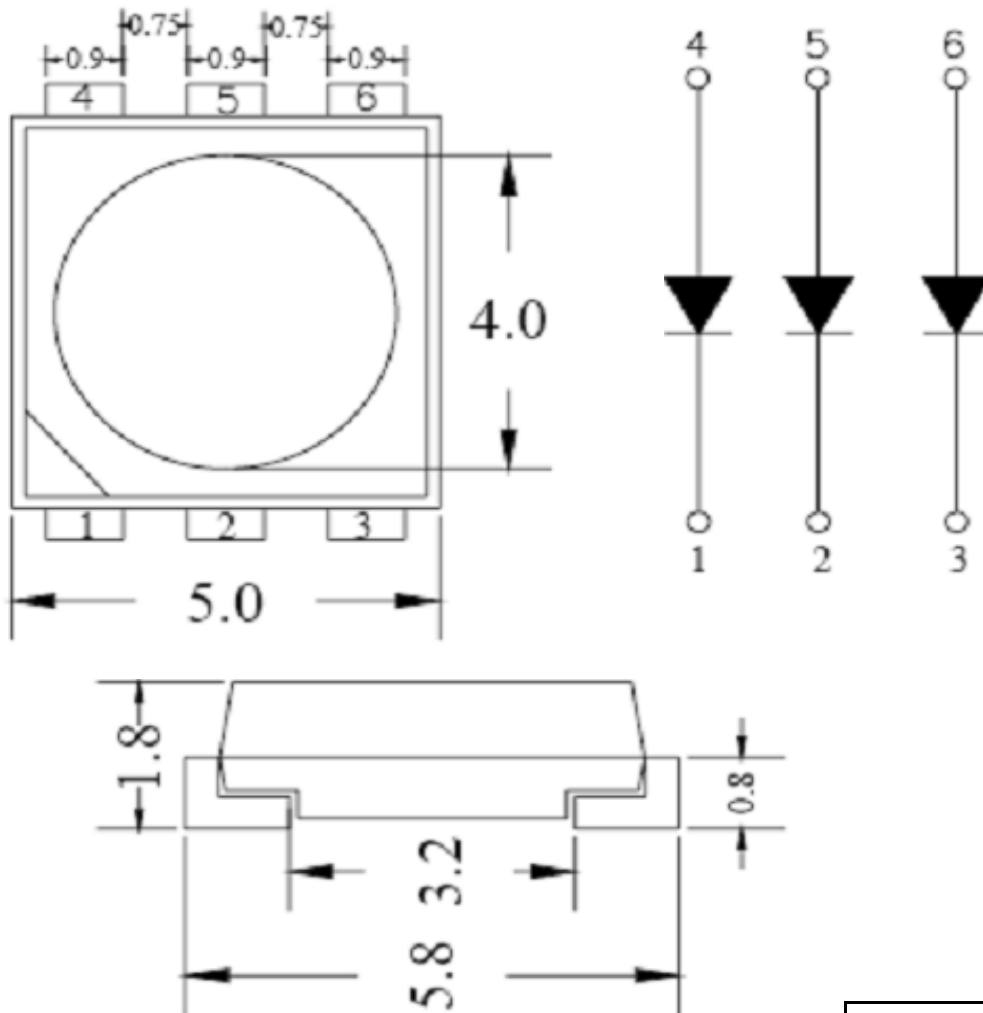




### Applications

- Interior automotive lighting(dashboard backlight etc...)
- Optical indicators
- Communication Products
- Backlighting
- Toys

### Package Dimensions



**Notes:**

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

<b>PLCC 6 LED Color Red Three Chip</b>	
Part No.:	<b>M11A5003</b>
Customer:	

DRW:	Harry	CHKD:	Dustin	MATL:	Wilson	TOLERANCE:	Mason	DATE:	24.07.2009
APPD:	Jason			FINISH:	John		Sheet No.:	1 from 9	



### Absolute Maximum Ratings (Ta = 25°C)

Parameter	MAX.	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	60	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-40°C to + 100°C	
Lead Soldering Temperature	260°C for 3 Seconds	

\*Pulse width ≤0.1msec duty ≤1/10

### Typical Electrical & Optical Characteristics (IF=20mA and Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_v$	400	600	---	mcd	$I_F = 60mA$ (Note 8)
Luminous Flux (FYI)	$\Phi_v$	1	2	---	Lm	$I_F = 60mA$
Wavelength	$\lambda$	620	---	630	nm	$I_F = 60mA$
Viewing Angle	2θ1/2	---	120	---	Deg	$I_F = 60mA$
Forward Voltage	$V_F$	---	2.0	2.8	V	$I_F = 60mA$
Reverse Current	$I_R$	---	---	50	μA	$V_R = 5V$

### Ranks Combination (IF = 20mA)

Rank			
Luminous Intensity			

#### Notes:

1. Tolerance of measurement of luminous intensity	: ±15%	<b>PLCC 6 LED Color Red Three Chip</b>
2. Tolerance of measurement of chromatic coordinates	: ±0.02	
3. Tolerance of measurement of forward voltage	: ±0.1V	

Part No.: **M11A5003**

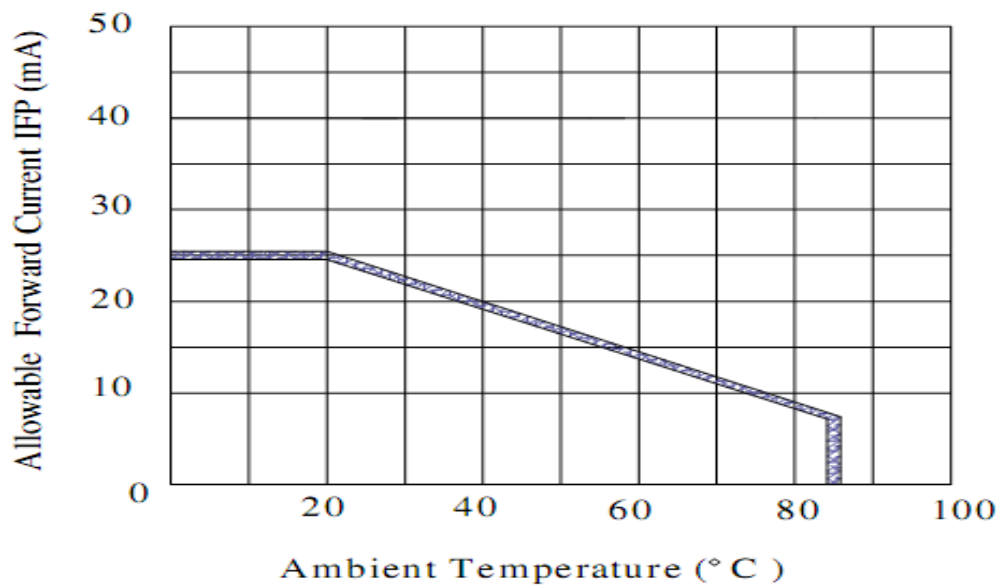
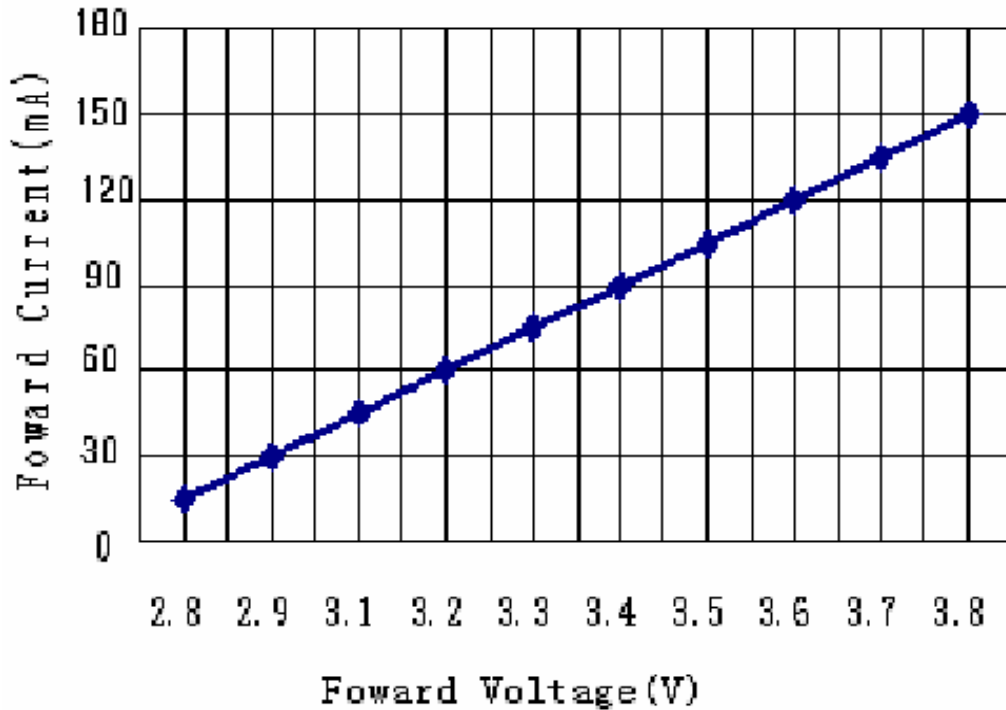
Customer:

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<b>PLCC 6 LED Color Red Three Chip</b>	
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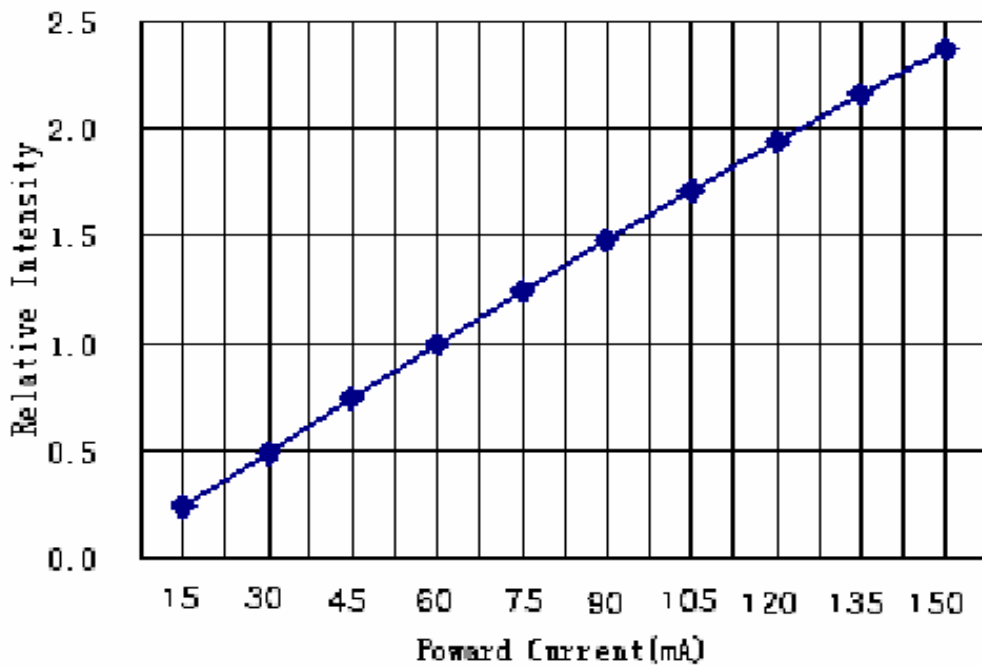
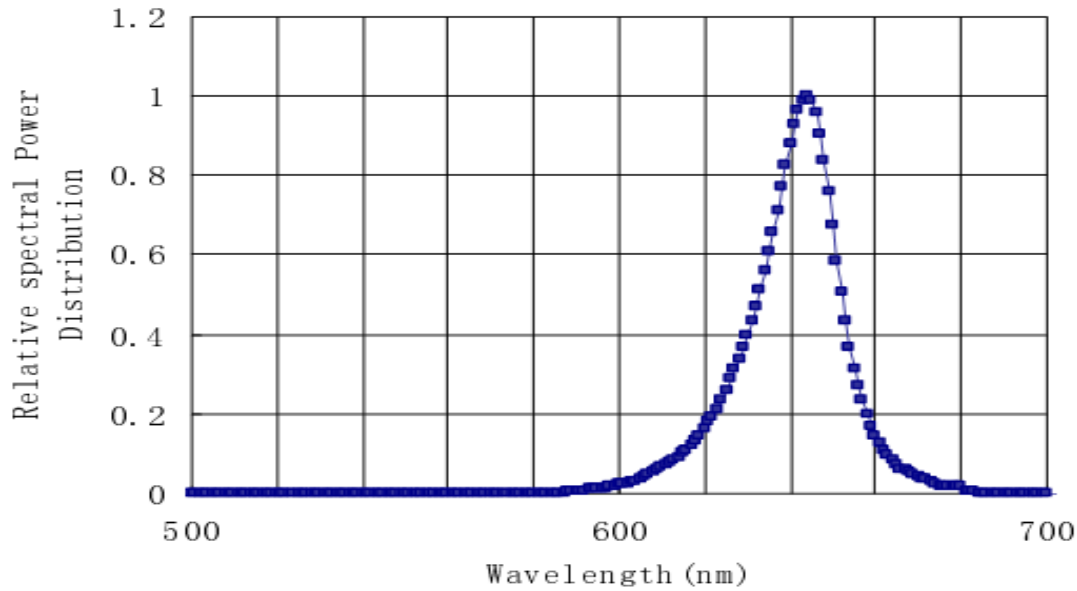
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**Typical Electrical/ Optical Characteristics Curves (Ta=25°C Unless Otherwise Noted)**



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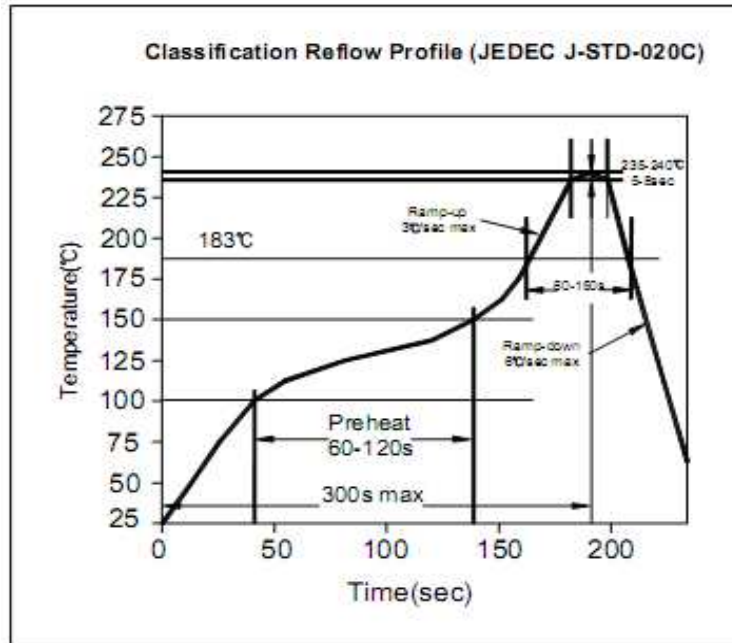
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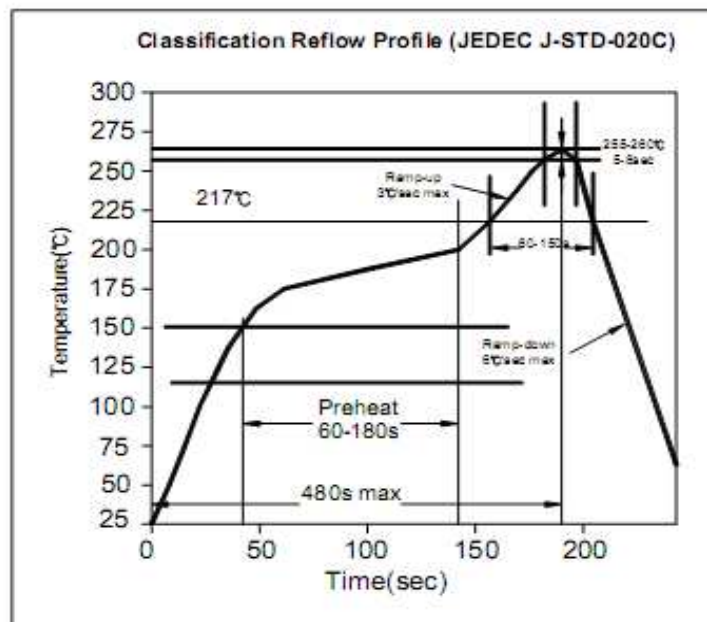


**Solder Condition**

lead solder



lead free solder



<b>PLCC 6 LED Color Red Three Chip</b>	
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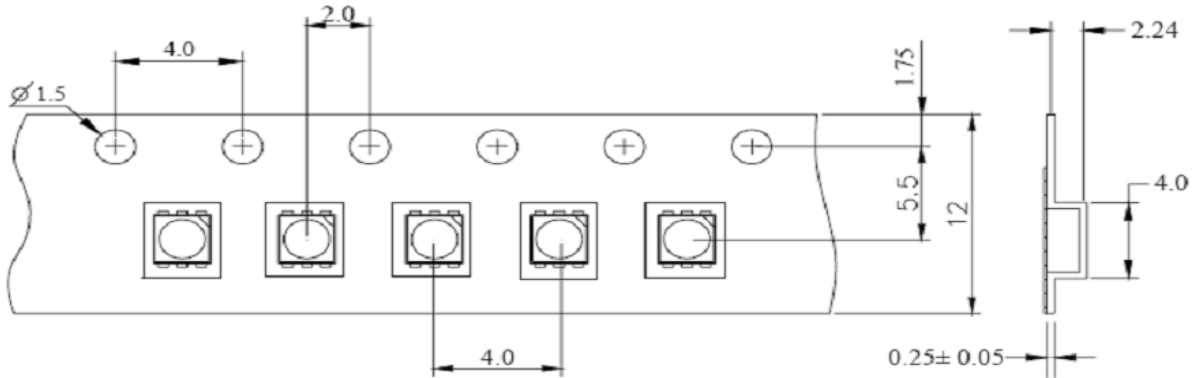
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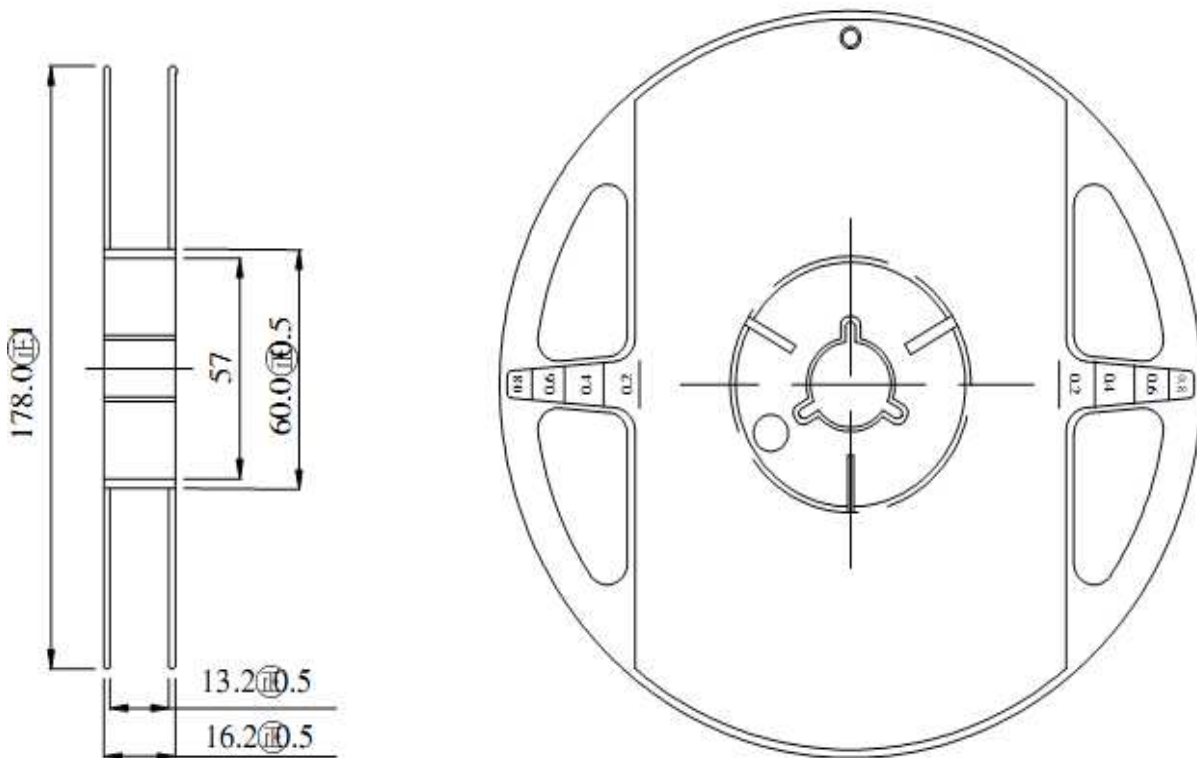
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**Packing Specifications:**



**Reel Specifications**



Dimensions are specified as follows: mm

Notes:

- 1) The packing only appropriate for ECGD
- 2) Normal packing quantity: 2,000pcs/reel

<b>PLCC 6 LED Color Red Three Chip</b>	
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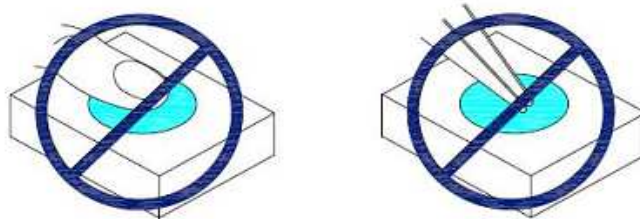
### Handling Precautions

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 leads to damage and premature failure of the LED.

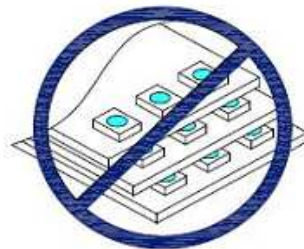
1. Handle the component along the side surfaces by using forceps or appropriate tools.



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.



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.

<b>PLCC 6 LED Color Red Three Chip</b>									
Part No.:	<b>M11A5003</b>								
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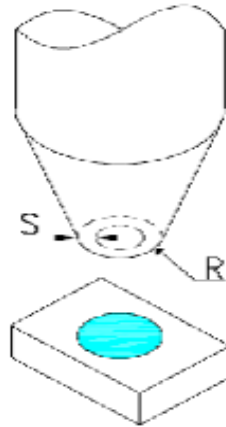
DRW:	Harry	CHKD:	Dustin	MATL:	Wilson	TOLERANCE:	Mason	DATE:	24.07.2009
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5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.

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.



<b>PLCC 6 LED Color Red Three Chip</b>	
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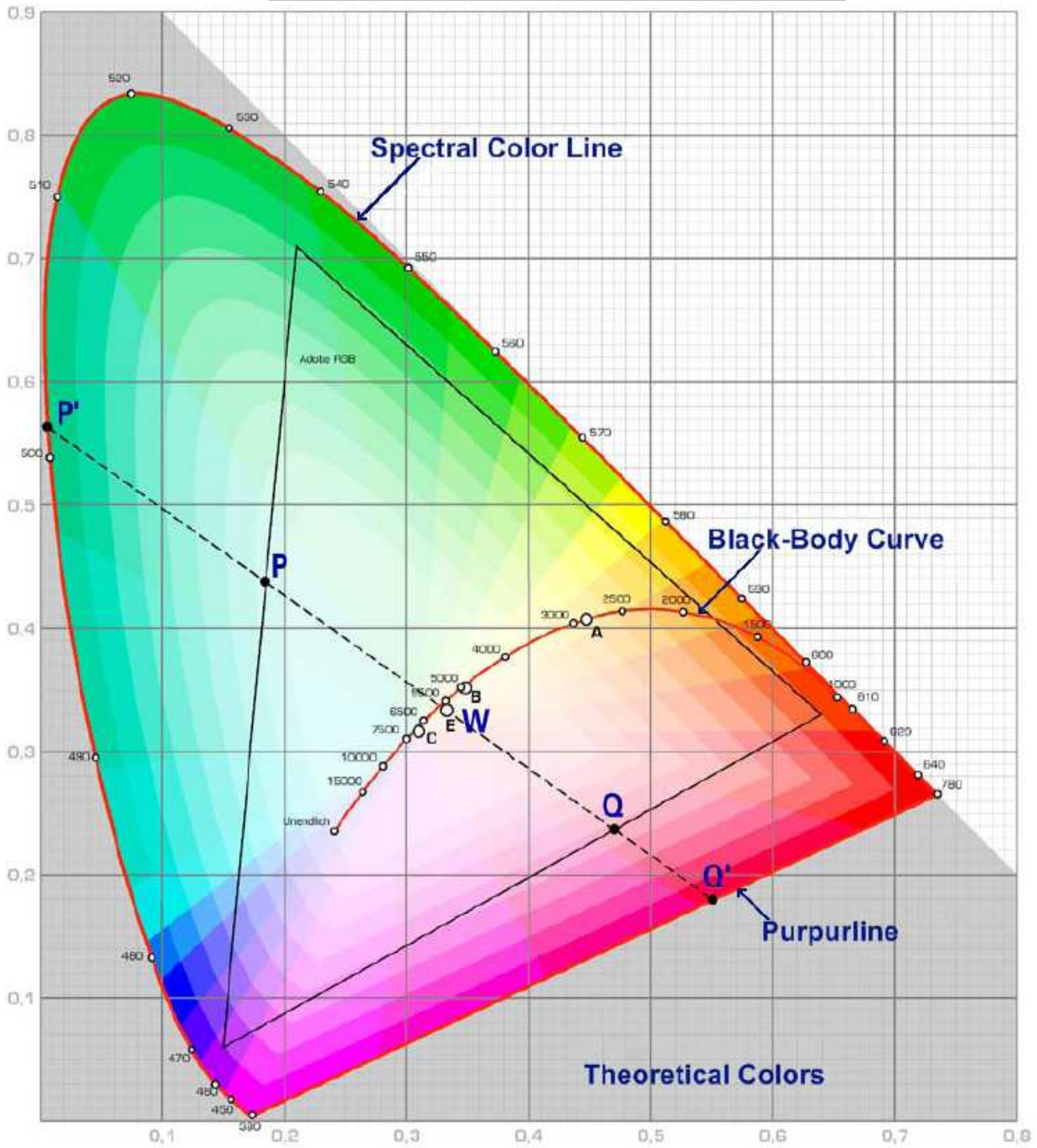
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**Color table curve**



<b>PLCC 6 LED Color Red Three Chip</b>	
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