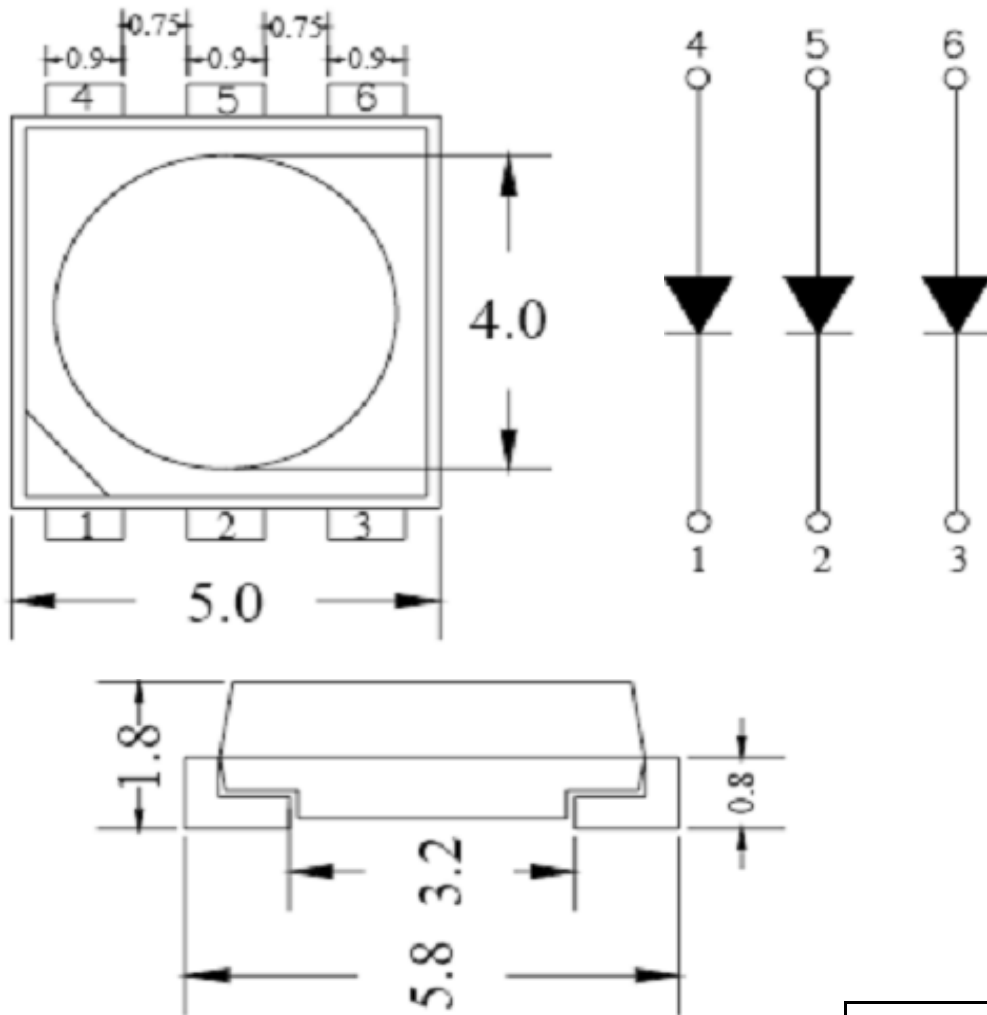




Applications

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

Package Dimensions



Notes:

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

PLCC 6 LED Color White Three Chip	
Part No.:	M11A5005
Customer:	

DRW:	Harry	CHKD	Dustin	MATL	Wilson	TOLERANCE	Mason	DATE 24.07.2009
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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 ≤ 0.1 msec duty $\leq 1/10$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_v	4000	4500	---	mcd	$I_F = 60$ mA (Note 8)
Luminous Flux (FYI)	Φ_v	12	14	---	Lm	$I_F = 60$ mA
Color Rank	x	---	0.40	---	NIL	$I_F = 60$ mA
	y	---	0.41	---	NIL	$I_F = 60$ mA
Forward Voltage	V_F	---	3.2	4.0	V	$I_F = 60$ mA
Reverse Current	I_R	---	---	50	μ A	$V_R = 5$ V

Ranks Combination (IF = 20mA)

Rank			
Luminous Intensity			

Notes:

1. Tolerance of measurement of luminous intensity	: $\pm 15\%$	PLCC 6 LED Color White Three Chip
2. Tolerance of measurement of chromatic coordinates	: ± 0.02	
3. Tolerance of measurement of forward voltage	: ± 0.1 V	

Part No.: **M11A5005**

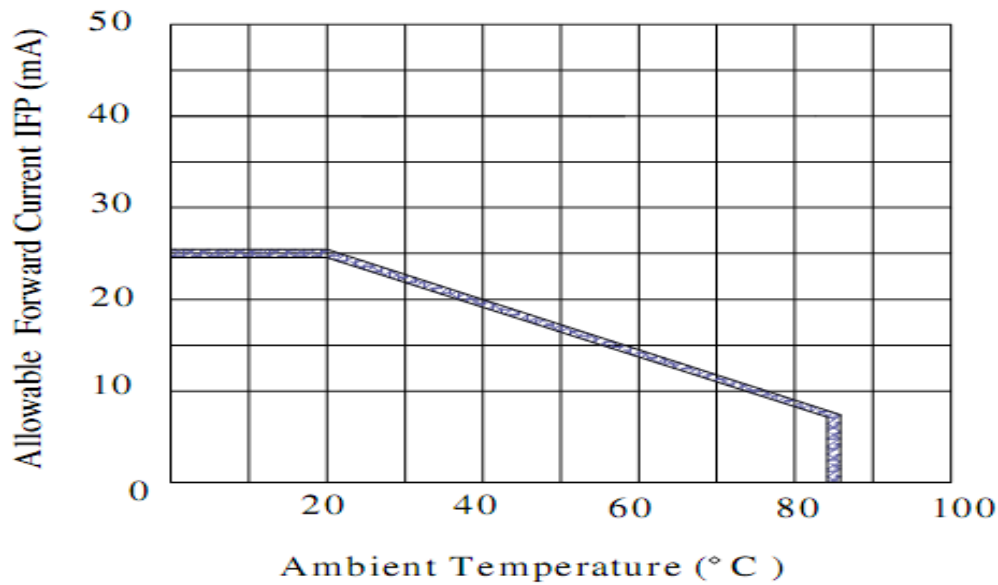
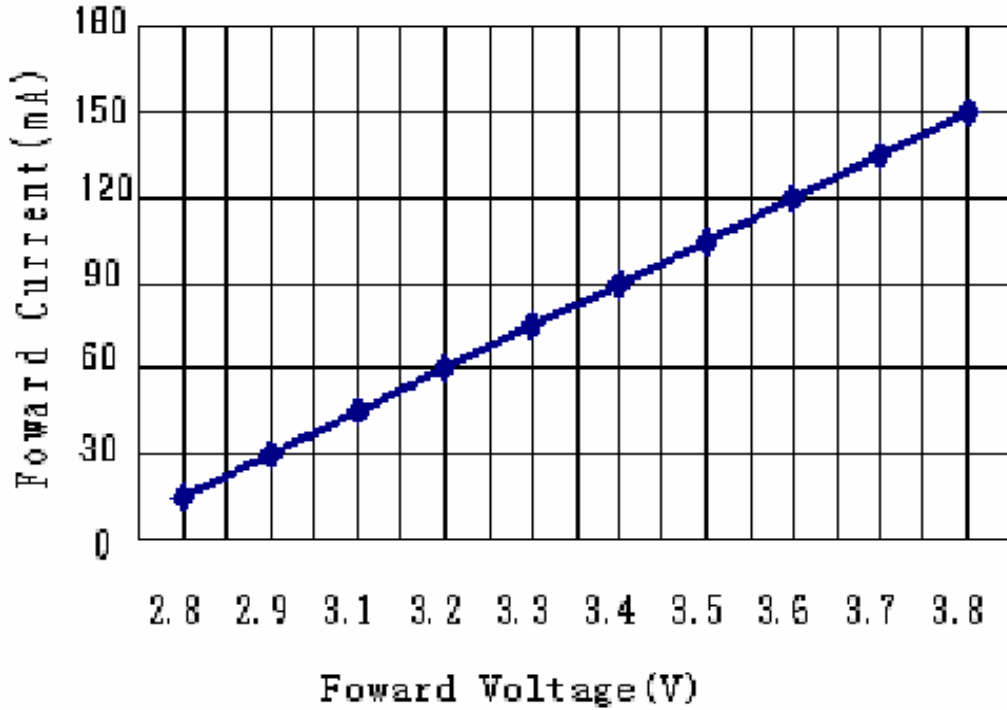
Customer:

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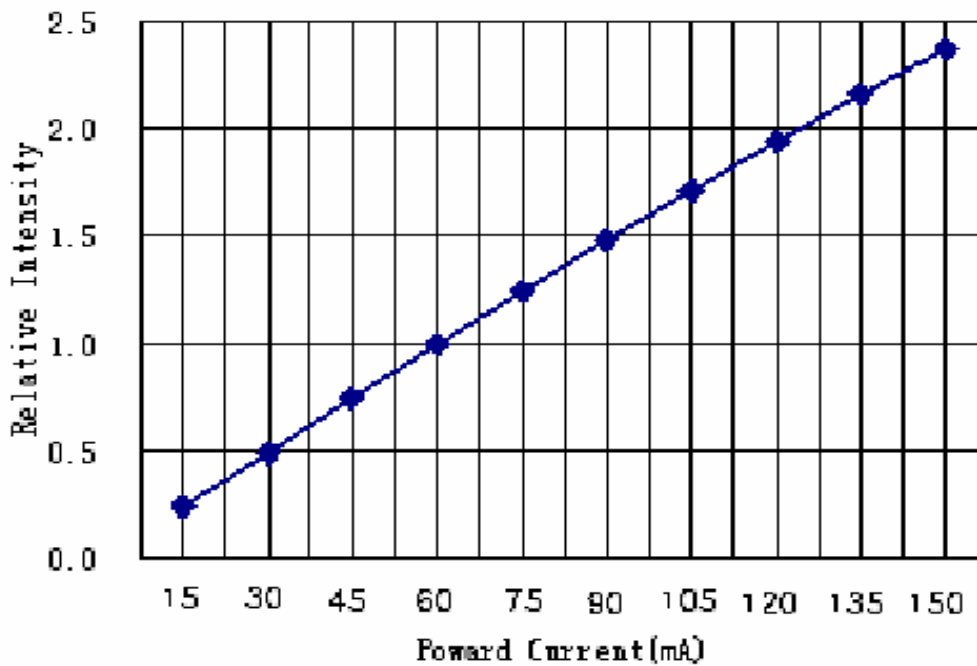
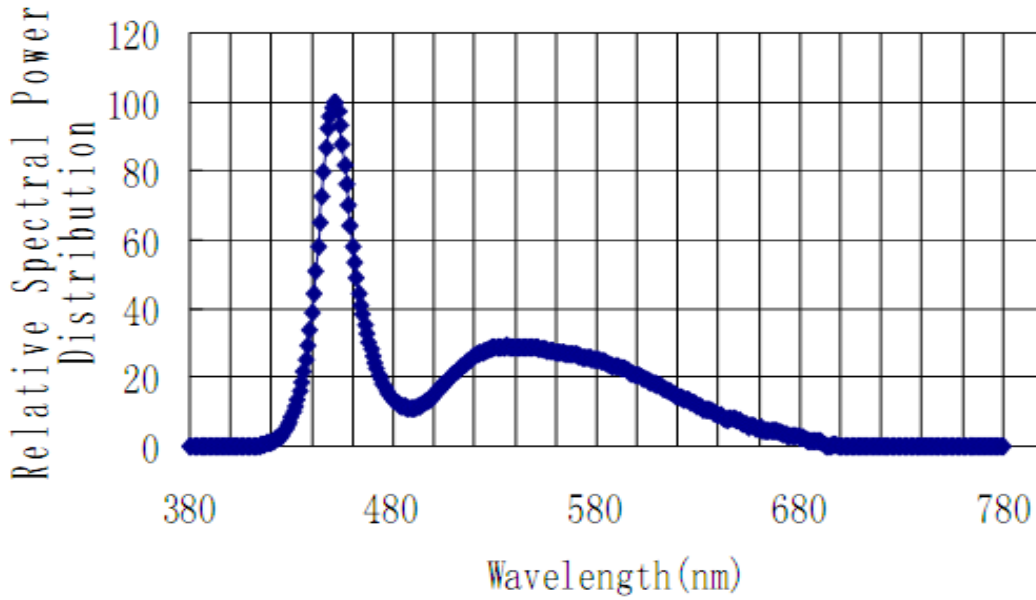
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Typical Electrical/ Optical Characteristics Curves (Ta=25°C Unless Otherwise Noted)



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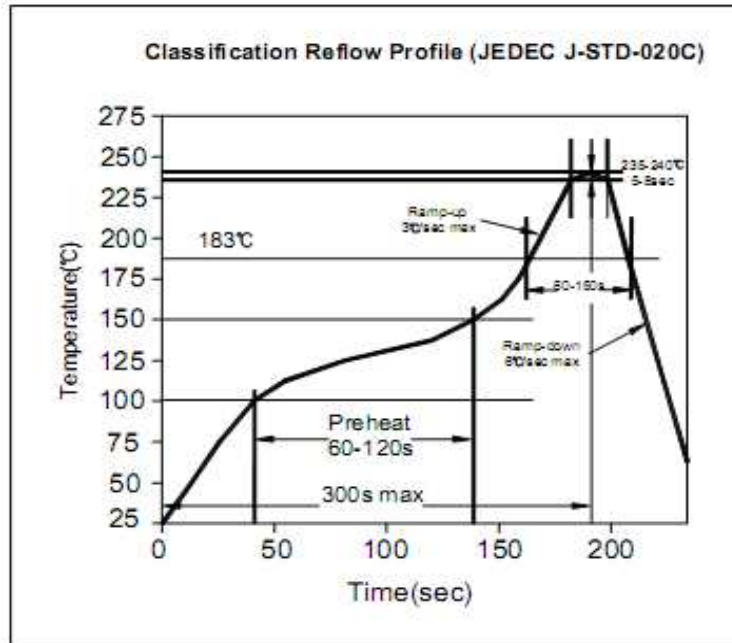
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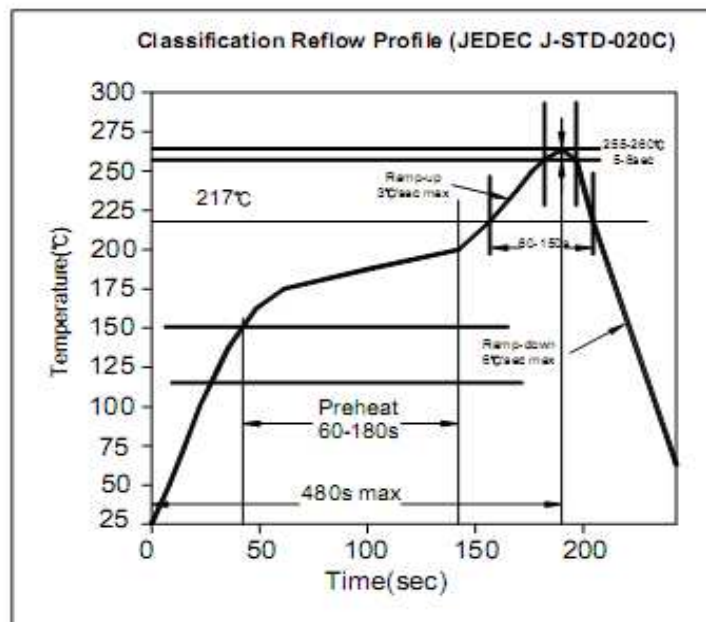


Solder Condition

lead solder



lead free solder



PLCC 6 LED Color White Three Chip	
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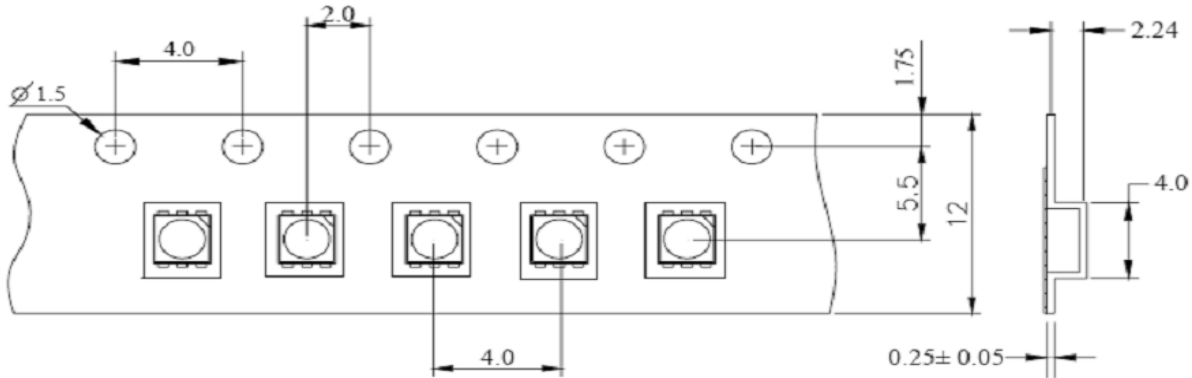
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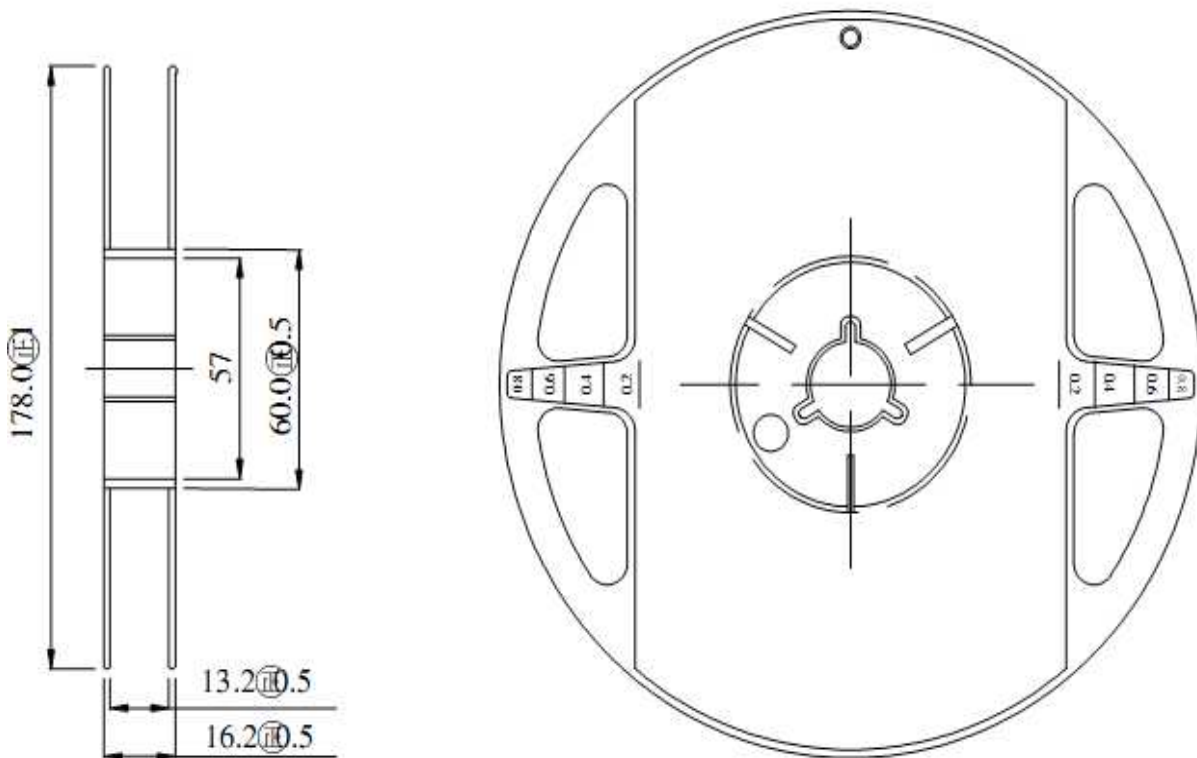
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Packing Specifications:



Reel Specifications



Dimensions are specified as follows: mm

Notes:

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

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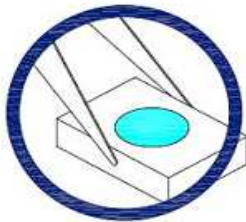




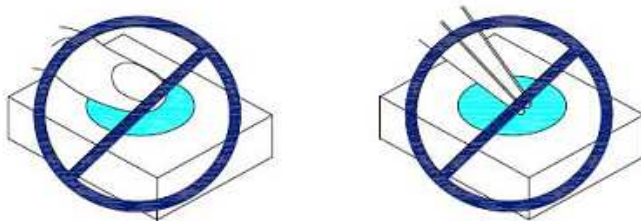
Handling Precautions

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.

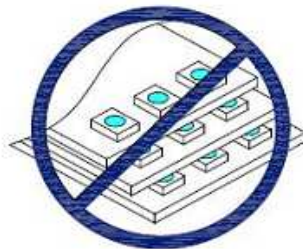
1. Handle the component along the side surfaces by using forceps or appropriate tools.



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.

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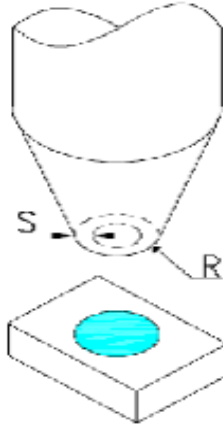
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5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.

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.



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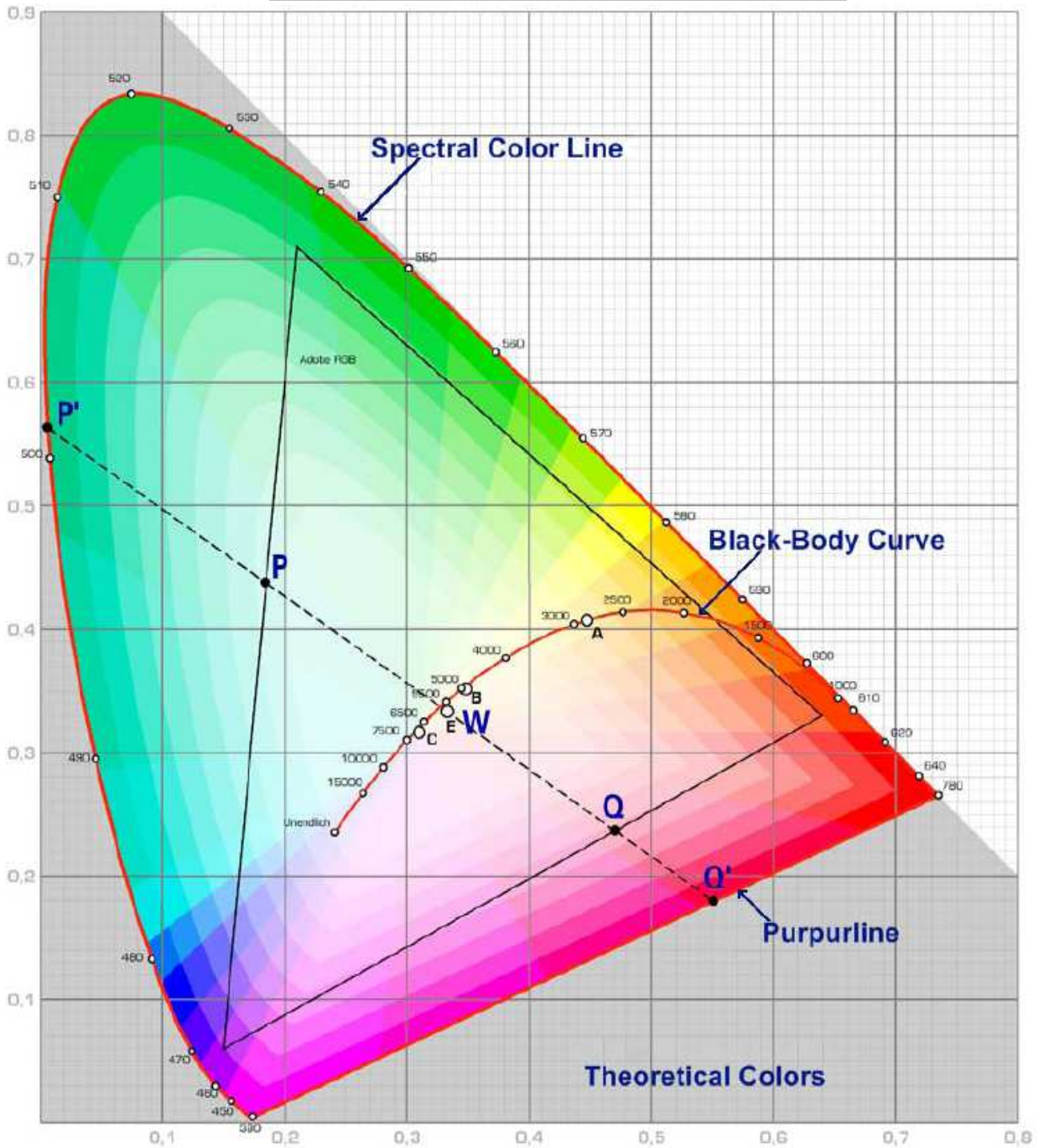
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Color table curve



PLCC 6 LED Color White Three Chip	
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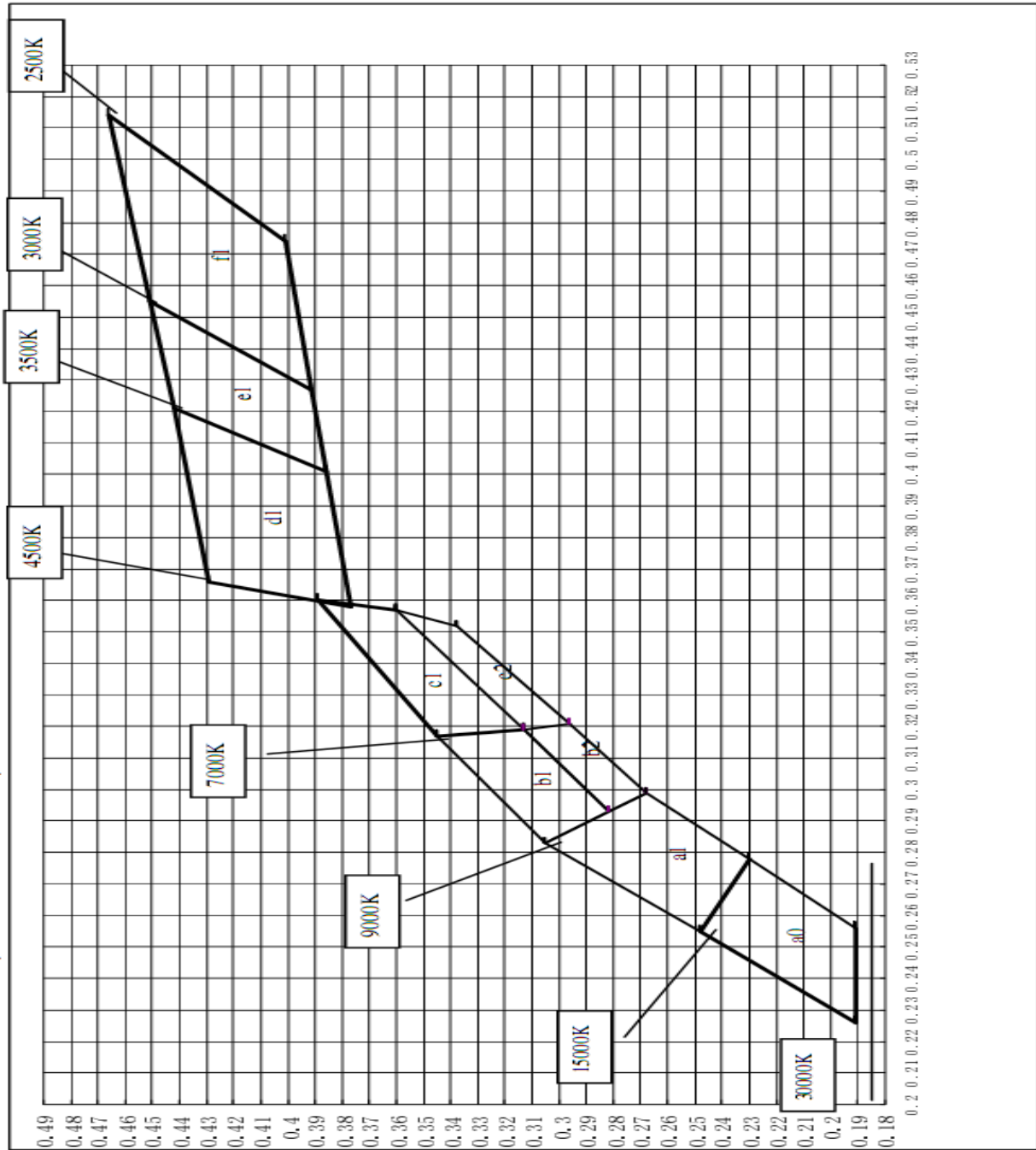
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Chromaticity Coordinates Specifications and BIN Grading



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Chromaticity Coordinates Specifications and BIN Grading

Color Ranks

		a0				a1				b1				b2					
X	0.256	0.226	0.255	0.278	X	0.278	0.255	0.283	0.299	X	0.319	0.293	0.283	0.317	X	0.321	0.299	0.293	0.319
Y	0.191	0.191	0.248	0.23	Y	0.23	0.248	0.305	0.268	Y	0.313	0.282	0.305	0.345	Y	0.296	0.268	0.282	0.313
		c1				c2				d1				e1					
X	0.319	0.317	0.36	0.357	X	0.352	0.321	0.319	0.357	x	0.401	0.358	0.366	0.421	x	0.427	0.401	0.421	0.455
Y	0.313	0.345	0.389	0.36	Y	0.338	0.296	0.313	0.36	y	0.386	0.377	0.429	0.442	y	0.391	0.386	0.442	0.451
		f1								..				..
x	0.474	0.427	0.455	0.514						..	..	..	..	..	..	..	..	..	..
y	0.401	0.391	0.451	0.466						..	..	..	..	..	..	..	..	..	..

Notes:

Group	Customer Ranks	Factory code	TC(K)
1	f1	IJ4-7	2500-3000
2	e1	K4-7	3000-3500
3	d1	LM4-7	3500-4500
4	c1	CDEF9-b	4500-7000
5	b1	CDEF7-9	7000-9000
6	a1	CDEF4-7	9000-15000

**PLCC 6 LED Color White
Three Chip**

Part No.: **M11A5005**

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