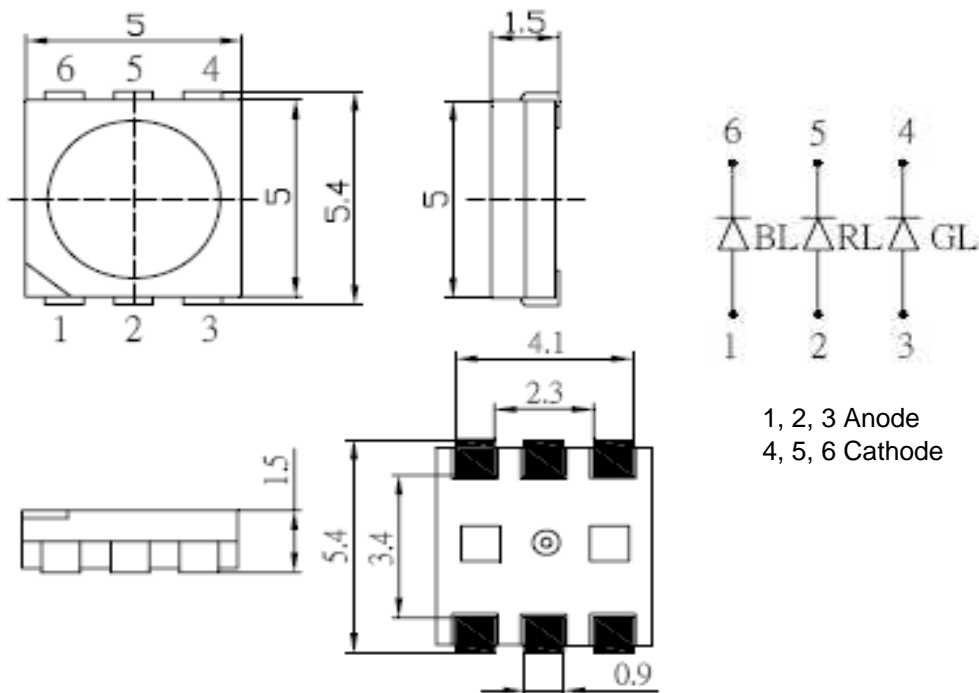


Applications

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

Technical Drawing



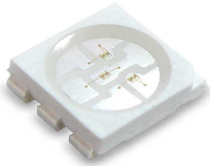
1, 2, 3 Anode
 4, 5, 6 Cathode

Notes :

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

SMT Top View LED	
Red	Green
Part No.: M11A6004	
Customer:	

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	1 from 9



Absolute Maximum Ratings

Item	Symbol	Red	Green / Blue	Unit
Power Dissipation	P _D	182	180	mW
DC Forward Current	I _F	70	50	mA
Pulsed Forward Current	I _{FP} *	120	120	mA
Reverse Voltage	V _R	5		V
Operating Temperature	T _{OP}	-30 ~ 85		°C
Storage Temperature	T _{ST}	-40 ~ 100		°C

* 0.1 msec pulse, 10% duty cycle

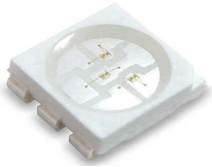
Electrical / Optical Characteristics

Ermitting Color	Red		Green		Blue	
Material	---		---		---	
Forward Voltage	typ.	2.1	3.1	3.1	V _F	
	max.	2.6	3.6	3.6	V _F	
Wavelength typ.	λ _D	620 ~ 630	525 ~ 535	465 ~ 475	nm	
	λ _P	---	---	---	nm	
	Δλ	---	---	---	nm	
Color Temperature	min.	---	---	---	K	
	max.	---	---	---	K	
Luminous Intensity *	min.	500	1120	220	mcd	
	typ.	750	1560	400	mcd	
Reverse Current	max.	---			μA	
Viewing Angle	2Θ1/2	120				

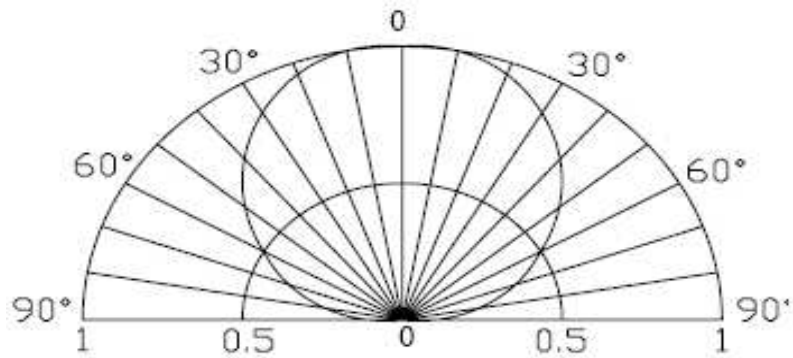
* Per NIST standards

SMT Top View LED			
Red	Green	Blue	
Part No.:			M11A6004
Customer:			

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	2 from 9

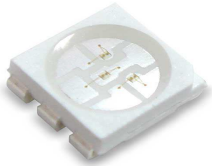


Directive Characteristics

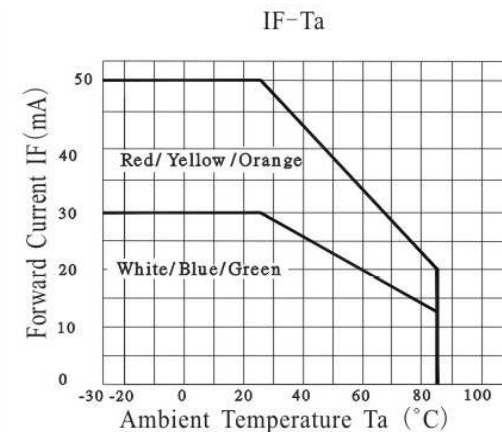
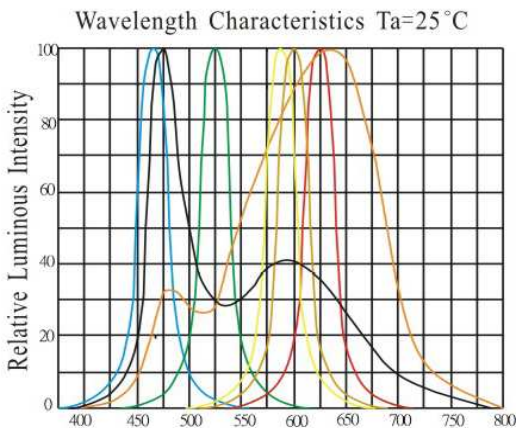
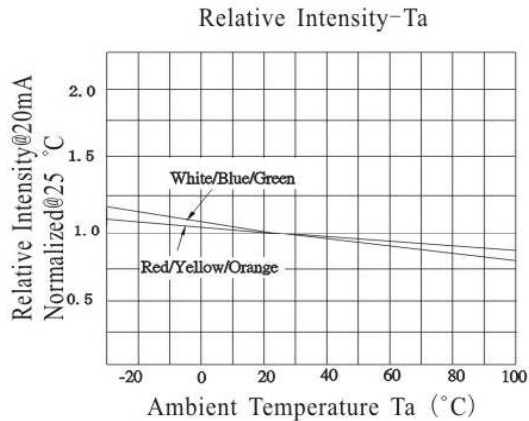
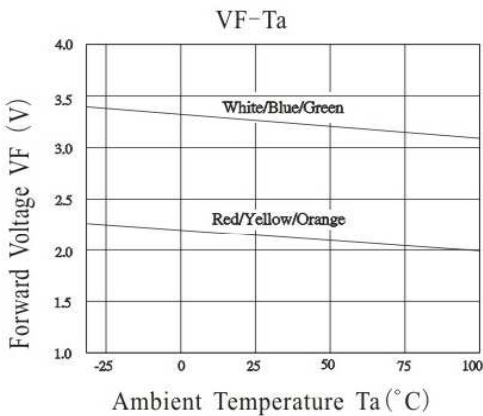
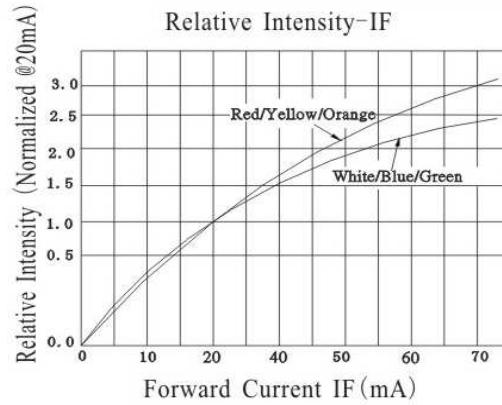
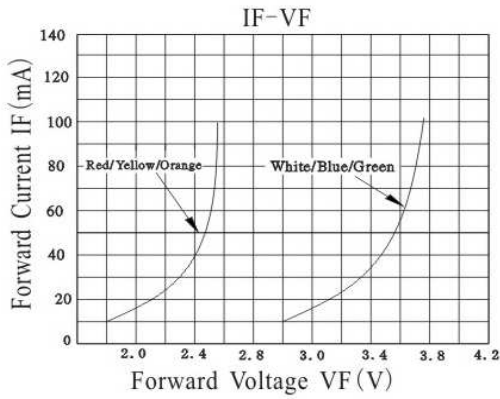


SMT Top View LED	
<i>Red</i>	<i>Green</i>
<i>Blue</i>	
Part No.:	M11A6004
Customer:	

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	3 from 9

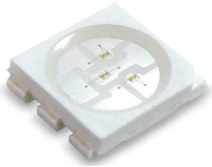


Typical Characteristics



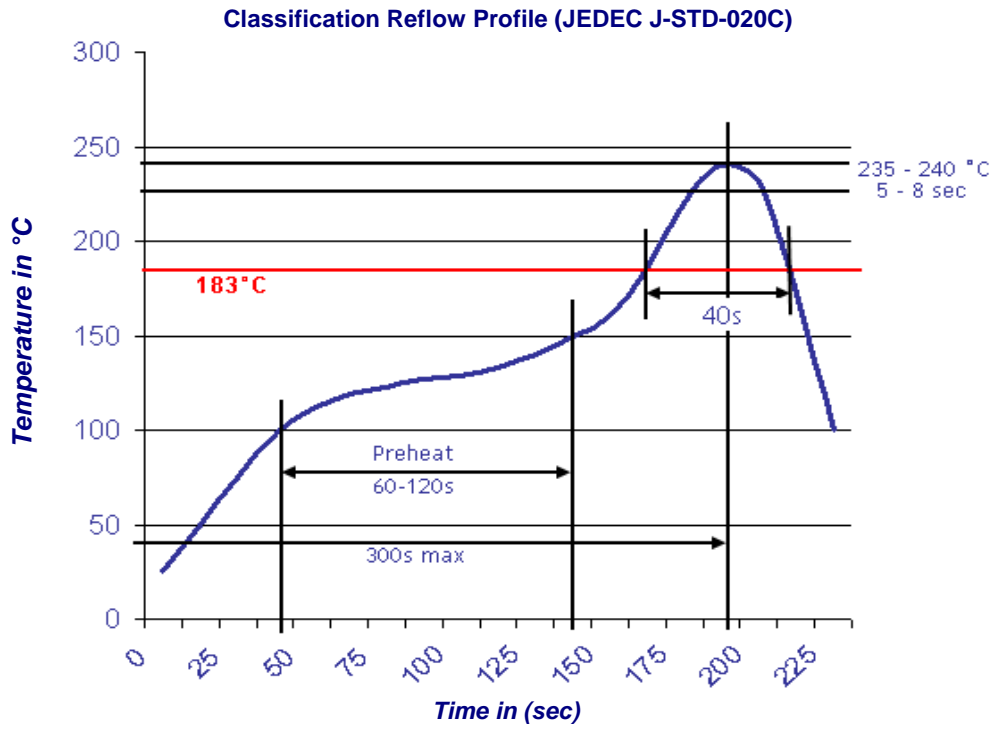
SMT Top View LED			
Red	Green	Blue	
Part No.:			M11A6004
Customer:			

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	4 from 9



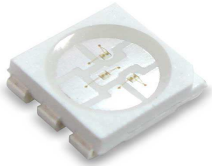
Solder Condition

Lead Free Solder

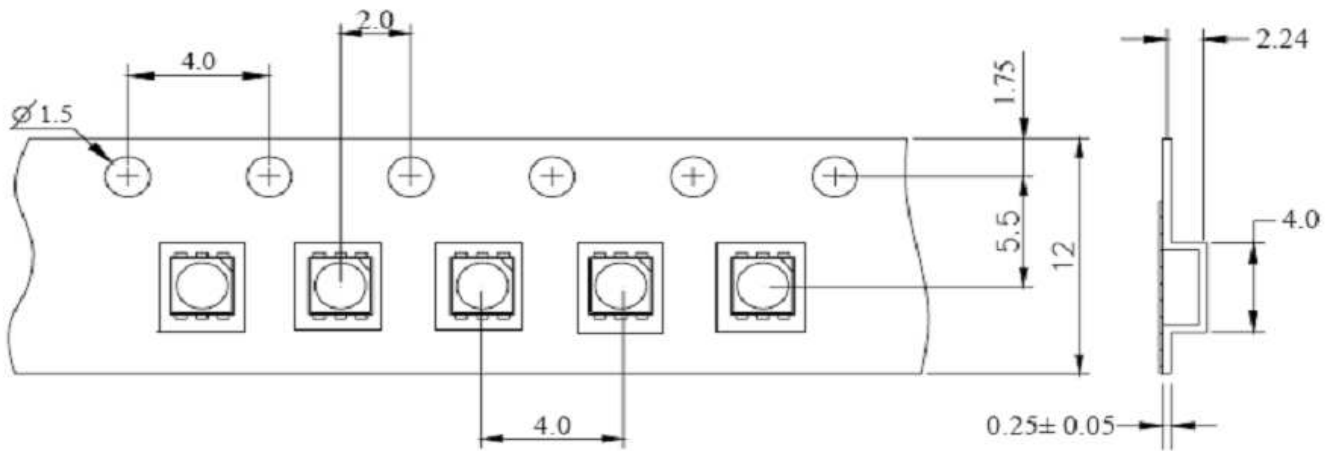


SMT Top View LED		
<i>Red</i>	<i>Green</i>	<i>Blue</i>
Part No.:		M11A6004
Customer:		

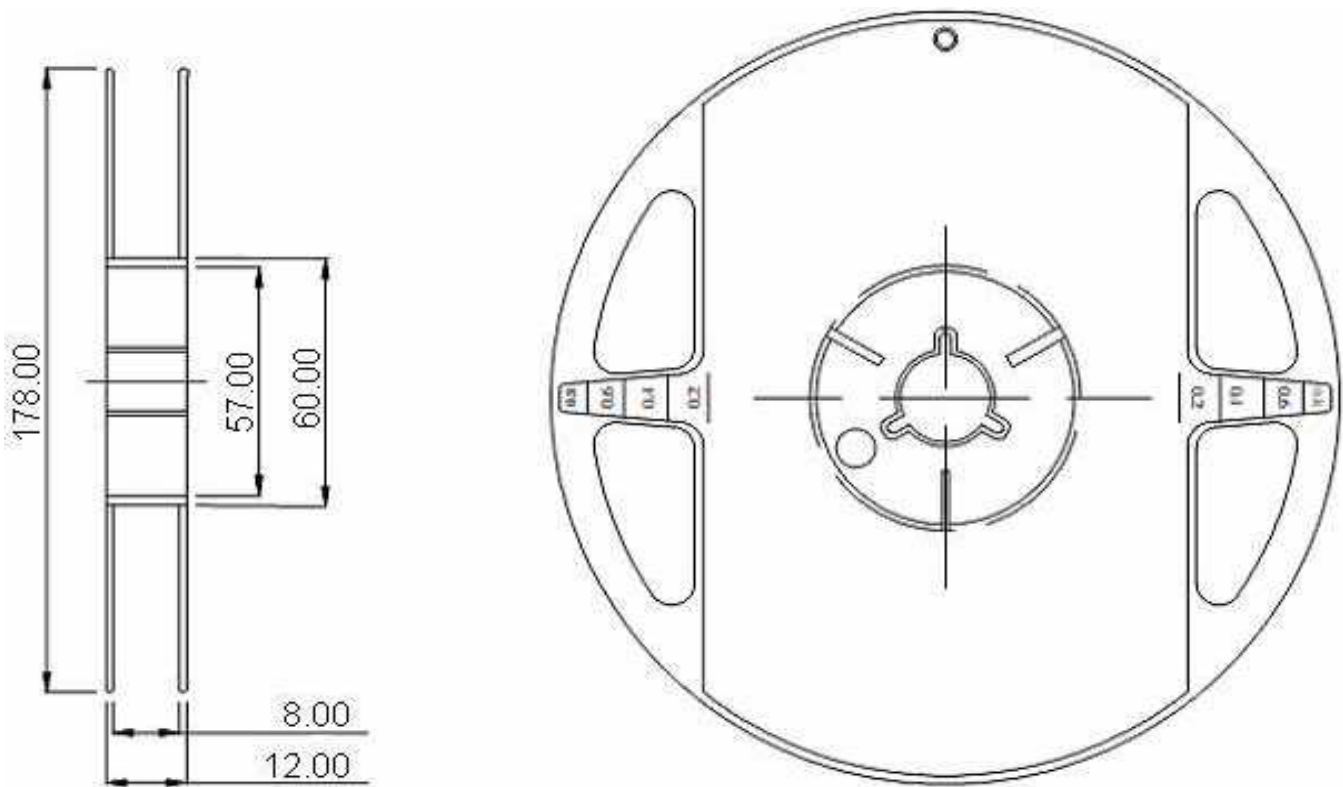
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	5 from 9



Packing Specifications

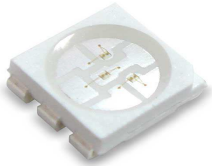


Reel Specifications



SMT Top View LED		
<i>Red</i>	<i>Green</i>	<i>Blue</i>
Part No.:		M11A6004
Customer:		

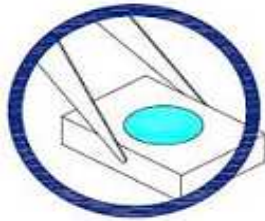
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	6 from 9



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 lead 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.

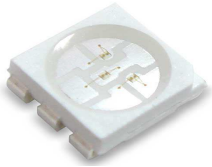


3. Do not stack together assembled PCBs containing exposed LEDs. Outside impact may scratch the silicone lens or damage the internal circuitry.

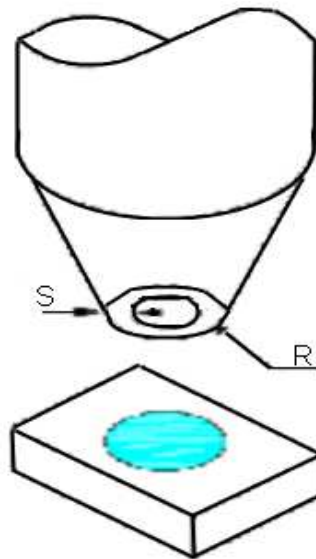


SMT Top View LED			
<i>Red</i>	<i>Green</i>	<i>Blue</i>	
Part No.:			M11A6004
Customer:			

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	7 from 9

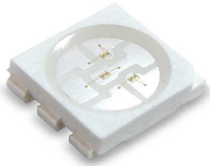


4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible.
5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.
6. The dimensions of the component must be accurately programmed in the pick-and-place machine to insure precise pickup and avoid damage during production.

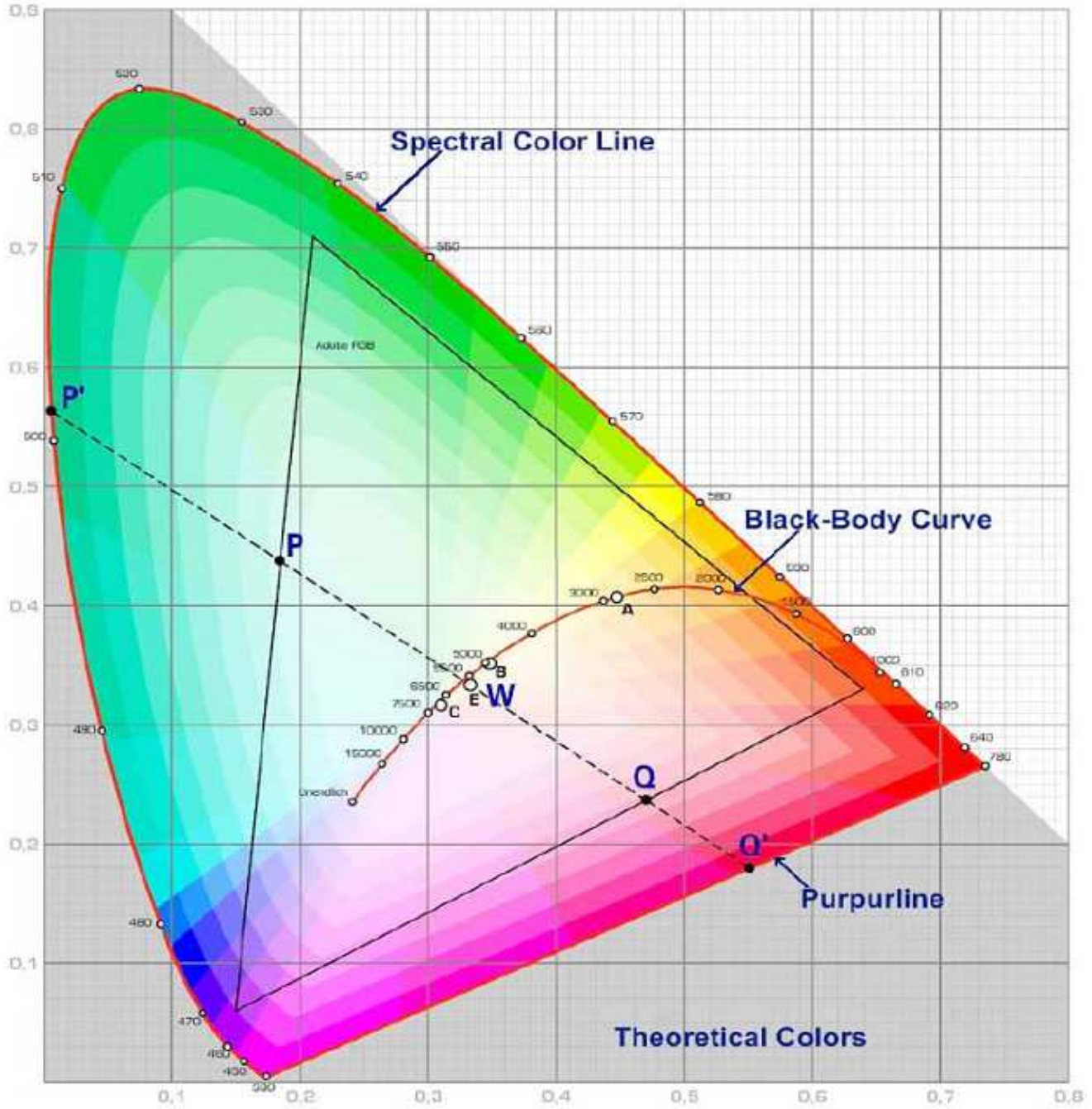


SMT Top View LED	
<i>Red</i>	<i>Green</i> <i>Blue</i>
Part No.:	M11A6004
Customer:	

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	8 from 9



Color table curve



SMT Top View LED		
Red	Green	Blue
Part No.:		M11A6004
Customer:		

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	22.06.2010
APPD:	Ping			FINISH	Hui	Sheet	9 from 9

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