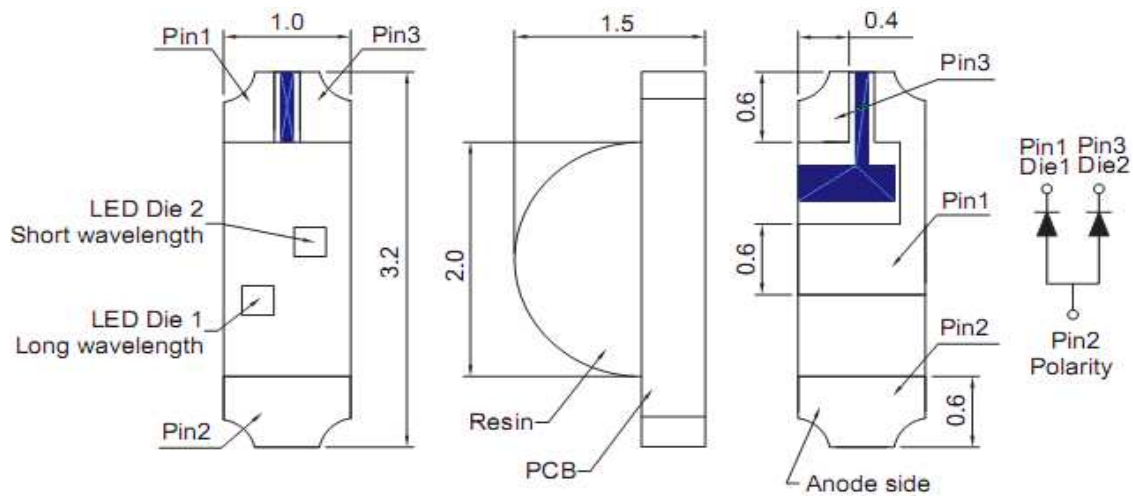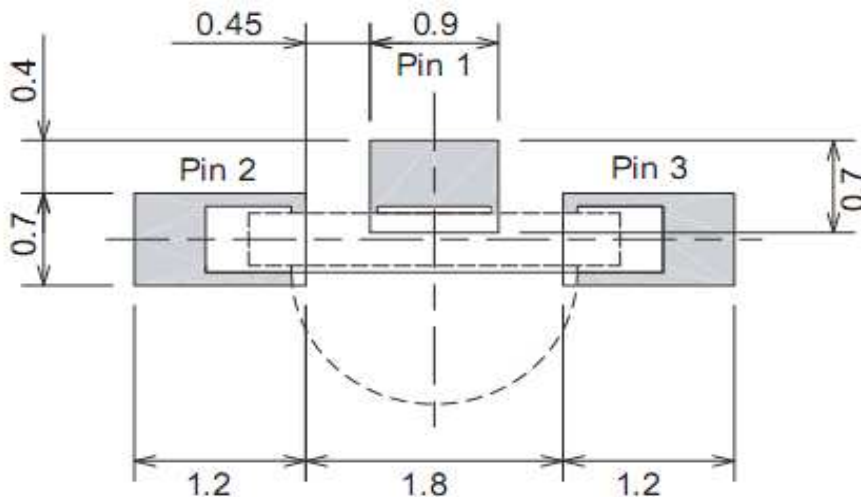## Applications

- 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 Side View LED
Orange   *Blue*

Part No.:	**M11L9007**
Customer:	

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	1 from 9

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REACH RoHS Lead Free

Absolute Maximum Ratings Ta=25°C

Item	Symbol	AlInGaP	InGaN	Unit
Power Dissipation	P_D	72	78	mW
DC Forward Current	I_F	30	20	mA
Plused Forward Current	I_{FP}*	100	80	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		Orange	Blue	
Material		AlInGaP	InGaN	
Forward Voltage	typ.	1.9	3.3	V_F
	max.	2.4	3.9	V_F
Wavelength typ.	λD	622	470	nm
	λP	636	468	nm
	Δλ	17	40	nm
Color Temperature	min.	---	---	K
	max.	---	---	K
Luminous Intensity *	min.	56	36	mcd
	typ.	120	60	mcd
Reverse Current	max.	---		µA
Viewing Angle	2Θ1/2	x = 140 y = 120		

* Per NIST standards

SMT Side View LED		
Orange		*Blue*
Part No.:	**M11L9007**	
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DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	2 from 9

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Directive Characteristics
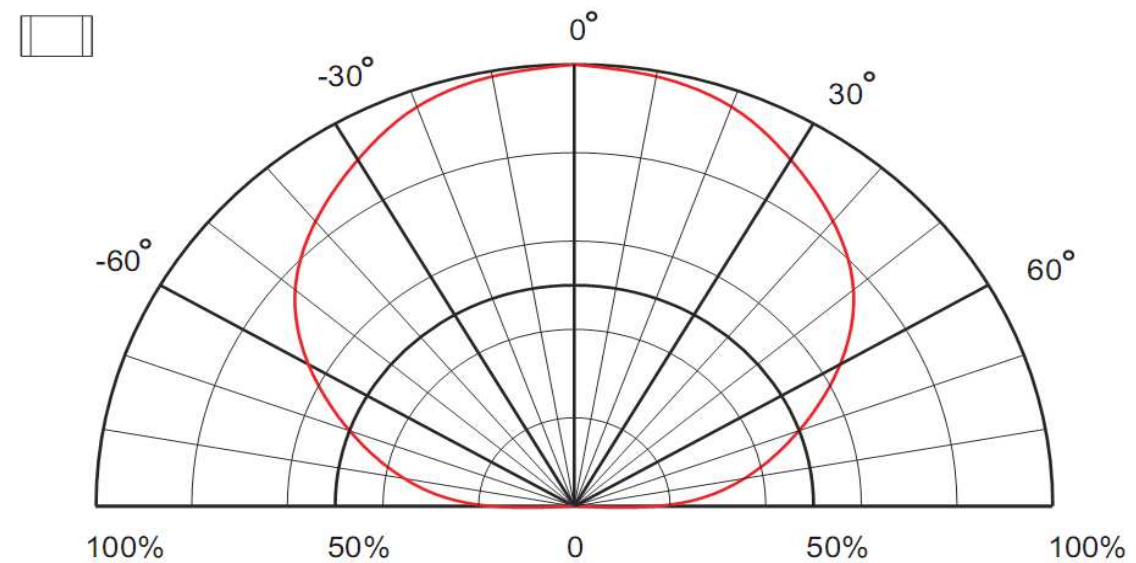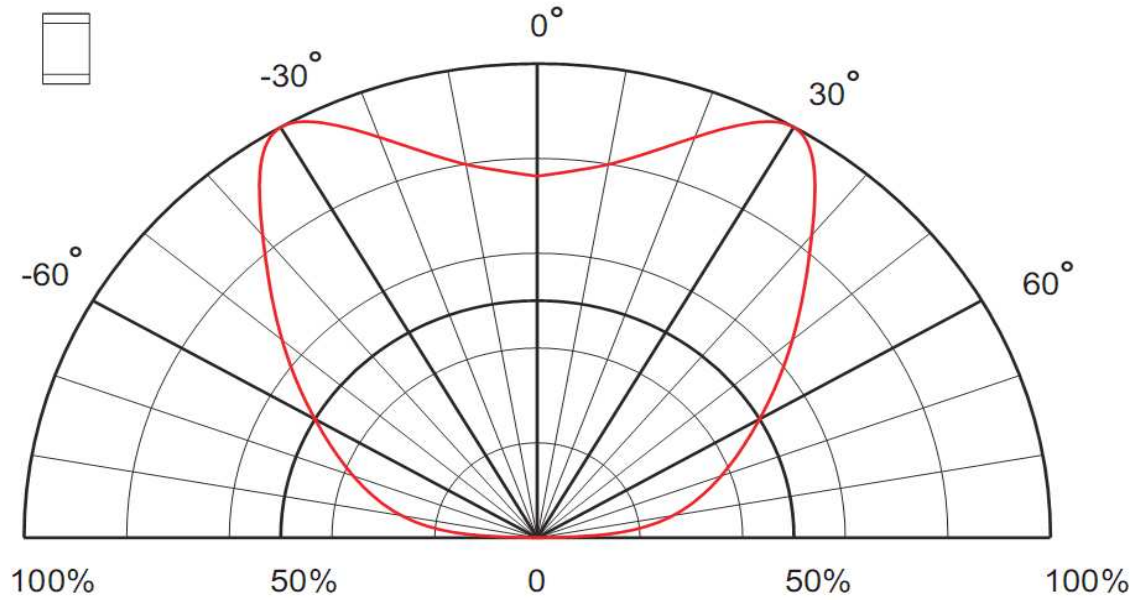
		SMT Side View LED		
		Orange		*Blue*
	Part No.:		**M11L9007**	
	Customer:			

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	3 from 9
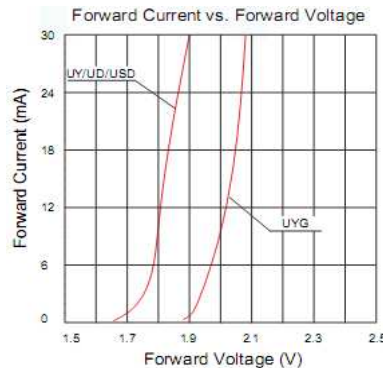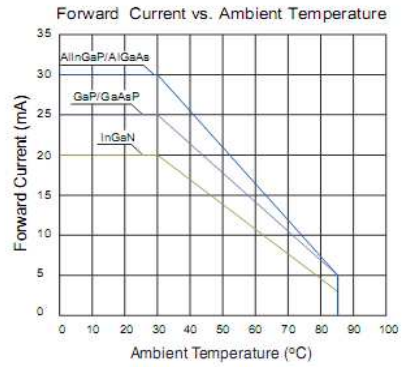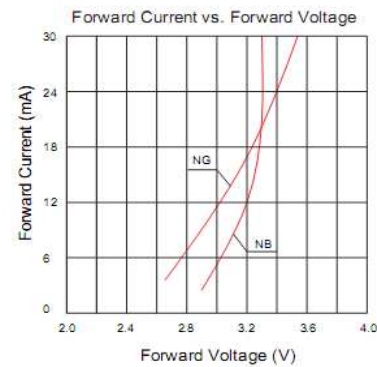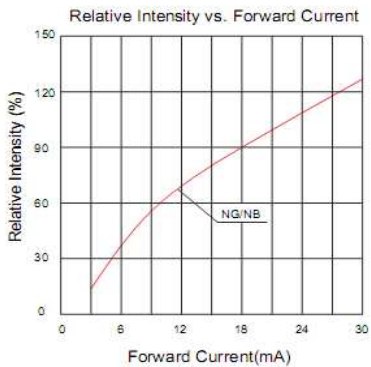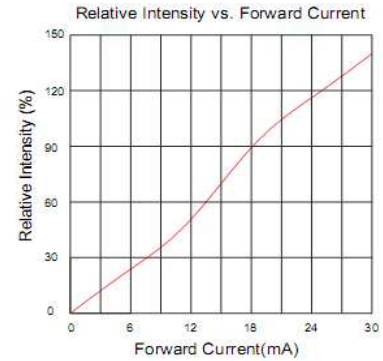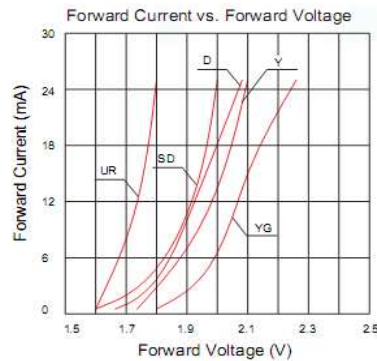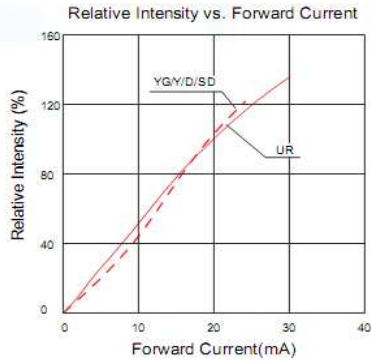
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Curvs

Relative Intensity vs. Forward Current

YG/Y/D/SD

UR

Forward Current vs. Forward Voltage

D   V

UR   SD

YG

Relative Intensity vs. Forward Current

Relative Intensity vs. Forward Current

NG/NB

Forward Current vs. Forward Voltage

NG

NB

Forward Current vs. Ambient Temperature

AlInGaP/AlGaAs

GaP/GaAsP

InGaN

Forward Current vs. Forward Voltage

UY/UD/USD

UYG

					SMT Side View LED		
					Orange		***Blue***
					Part No.:	**M11L9007**	
					Customer:		
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	4 from 9

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Solder Condition

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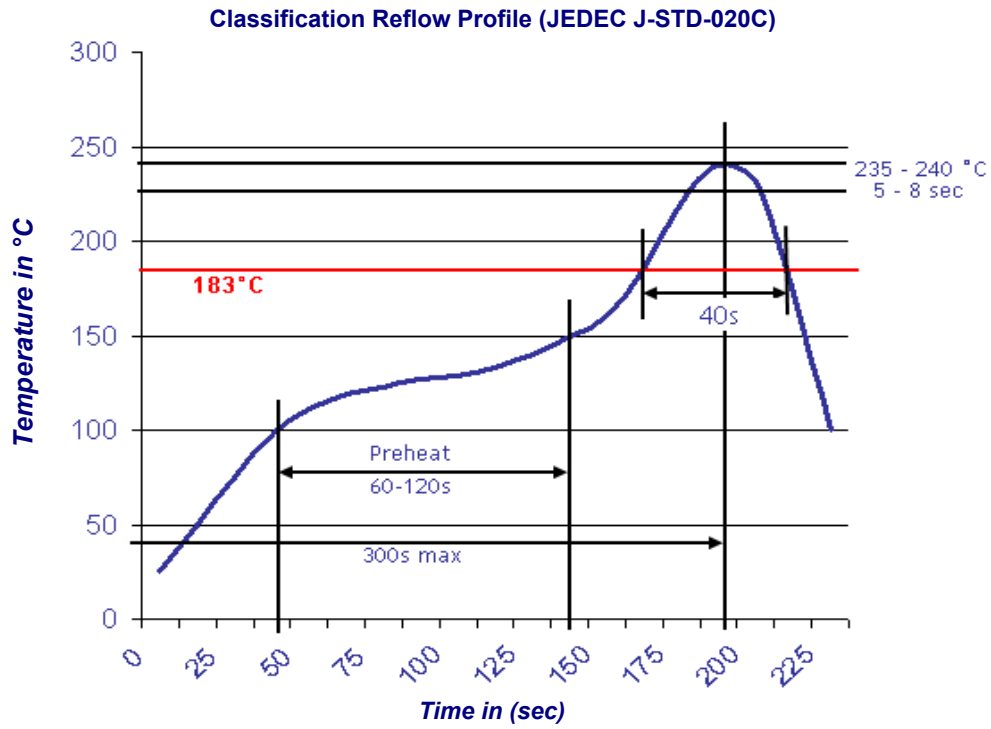
Classification Reflow Profile (JEDEC J-STD-020C)

Temperature in °C (y-axis: 0 to 300)

183°C

235 - 240 °C
5 - 8 sec

40s

Preheat
60-120s

300s max

Time in (sec) (x-axis: 0 to 225)

	SMT Side View LED	
	Orange	*Blue*
	Part No.:	**M11L9007**
	Customer:	

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	5 from 9

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Packing Specifications
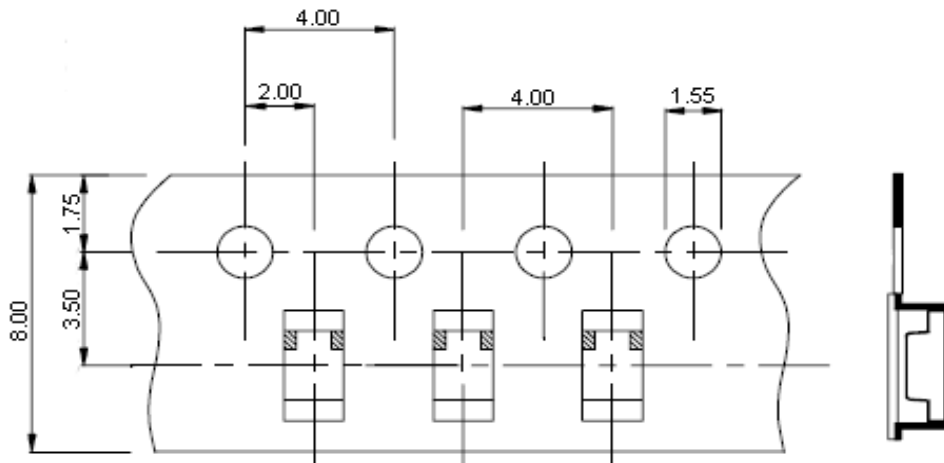
Reel Specifications
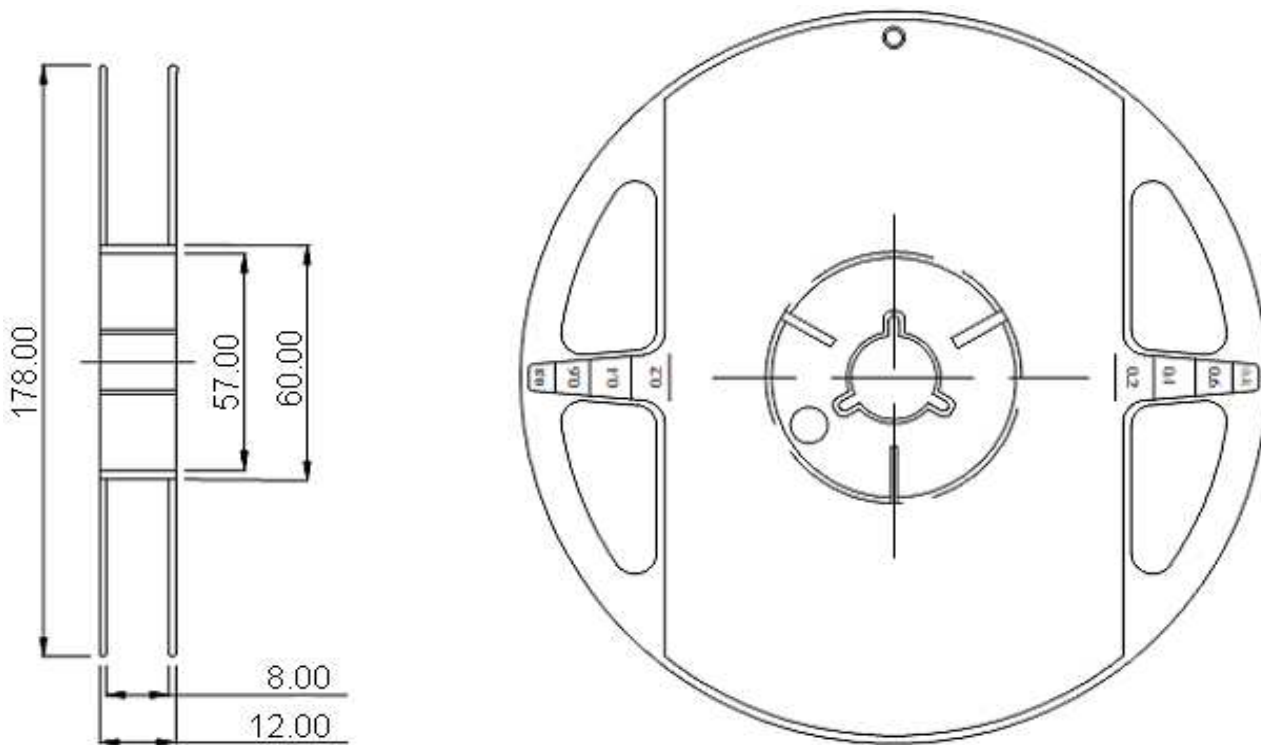
	SMT Side View LED	
	Orange	*Blue*
Part No.:	**M11L9007**	
Customer:		

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	6 from 9

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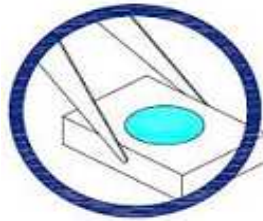
2. Do not directly touch or handle the silicone lens surfance. It may damage the
   internal circuitry.

3. Do not stack together assembled PCBs containing exposed LEDs. Outside impact
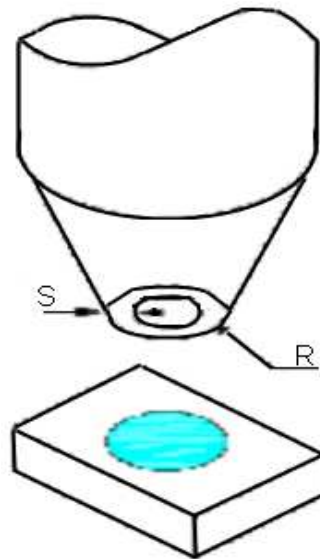   may scratch the silicone lens or damage the internal circuitry.
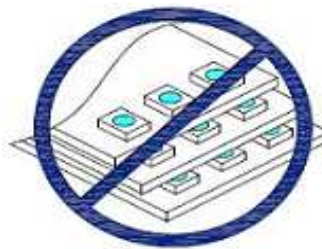
SMT Side View LED		
Orange		*Blue*
Part No.:		**M11L9007**
Customer:		

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	7 from 9

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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
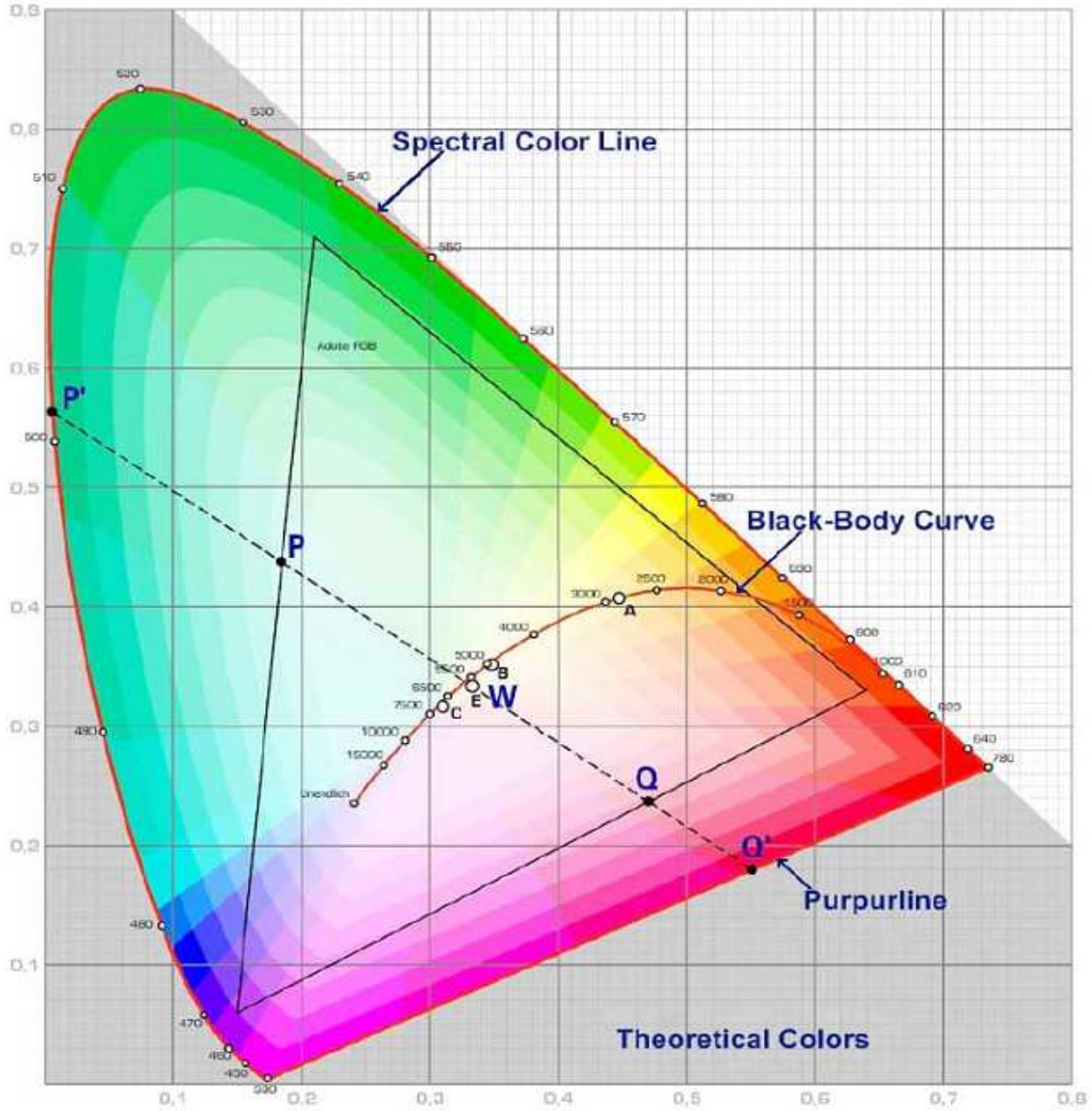   pick-and-place machine to insure precise pickup and avoid damage during production.

	SMT Side View LED	
	Orange	Blue
Part No.:	M11L9007	
Customer:		

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	8 from 9

Color table curve

	SMT Side View LED	
	Orange	*Blue*
Part No.:	**M11L9007**	
Customer:		

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	9 from 9