



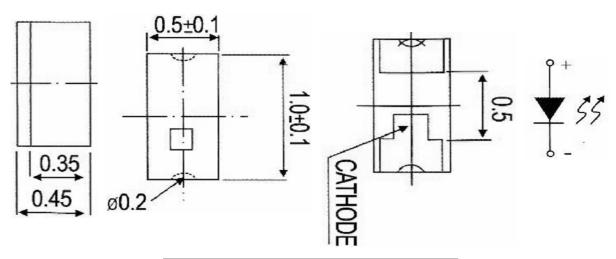




Applications

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

Technical Drawing



Recommended Soldering Pattern

Notes:

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

Chip LED Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	1 from 9









Absolute Maximum Ratings

Ta=25°C

Item	Symbol	AlGalnP	Unit
Power Dissipation	P_{D}		mW
DC Forward Current	I _F	20	mA
Plused Forward Current	I _{FP} *		mA
Reverse Voltage	V_R		V
Operating Temperature	T _{OP}		°C
Storage Temperature	T_{ST}	-55 to 100	°C

^{* 0.1} msec pulse, 10% duty cycle

Electrcal / Optical Characteristics

I_F=20mA Ta=25°C

Ermitting Color		Yellow	
Material		AlGalnP	
Forward Voltage	typ.	2.0	V_{F}
Forward voitage	max.	2.4	V_{F}
Wavelength	λD	589	nm
_	λP		nm
typ.	Δλ		nm
Color Tomporatura	min.		K
Color Temperature	max.		K
Luminous Intensity *	min.	15	mcd
Luminous intensity	typ.	38	mcd
Reverse Current	max.		μΑ
Viewing Angle	2Θ1/2	120	

^{*} Per NIST standards

Chip LED Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	2 from 9

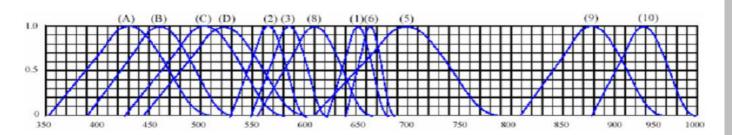








Curve



Wavelength (nm)

Relative Intensity vs Wavelength

(1)	GaAsP / GaAs	(9)	GaAlAs
	655nm Red		880nm
(2)	GaP	(10)	GaAs & GaAlAs
	568nm Yellow Green		940nm
(3)	GaAsP / GaP	(A)	GaN
	585nm Yellow		430nm Blue
(4)	GaAsP / GaP	(B)	InGaN
	635nm Orange & Red		470nm Blue
(5)	GaP	(C)	InGaN
	700nm Red		502nm Green
(6)	GaAlAs / GaAs	(D)	InGaN
	660nm Red		523nm Green
(8)	GaAsP / GaP		

610nm Red

Chip LED Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	3 from 9

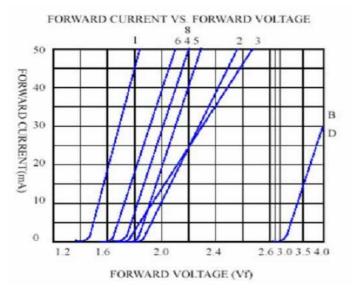


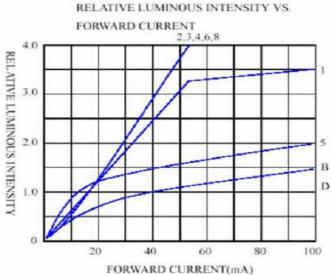




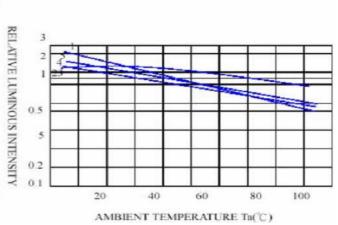


Curve





FORWARD CURRENT VS. AMBIENT TEMPERATURE 50 1 20 40 6 24.8 A 3 5 10 AMBIENT TEMPERATURE Ta(°C)



Chip LED Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	4 from 9



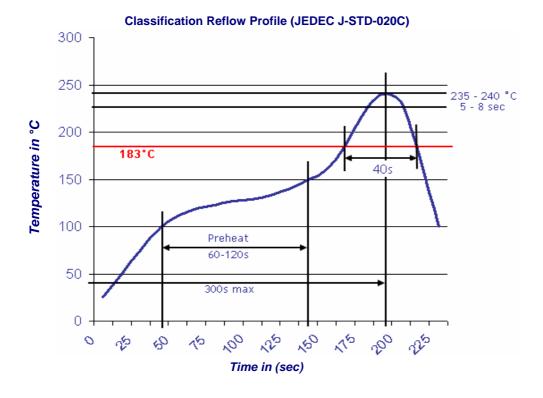






Solder Condition

Lead Free Solder



Chip	LED
Yell	low

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	5 from 9

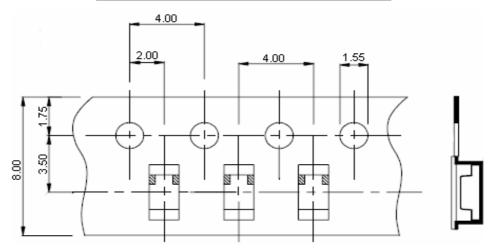




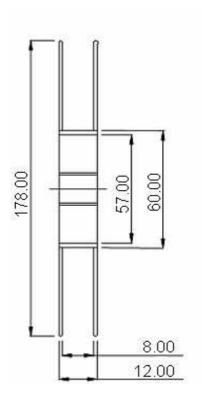


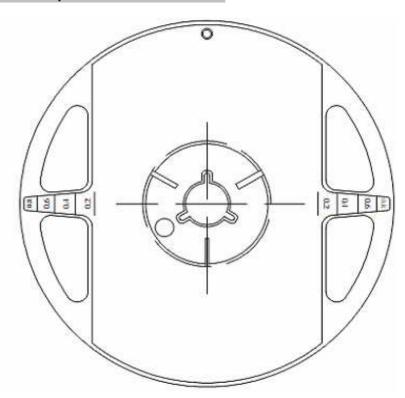


Packing Specifications



Reel Specifications





Chip LED Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	6 from 9





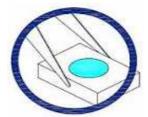




Handling Precautions

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although 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.



Chip LED Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	7 from 9

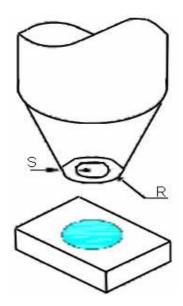








- 4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible.
- 5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.
- 6.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



Chip LED Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	8 from 9

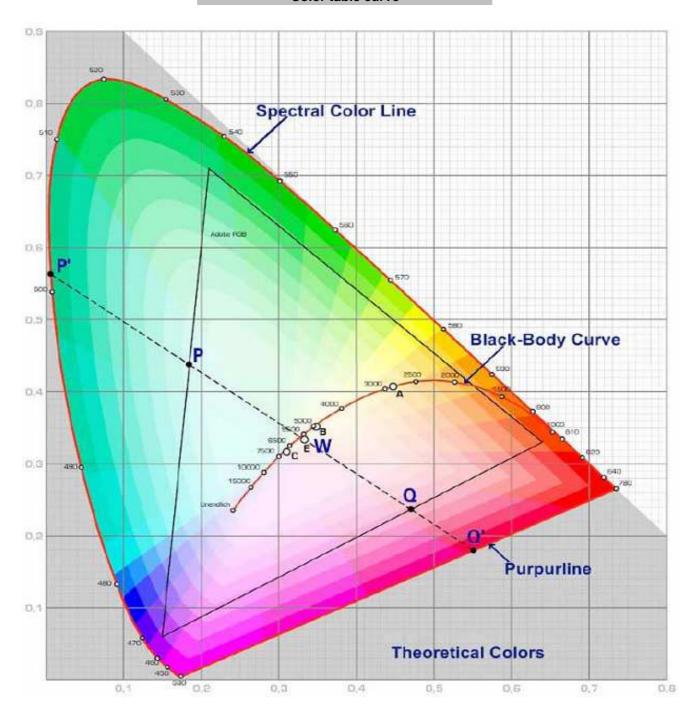








Color table curve



Chip LED
Yellow

Part No.: **M11C9001**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	06.12.2009
APPD:	Ping			FINISH	Hui	Sheet	9 from 9