



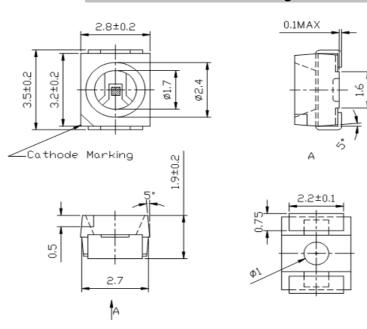




Applications

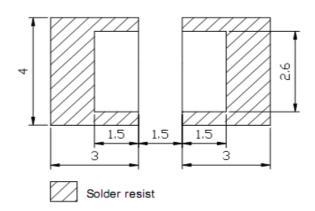
- Interior automotive lighting
 - Optical indicators
- Communication Products
 - Backlighting
 - Toys

Technical Drawing





Recommended Soldering Pattern



Notes:

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

PL	.CC2	?
F	Red	

Part No.: **M11A1056**

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









Absolute Maximum Ratings

Ta=25°C

Item	Symbol		Unit
Power Dissipation	P_{D}	80	mW
DC Forward Current	I _F	30	mA
Plused Forward Current	I _{FP} *	100	mA
Reverse Voltage	V_R		V
Operating Temperature	T _{OP}	-40 to 95	°C
Storage Temperature	T _{ST}	-40 to 100	°C

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

Electrcal / Optical Characteristics

I_F=20mA Ta=25°C

Ermitting Color		Red					
Material							
Forward Voltage	typ.	1.8	V_{F}				
Torward Voltage	max.	2.0	V_{F}				
Wavelength	λD	620	nm				
	λP	625	nm				
typ.	Δλ		nm				
Color Temperature	min.		K				
Color remperature	max.		K				
Luminous Intensity *	min.	230	mcd				
Lummous intensity	typ.	320	mcd				
Reverse Current	max.	10	μA				
Viewing Angle	201/2	120					

^{*} Per NIST standards

Ranks Combination

 $I_F=20mA$

Rank	P1	P2	Q1	
Luminous Intensity	230~288	288~360	360~450	mcd

PLCC2 Red

Part No.: **M11A1056**

Customer:

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
APPD:	Ping			FINISH	Hui	Sheet	2 from 9

Copyright by EDCON-COMPONENTS

www.edcon-components.com

email: info@edcon-components.com

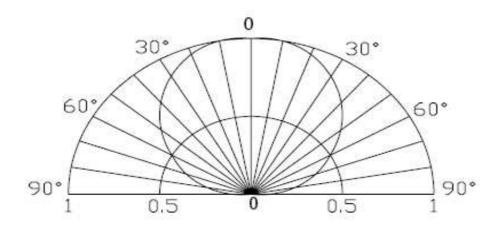








Directive Characteristics



PLCC2 Red

Part No.: **M11A1056**

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

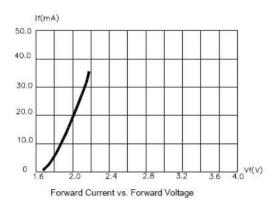


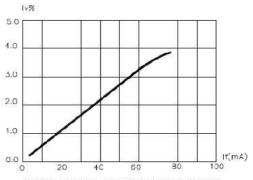




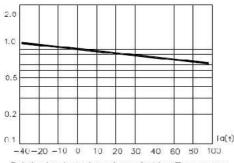


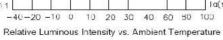
Curvs

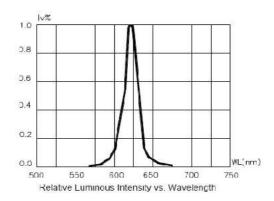


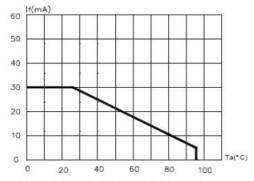


Relative Luminous Intensity vs. Forward Current

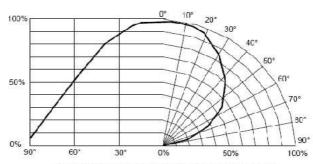








Maximum Forward Current vs.Ambient Temperature



Relative Luminous Intensity vs.Radiation Angle

PLCC2 Red						
Part No.	: M11 /	A1056				
Custome	r:					
Chui	DATE	04.12.2009				
Hui	Sheet	4 from 9				

APPD:	Ping			FINISH	Hui	Sheet	4 from 9		
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009		



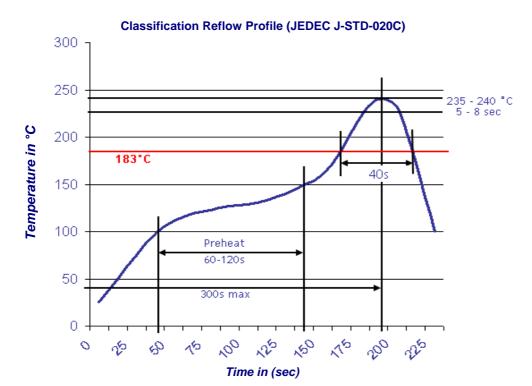






Solder Condition

Lead Free Solder



PLCC2 Red

Part No.: **M11A1056**

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

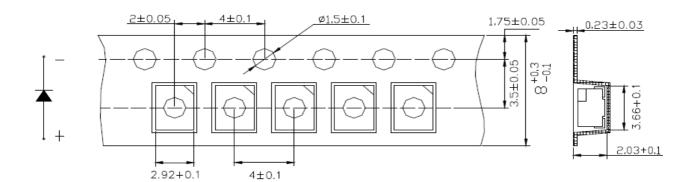




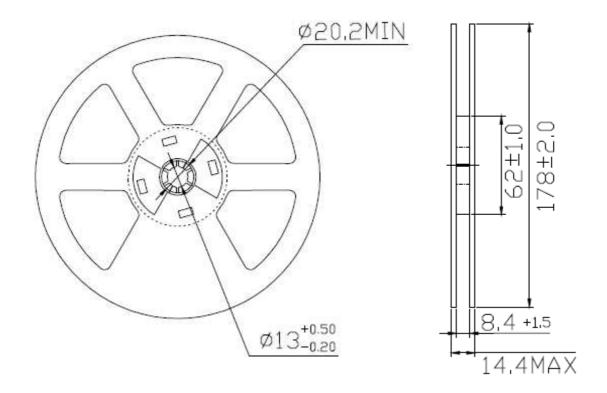




Packing Specifications



Reel Specifications



PLCC2	
Red	

Part No.: **M11A1056**

DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	04.12.2009
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.



PLCC2	
Red	

Part No.: **M11A1056**

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

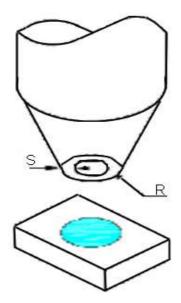








- 4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible.
- 5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.
- 6.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



PLCC2
Red

Part No.: **M11A1056**

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

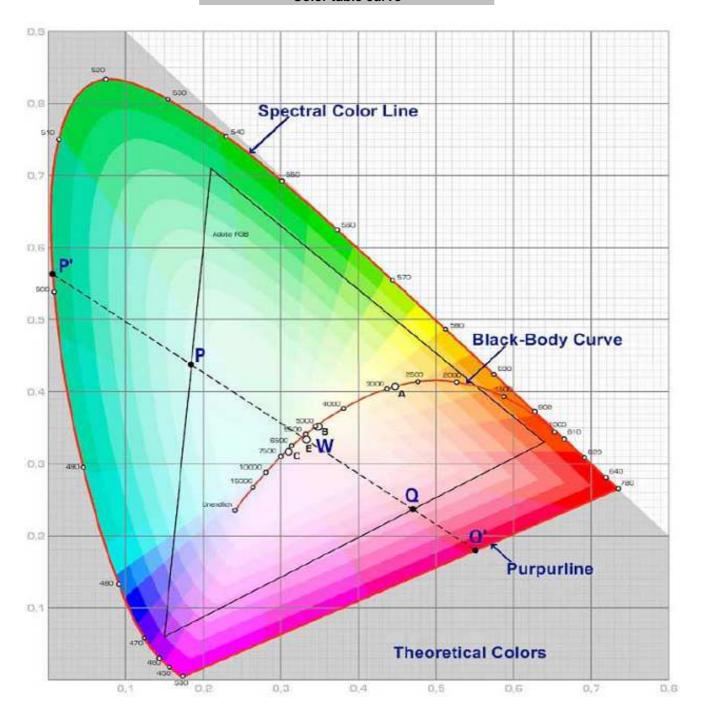








Color table curve



PLCC2 Red				
Part No.: M11A1056				
Custome	er:			
Chui	DATE	04.12.2009		
Hui	Sheet	9 from 9		

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