



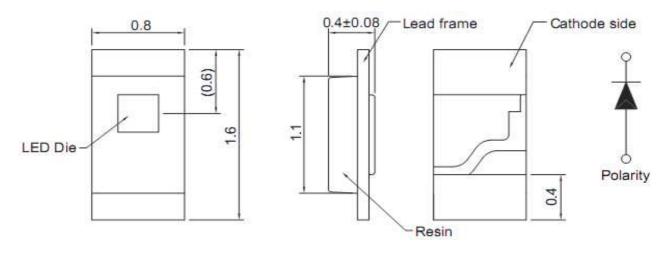
Applications

Interior automotive lighting

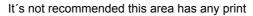
 Optical indicators
 Communication Products
 Backlighting

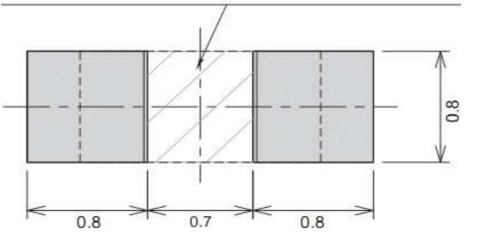
 Toys

Technical Drawing



Recommended Soldering Pattern





Notes	: All dimensions ± 0.1mm unles		SMT Top View LED Amber				
					Part No.	: M110	D8003
					Custome	er:	
DRW:	Wang	CHKD	Wung	MATL:	Chui	DATE	03.12.2009
APPD:	Ping			FINISH	Dia	Sheet	1 from 9

www.edcon-components.com

Copyright by EDCON-COMPONENTS





Absolute Maximum Ratings

Ta=25°C

Item	Symbol	AllnGaP	Unit
Power Dissipation	PD	72	mW
DC Forward Current	I _F	30	mA
Plused Forward Current	I _{FP} *	120	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

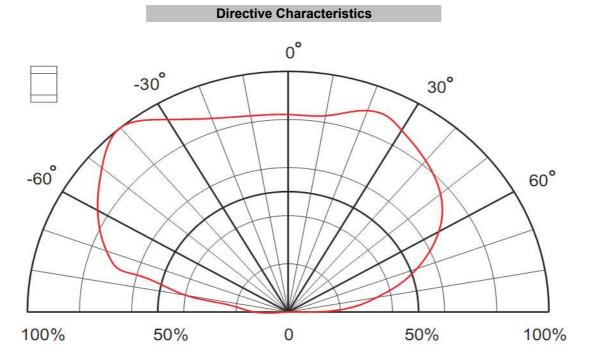
Ermitting Color		Amber			
Material	AllnGaP				
Forward Voltage	typ.	1.9	V _F		
r orward voltage	max.	2.4	V _F		
Wavelength	λD	605	nm		
typ.	λP	609	nm		
	Δλ	17	nm		
Color Temperature	min.		K		
	max.		K		
Luminous Intensity *	min.	50	mcd		
Lummous intensity	typ.	120	mcd		
Reverse Current	max.		μA		
Viewing Angle	2Θ1/2	140			

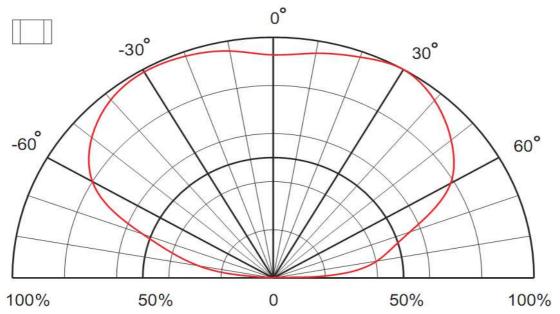
* Per NIST standards

					SN	IT Top View L Amber	.ED
					Part No.	.: M11	D8003
					Custome	er:	
DRW:	Wang	CHKD	Wung	MATL:	Chui	DATE	03.12.2009
APPD:	Ping			FINISH	Dia	Sheet	2 from 9
			Copyright by E	EDCON-COMPC	NENTS		









					SMT Top View LED Amber		
					Part No	.: M110	D8003
					Customer:		
DRW:	Wang	CHKD	Wung	MATL:	Chui	DATE	03.12.2009
APPD:	Ping			FINISH	Dia	Sheet	3 from 9

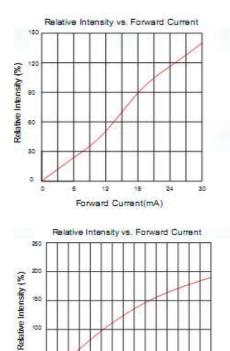
www.edcon-components.com

Copyright by EDCON-COMPONENTS





Curvs



40

Forward Current (mA)

20

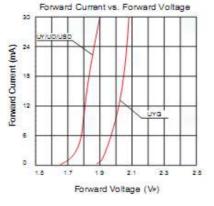
60

100

50

٥ι

0



Forward Current vs. Forward Voltage

10 15 20 25 30 35 40 45 50

Forward Voltage (Vr)

100

90

80

70

60

50 40

30

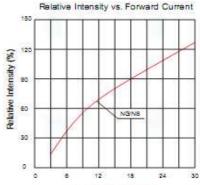
20

10

٥

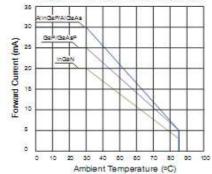
0 05

Forward Current (mA)



Forward Current(mA)





Forward Current vs. Forward Voltage 30 Forward Current (mA) 24 18 NG 12 8 0 2.8 3.2 3.6 4.0 2.0 2.4 Forward Voltage (Vr)

SMT Top View LED Amber
Part No.: M11D8003
Customer:
DRW: Wang CHKD Wung MATL: Chui DATE 03.12.200
APPD: Ping FINISH Dia Sheet 4 from 9

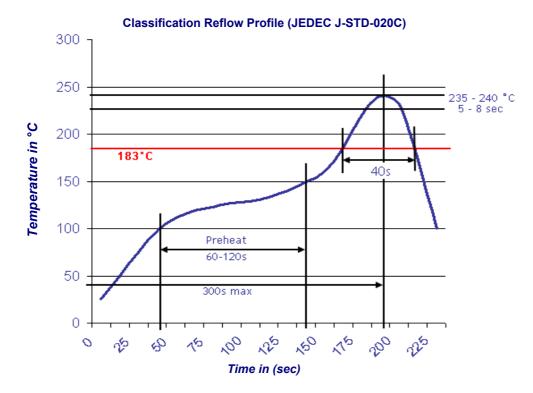
Copyright by EDCON-COMPONENTS





Solder Condition

Lead Free Solder



			SMT Top View LED Amber		
			Part No.: M11D8003		D8003
			Custome	r:	
CHKD	Wung	MATL:	Chui	DATE	03.12.2009
		FINISH	Dia	Sheet	5 from 9

Wang

Ping

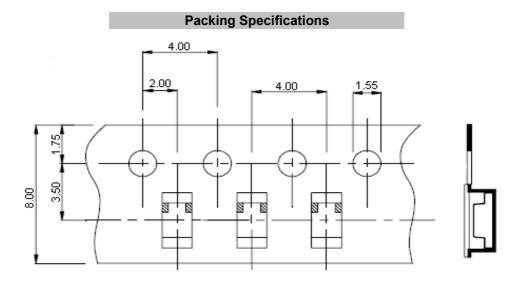
DRW:

APPD:

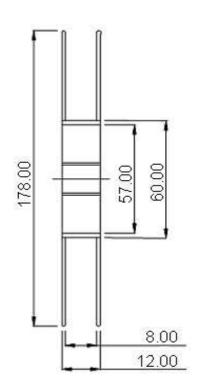
Copyright by EDCON-COMPONENTS

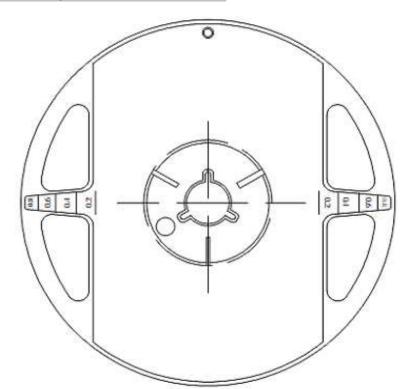






Reel Specifications





					SMT Top View LED Amber		
					Part No.: M11D8003		D8003
					Customer:		
DRW:	Wang	CHKD	Wung	MATL:	Chui	DATE	03.12.2009
APPD:	Ping			FINISH	Dia	Sheet	6 from 9

www.edcon-components.com

Copyright by EDCON-COMPONENTS

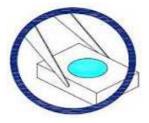




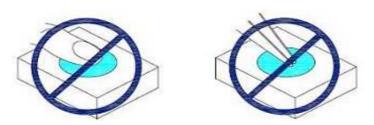
Handling Precautions

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.

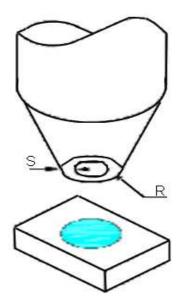


					SM	T Top View I Amber	LED		
					Part No.:	M1 [•]	1D8003		
					Customer				
DRW: Wang CHKD Wung MATL: Chui DATE 03.12.2009									
APPD:	Ping			FINISH	Dia	Sheet	7 from 9		
	Copyright by EDCON-COMPONENTS								





- 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 Amber			
		Part No.: M11D8003			
		Customer:			
Wung	MATL:	Chui DATE		03.12.2009	
	FINISH	Dia	Sheet	8 from 9	

Wang

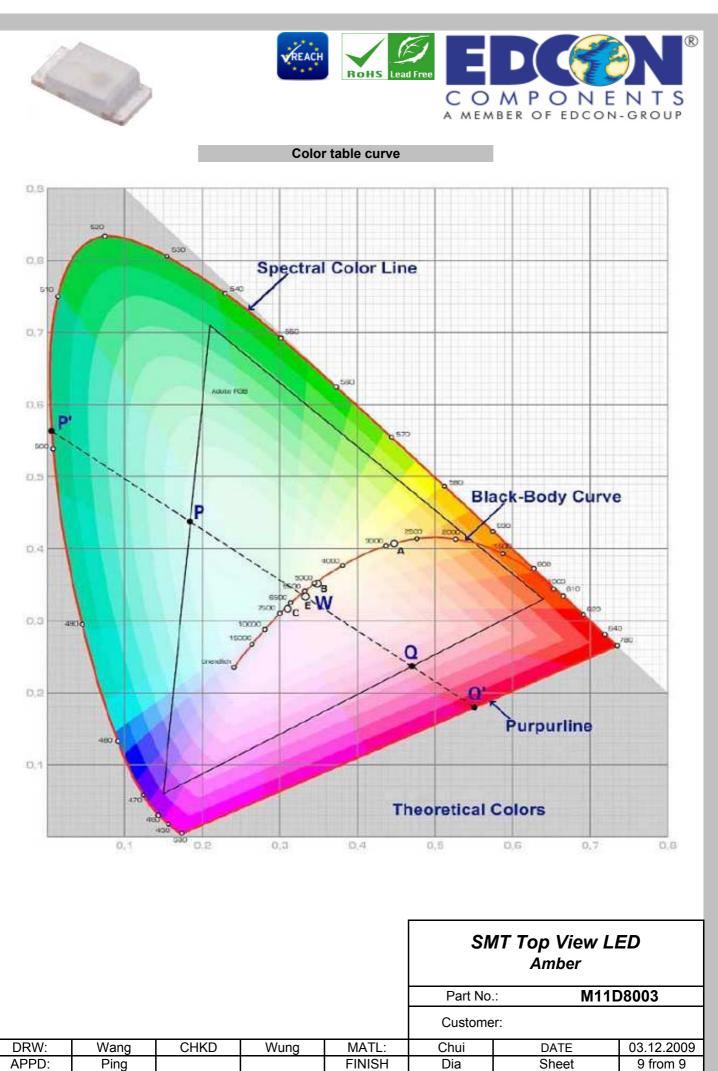
Ping

CHKD

DRW:

APPD:

Copyright by EDCON-COMPONENTS



Copyright by EDCON-COMPONENTS