

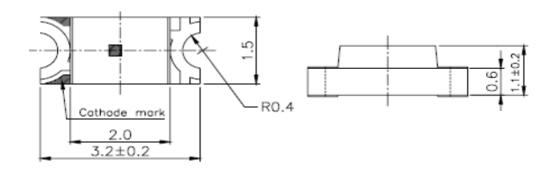


# Applications

Interior automotive lighting

 Optical indicators
 Communication Products
 Backlighting
 Toys

### **Technical Drawing**



## **Recommended Soldering Pattern**

<i>Notes :</i> All dimensions in mm tolerance is ± 0.1mm unless otherwise noted.					SN	SMT Top View LED Blue			
					Part No.	: M110	G1016		
					Custome	er:			
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	21.06.2010		
APPD:	Ping			FINISH	Hui	Sheet	1 from 9		

www.edcon-components.com

Copyright by EDCON-COMPONENTS





## **Absolute Maximum Ratings**

Item	Symbol	InGaN	Unit
Power Dissipation	P <sub>D</sub>		mW
DC Forward Current	I <sub>F</sub>		mA
Plused Forward Current	I <sub>FP</sub> *		mA
Reverse Voltage	V <sub>R</sub>		V
Operating Temperature	T <sub>OP</sub>		°C
Storage Temperature	T <sub>ST</sub>		°C

\* 0.1 msec pulse, 10% duty cycle

## **Electrcal / Optical Characteristics**

 $I_F = 20 \text{mA}$ 

Ermitting Color		Blue				
Material	InGaN					
Forward Voltage	typ.	2.9	V <sub>F</sub>			
Forward voltage	max.	3.5	V <sub>F</sub>			
Wavelength	λD	460	nm			
	λP	470	nm			
typ.	Δλ		nm			
Color Temperature	min.		K			
	max.		K			
Luminous Intensity *	min.	60	mcd			
Lumnous mensity	typ.	80	mcd			
Reverse Current	max.		μA			
Viewing Angle	2Θ1/2	120				

\* Per NIST standards

					SMT Top View LED Blue		
					Part No.: <b>M11G1016</b>		
					Custome	er:	
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	21.06.2010
APPD:	Ping			FINISH	Hui	Sheet	2 from 9
			Copyright by E	EDCON-COMPC	NENTS		

ıyı

ſ





**Directive Characteristics** 

				SMT Top View LED Blue			
				Part No.	: M110	G1016	
				Custome	er:		
Dong	CHKD	Chang	MATL:	Chui	DATE	21.06.2010	
Ping			FINISH	Hui	Sheet	3 from 9	

DRW: APPD:

Copyright by EDCON-COMPONENTS





Curvs

				SMT Top View LED Blue			
				Part No.: <b>M11G1016</b>		G1016	
				Custome	Customer:		
Dong	CHKD	Chang	MATL:	Chui	DATE	21.06.2010	
Ping			FINISH	Hui	Sheet	4 from 9	

www.edcon-components.com

DRW:

APPD:

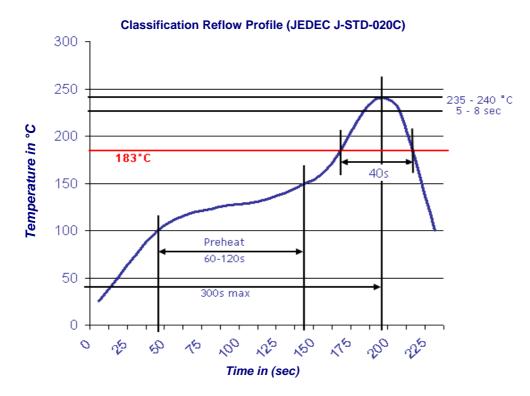
Copyright by EDCON-COMPONENTS





#### **Solder Condition**

### Lead Free Solder



		SMT Top View LED Blue				
		Part No.: <b>M11G1016</b>		1G1016		
		Custome	er:			
Chang	MATL:	Chui	DATE	21.06.2010		
	FINISH	Hui	Sheet	5 from 9		

Dong

Ping

CHKD

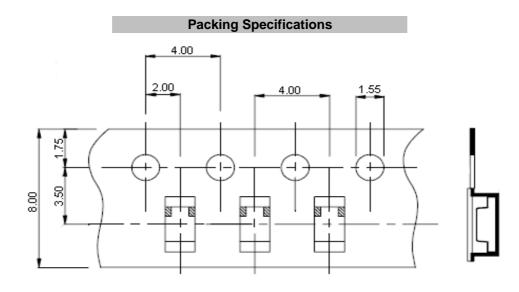
DRW:

APPD:

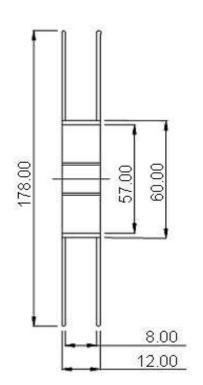
Copyright by EDCON-COMPONENTS

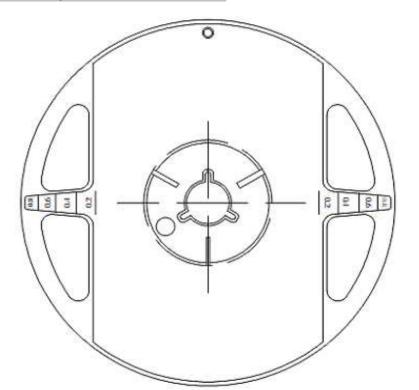






**Reel Specifications** 





					SMT Top View LED Blue		
					Part No.: <b>M11G1016</b>		G1016
					Custome	er:	
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	21.06.2010
APPD:	Ping			FINISH	Hui	Sheet	6 from 9

www.edcon-components.com

Copyright by EDCON-COMPONENTS

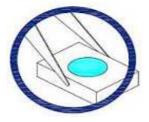




#### Handling Precautions

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.



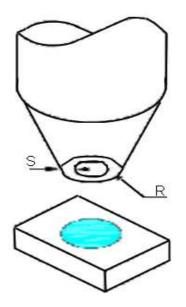
					SMT Top View LED Blue		
					Part No.: <b>M11G1016</b>		G1016
					Custome	er:	
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	21.06.2010
APPD:	Ping			FINISH	Hui	Sheet	7 from 9

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 Blue						
	Part No.	.: M110	G1016				
	Custome	er:					
MATL:	Chui	DATE 21.06.201					
FINISH	Hui	Sheet	8 from 9				

Dong

Ping

CHKD

DRW:

APPD:

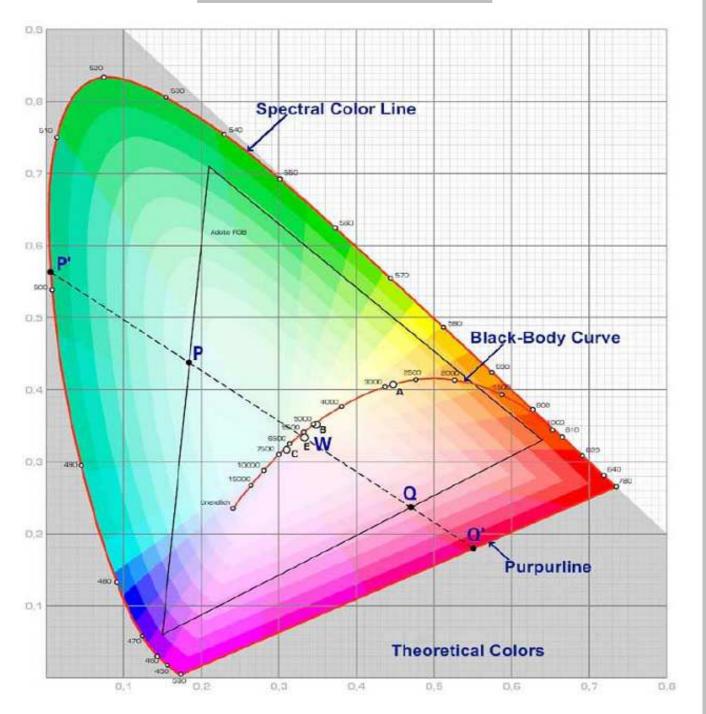
Copyright by EDCON-COMPONENTS

Chang





Color table curve



					SMT Top View LED Blue		
					Part No.: <b>M11G1016</b>		G1016
					Custome	er:	
DRW:	Dong	CHKD	Chang	MATL:	Chui	DATE	21.06.2010
APPD:	Ping			FINISH	Hui	Sheet	9 from 9

www.edcon-components.com

Copyright by EDCON-COMPONENTS