



TOYO LED ELECTRONICS LIMITED

Room 1610, Hong Kong Plaza, 188 Connaught Road West, Hong Kong.

Tel : (852) 2540 7288
http://www.toyo-led.com

Fax : (852) 2517 1797
E-mail : sales@toyo-led.com



P/N: TY-Y0603BL1(0.60)

0603 Package 1.6*0.8mm Surface Mount LEDs Series

SPECIFICATION FOR CUSTOMER APPROVAL

P/N: TY-Y0603BL1(0.60)

DATE : December 26, 2013

PREPARED BY : Yanguoliang

CONFIRMED BY :

PLEASE CONFIRM & SIGN BACK THIS SHEET TO US

CUSTOMER: _____

(COMPANY CHOP)

APPROVAL BY: _____

(SIGNATURE)



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✧ Features:

- 1.6*0.8*0.60 mm
- Mono-color type
- Soldering methods :All SMT assembly methods
- Comply ROHS standard

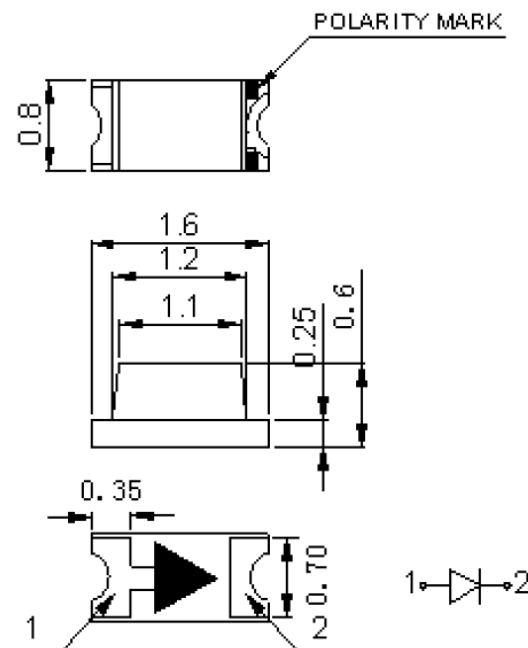
✧ Description

The Blue source color devices are made with InGaN on sapphire Light Emitting Diode.

✧ Application

- LCD backlight
- Illuminations

✧ Package Dimensions



NOTES:

1. All dimensions are in millimeter;
2. Tolerance is ± 0.1 mm unless other specified;
3. Specifications are subject to change without notice.



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Part No.	Emitted Color	Lens Color	Chip Material
TY-Y0603BL1(0.60)	Blue	Water Clear	InGaN

❖ Absolute Maximum Ratings(Ta=25°C)

Item	Symbol	Maximum	Unit
Power Dissipation	PD	135	mW
Continuous Forward Current	I _{Fmax}	30	mA
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	I _{FP}	140	mA
Reverse Voltage	V _R	5	V
Operating Temperature Range	T _{opr}	-40 to+85	°C
Storage Temperature Range	T _{stg}	-40 to+85	°C
Lead Solder Temperature	Tsol	260 °C for 3 seconds	

❖ Electrical/Optical Characteristics(Ta=25°C)

Item	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	V _F	I _F =20mA	2.8	3.2	--	V
Luminous Intensity	I _V	I _F =20mA	70	100	--	mcd
Wavelength	λ	I _F =20mA	464	---	470	nm
Viewing Angle	2θ _{1/2}	I _F =20mA	---	120	---	Deg
Reverse Current	I _R	V _R =5V	---	---	10	uA



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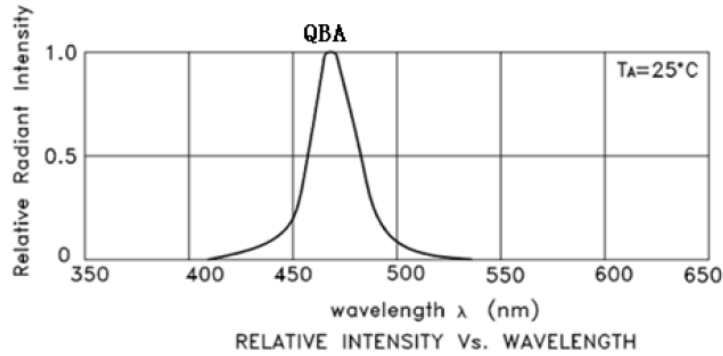
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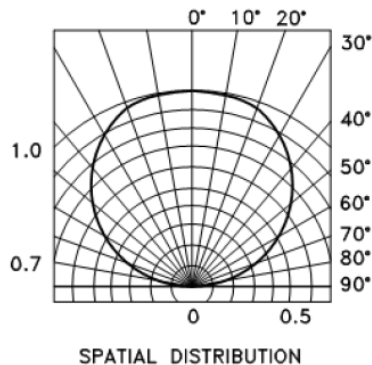
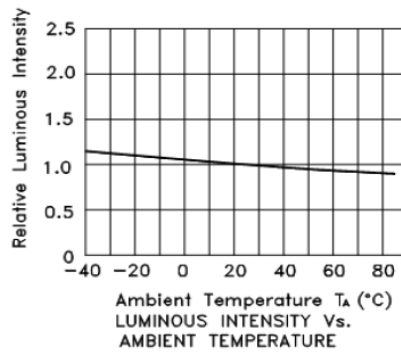
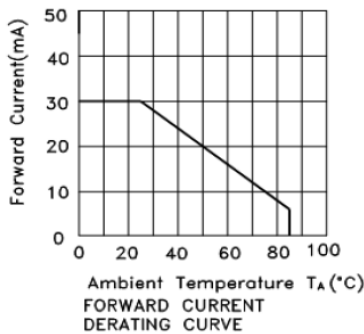
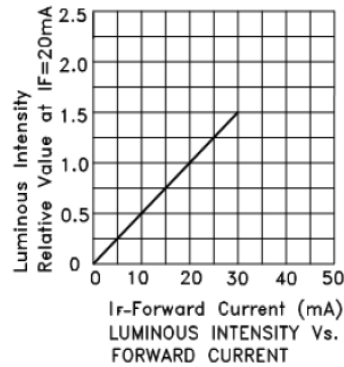
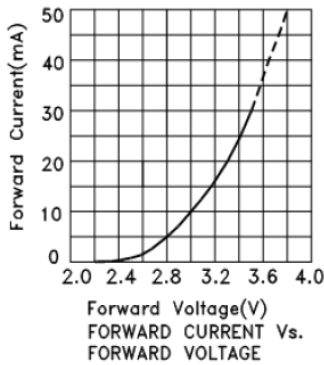
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✧ Typical Electro-Optical Characteristics Curves



E6C0805QBACIUDA





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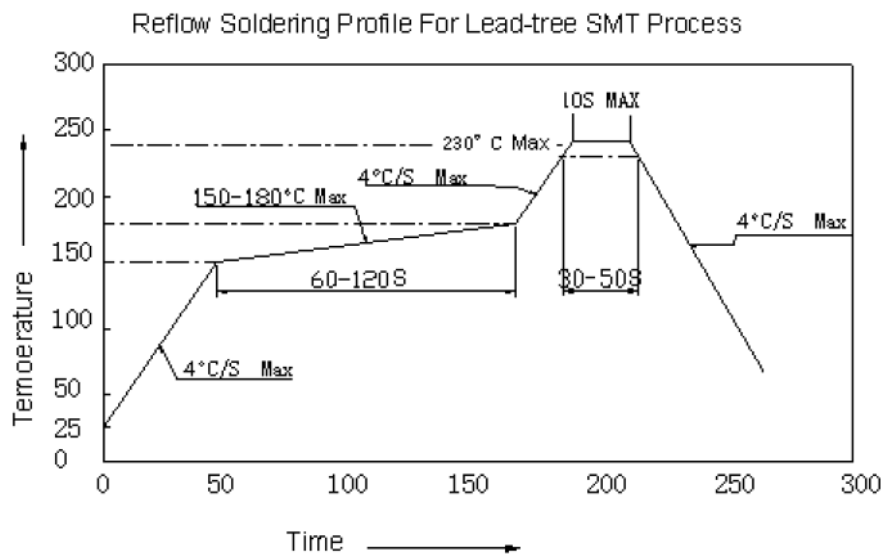
◇ Reliability Test Items And Conditions

NO.	Item	Test Condition	Test Hr/cycle/time	Sample Q'ty	Ac/Re
1	Reflow	TEMP:260±5°C; Min.5Sec	6 min	22pcs	0/1
2	Temperature Cycle	H:+100°C 15mins To(5mins) L:-40°C 15mins	10cycles	22pcs	0/1
3	Thermal Shock	H:+100°C 15mins To(5mins) L:-40°C 15mins	10 cycles	22pcs	0/1
4	Low Temperature Storage	TEMP:-40°C	1000hrs	22pcs	0/1
5	DC Operating Life	IF=20MA	1000hrs	22pcs	0/1
6	High Temperature	85°C	1000hrs	22pcs	0/1
7	High Humidity	85%R.H.	1000hrs	22pcs	0/1

◇ SMT Reflow Soldering Instructions

Number of reflow process shall be than 2 times and cooling

Process to normal temperature is required between first and second soldering process





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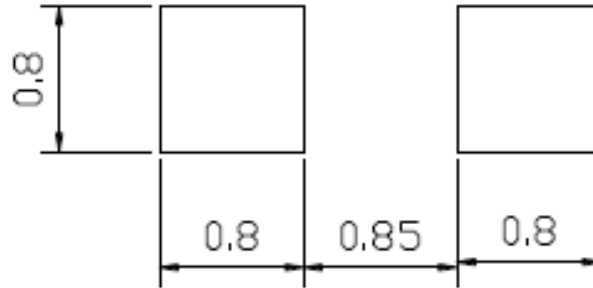
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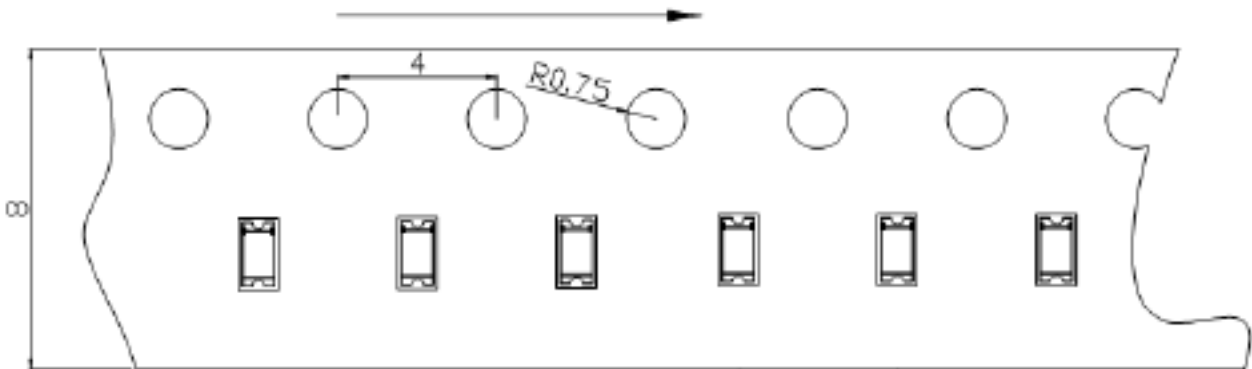
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◇ Recommended Soldering Pad Dimensions



◇ Tape Specification: 4,000PCS per reel



◇ Package Label

SMD LED		
PART NO: _____		QA Pass
LOT NO : _____		
Q' TY : _____		
VF : _____	IV : _____	
WL : _____	BIN: _____	Pb
DATA : _____		
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❖ Package & Shipping Instructions

