



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-Y1206UR1(0.90)-500

1206 Package 3.2*1.6mm Surface Mount LEDs Series

SPECIFICATION FOR CUSTOMER APPROVAL

P/N: TY-Y1206UR1(0.90)-500

DATE : September 27, 2019

PREPARED BY : Steven

CONFIRMED BY :

PLEASE CONFIRM & SIGN BACK THIS SHEET TO US

CUSTOMER: _____

(COMPANY CHOP)

APPROVAL BY: _____

(SIGNATURE)



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-Y1206UR1(0.90)-500

1206 Package 3.2*1.6mm Surface Mount LEDs Series

✧ Features:

- 3.2*1.6*0.90 mm
- Mono-color type
- Soldering methods :All SMT assembly methods
- Comply ROHS standard

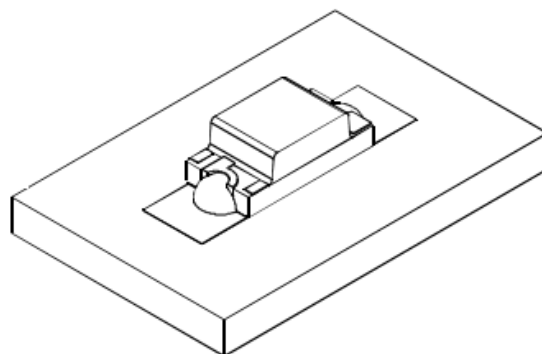
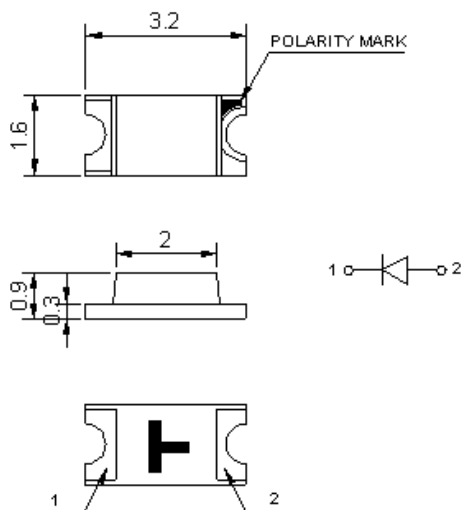
✧ Description

The Red source color devices are made with **AlGaInP** on sapphire Light Emitting Diode.

✧ Application

- Optical indicator
- Indicator and backlighting in telephone and fax
- Flat backlight for LCD, switch and symbol
- Light pipe application
- General use

✧ Package Dimensions



NOTES:

1. All dimensions are in millimeter[unit];
2. Tolerance is $\pm 0.1\text{mm}$ (0.004") unless other specified;
3. Specifications are subject to change without notice.



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-Y1206UR1(0.90)-500

1206 Package 3.2*1.6mm Surface Mount LEDs Series

Part No.	Emitted Color	Len's Color	Chip Material
TY-Y1206UR1(0.90)-500	Red	Water clear	AlGaInP

✧ Absolute Maximum Ratings(Ta=25°C)

Item	Symbol	Maximum	Unit
Power Dissipation	PD	75	mW
Continuous Forward Current	I _{Fmax}	30	mA
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	I _{FP}	80	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	1.8	2.1	2.4	V
Luminous Intensity	I _V	I _F =20mA	200	500	---	mcd
Wavelength	λ	I _F =20mA	618	620	625	nm
Viewing Angle	2θ _{1/2}	I _F =20mA	---	120	---	Deg
Reverse Current	I _R	V _R =5V	---	---	10	uA



TOYO LED ELECTRONICS LIMITED

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

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

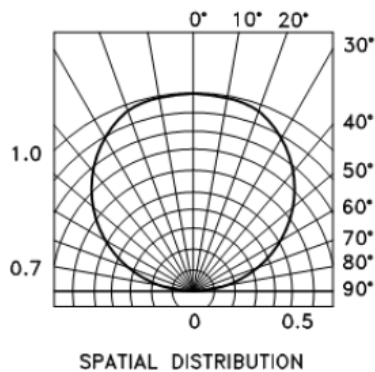
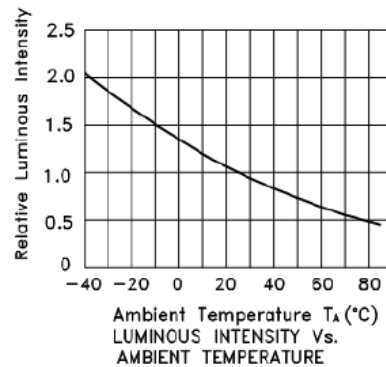
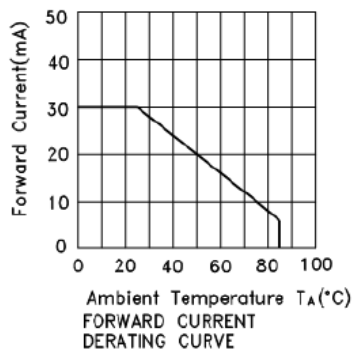
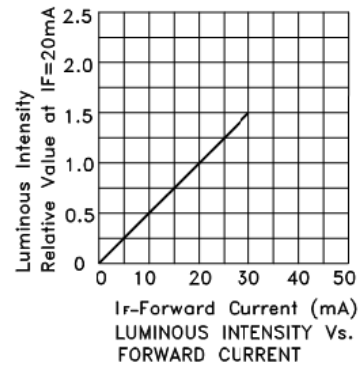
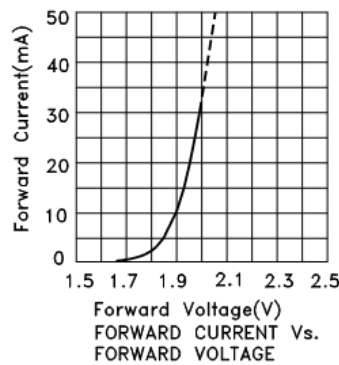
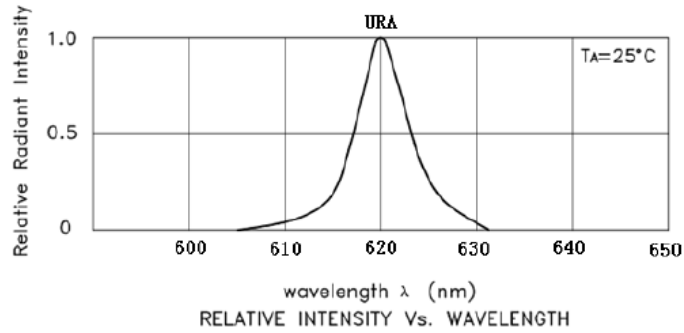
Fax : (852) 2517 1797
E-mail : sales@toyo-led.com



P/N: TY-Y1206UR1(0.90)-500

1206 Package 3.2*1.6mm Surface Mount LEDs Series

✧ Typical Electro-Optical Characteristics Curves





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-Y1206UR1(0.90)-500

1206 Package 3.2*1.6mm Surface Mount LEDs Series

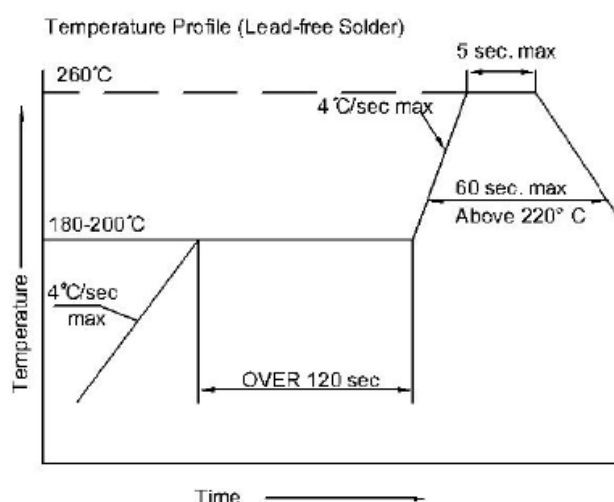
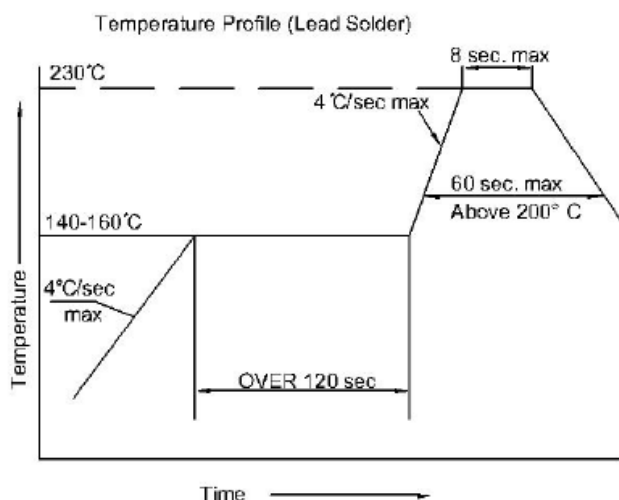
✧ Reliability Test Items And Conditions

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:+90°C 30mins To(5mins) L:-30°C 30mins	300 cycles	22pcs	0/1
3	Thermal Shock	H:+100°C 20mins To(5mins) L:-40°C 20mins	300 cycles	22pcs	0/1
4	High Temperature Storage	TEMP:+100°C	1000hrs	22pcs	0/1
5	Low Temperature Storage	TEMP:-30°C	1000hrs	22pcs	0/1
6	DC Operating Life	IF=20MA	1000hrs	22pcs	0/1
7	High Temperature	65°C	240hrs	22pcs	0/1
8	High Humidity	R.H.= 85%		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





TOYO LED ELECTRONICS LIMITED

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

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

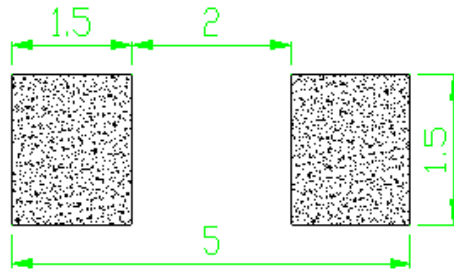
Fax : (852) 2517 1797
E-mail : sales@toyo-led.com



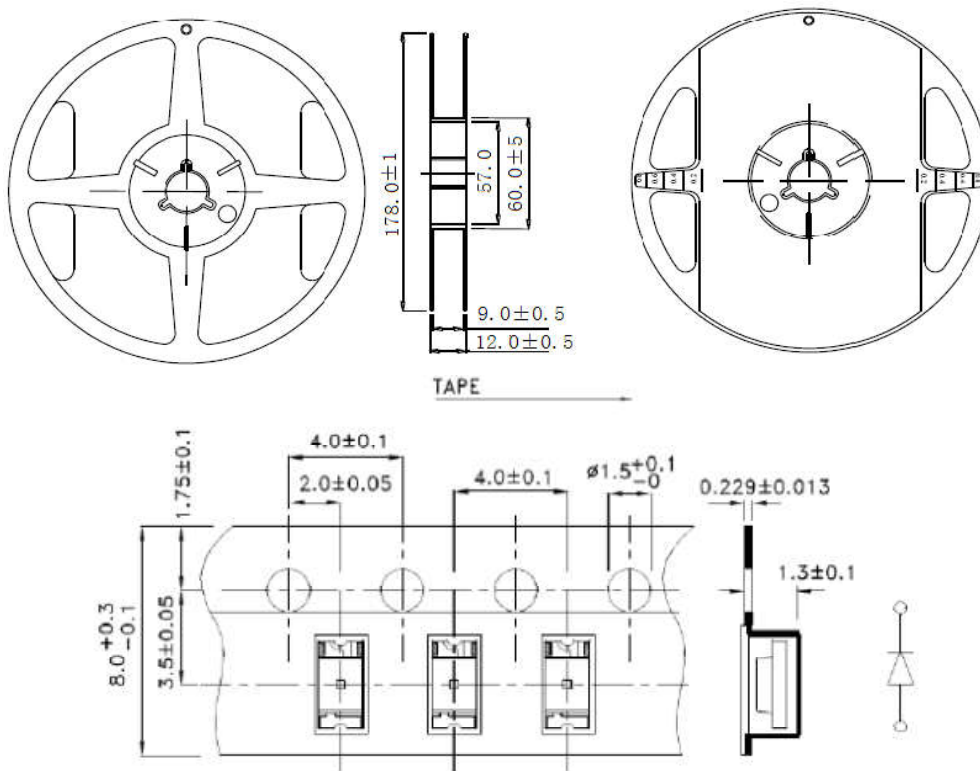
P/N: TY-Y1206UR1(0.90)-500

1206 Package 3.2*1.6mm Surface Mount LEDs Series

✧ Recommended Soldering Pad Dimensions



✧ Tape Specification: 3,000pcs



✧ Package Label

SMD LED	
PART NO:	_____
LOT NO :	_____
Q' TY :	_____
VF : _____	IV : _____
TC : _____	BIN: _____
DATE :	_____
TOYO LED ELECTRONICS LIMITED	
Website: http://www.toyo-led.com E-mail: sales@toyo-led.com	

QA Pass

Pb



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-Y1206UR1(0.90)-500

1206 Package 3.2*1.6mm Surface Mount LEDs Series

✧ Package & Shipping Instructions

