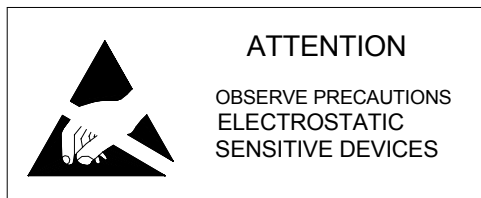


PCB SMD LED

JZ-S06031SY-CT

DATA SHEET

DOCUMENT NO.: WI-RD-SDS-S06031SY-CT
RELEASE DATE: 2007- 04-23
VERSION: A/0



PART NO.: JZ-S06031SY-CT

Features:

- LENS COLOR: WATER CLEAR
- EMITTING COLOR: YELLOW
- VIEWING ANGLE: 120°
- ROHS AND CE COMPLIANT
- LOW POWER CONSUMPTION
- WIDE VIEWING ANGLE.
- VARIOUS COLORS AVAILABLE
- PACKAGE: 4000PCS/REEL

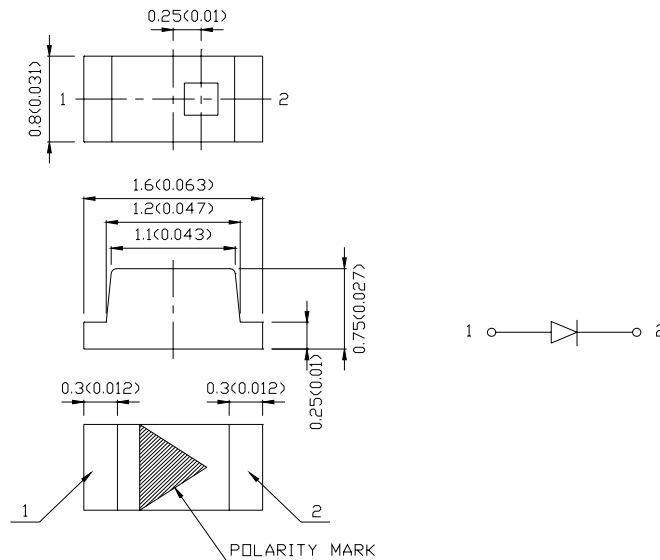
Application:

Indicator
Back-light
Decoration
others

Description

The Yellow source color devices are made with AlGaInp Light Emitting Diode.

Package Dimensions



Notes:

1. All dimension are in millimeters and(Inch)tolerance is ± 0.1 (0.004") unless otherwise noted.
- 2.Specifications are subject to change without notice.

PART NO.:JZ-S06031SY-CT

Absolute Maximum Rating at=Ta=25°C

Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	mA
Forward Current	25	mA
Operating Temperature Range	-30°C to +85°C	
Storage Temperature Range	-40°C to +100°C	

Electrical /Optical Characteristics at Ta=25°C

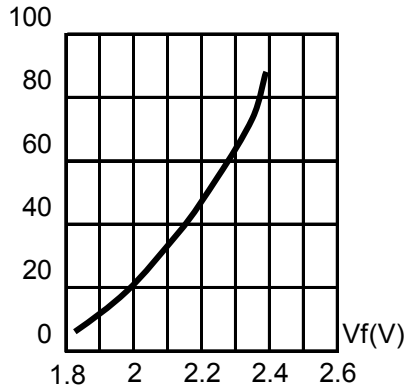
Description	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	1.8	2.0	2.4	V
Reverse Current	I _R	V _R =5V	/	/	10	μA
Dominant Wavelength	λ _D	I _F =20mA	585	588	/	nm
Luminous Intensity	I _v	I _F =20mA	70	150	/	mcd
Half V-angle	2θ _{1/2}	I _F =20mA	/	120	/	deg

1. V_f maximum tolerance for each bin Include is ±0.1V.
2. I_v maximum tolerance for each bin Include is ±15%.
3. λ_D maximum tolerance for each bin Include is ±1nm.

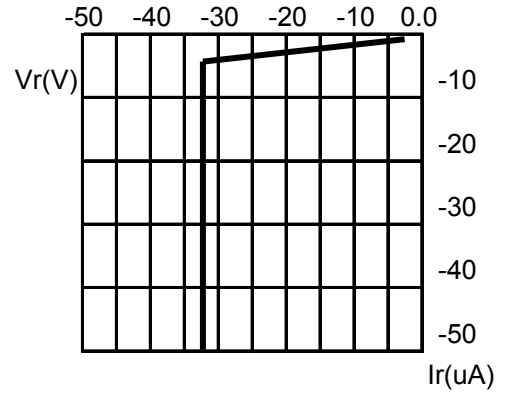
PART NO.:JZ-S06031SY-CT

Typical Optical-Electronic Characteristic Curves

If(mA)



CURRENT VS. FORWARD VOLTAGE.



CURRENT VS. REVERSE VOLTAGE.

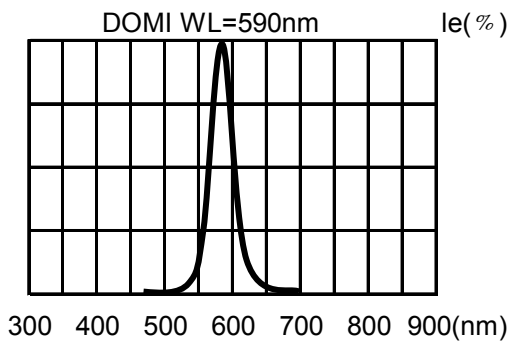
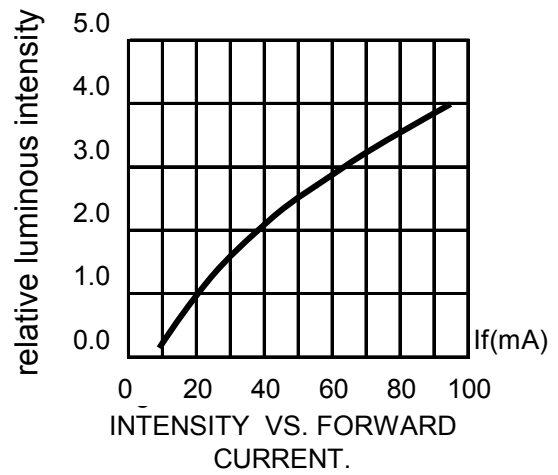


Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.



INTENSITY VS. FORWARD CURRENT.

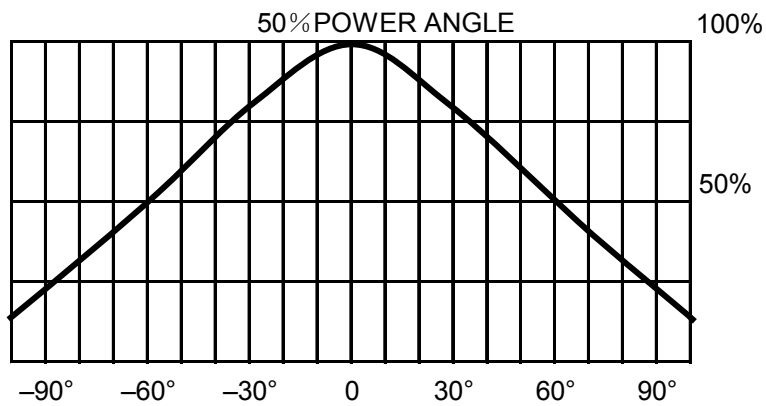
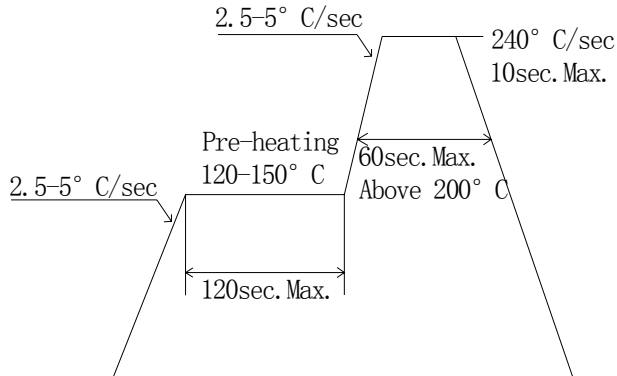


Fig.5 FAR FIELD PATTERN

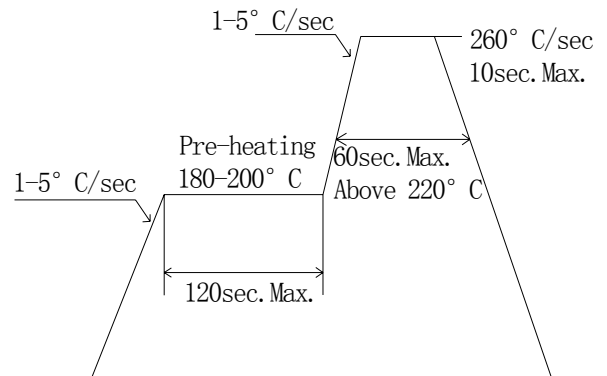
SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.

1. Lead Solder

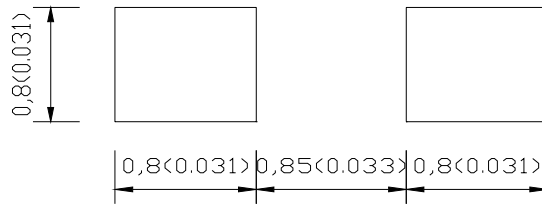


2. Lead-free Solder



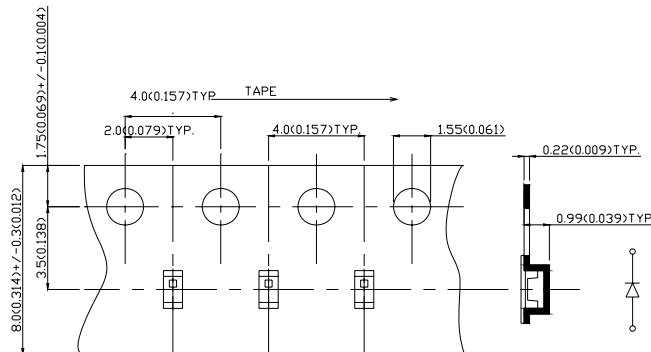
Recommended Soldering Pattern

<Units:mm>



Tape Specifications

<Units:mm>



CAUTIONS:

Storage time

1. The operation of Temperatures and RH are: 5°C~35°C, RH60%.
2. Once the package is opened, the products should be used within a week.
Otherwise, they should be kept in a damp proof box with desiccating agent.
Considering the tape life, we suggest our customers to use our products within a year(from production date).
3. If opened more than one week in an atmosphere 5°C~ 35°C, RH60%, they should be treated at 60°C±5 °C for 15hours.

Cleaning

Use alcohol-based cleaning solvents such as isopropyl alcohol to clean the LED.

ESD(Electrostatic Discharge)

Static Electricity or power surge will damage the LED. Use of a conductive wrist band or anti-electrostatic glove is recommended when handling these LED. All devices, equipment and machinery must be properly grounded.

(1)Test Items And Results

Test Item	Standard Test Method	Test Conditions	Note	Number of Damaged
Resistance to Soldering Heat	JEITA ED-4701 300 302	Tsld=260± 5°C,10sec. 3mm from the base of the epoxy bulb	1time	0/100
Solderability	JEITA ED-4701 300 303	Tsld=235+ 5°C,5sec. (using flux)	1time over 95%	0/100
Thermal Shock	JEITA ED-4701 300 307	-40°C/15min.~100°C/15min.	100cycles	0/100
Temperature Cycle	JEITA ED-4701 100 105	-40°C/30min.~25°C/5min. ~100°C/30min.~25°C/5min.	100cycles	0/100
Moisture Resistance Cyclic	JEITA ED-4701 200 203	25°C~65°C~-10°C 90%RH 24hrs./1cycle	10cycles	0/100
Terminal Strength(bending test)	JEITA ED-4701 400 401	Load 5N(0.5kgf) 0°~90°~0°bend 2 times	No noticeable damage	0/100
Terminal Strength(pull test)	JEITA ED-4701 400 401	Load 10N(1kgf)10±1sec.	No noticeable damage	0/100
High temperature Storage	JEITA ED-4701 200 201	Ta=100°C	1000hrs.	0/100
Temperature Humidity Storage	JEITA ED-4701 100 103	Ta=60°C,RH=90%	1000hrs.	0/100
Low Temperature Storage	JEITA ED-4701 200 202	Ta=-40°C	1000hrs.	0/100
Steady state Operating Life		Ta=25°C,IF=20mA	1000hrs.	0/100
Steady State Operating Life of High Humidity Heat		60°C,RH=90%,IF=20mA	500hrs.	0/100
Steady State Operating Life of Low Temperature		Ta=-30°C,IF=20mA	1000hrs.	0/100
Resistance to UV Beam		365nm/75W/mm	192hrs.	0/100

(2)Criteria For Judging The Damage

Item	Symbol	Test Conditions	Criteria for Judgement	
			Min.	Max.
Forward Voltage	Vf	IF=20mA	-	U.S.L.*) x 1.1
Reverse Current	Ir	VR=5V	-	U.S.L.*) x 2.0
Luminous Intensity	Iv	IF=20mA	L.S.L.**)	x 0.7

*)U.S.L.:Upper Standard Level

**)L.S.L.:Lower Standard Level

**SICHUAN JIUZHOU APPLIED ELECTRONICS CO., LTD.
SHENZHEN JIUZHOU OPTOELECTRONICS CO., LTD.**

www.jz-led.com

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