

TOP SMD LED

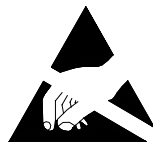
JZ-S35280SY-CT-F

DATA SHEET

DOCUMENT NO.: WI-RD-SDS-S35280SY-CT-F

RELEASE DATE: 2007- 05-09

VERSION: A/0



ATTENTION

OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

PART NO.: JZ-S35280SY-CT-F

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: 1500PCS/REEL

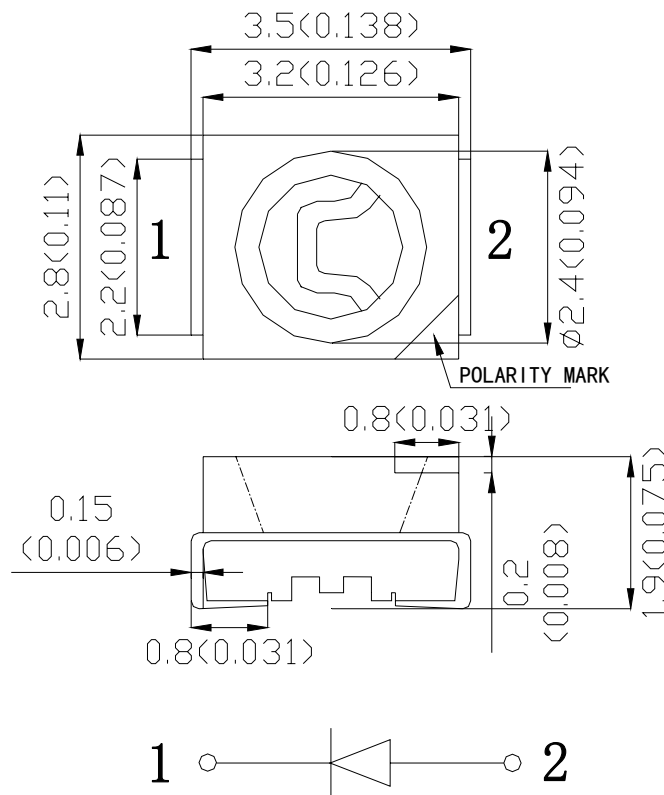
Application:

- 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. **Please attention the polarity.**
3. Specifications are subject to change without notice.

PART NO.:JZ-S35280SY-CT-F

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	

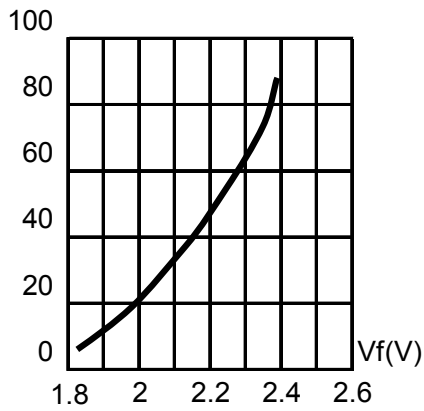
Electrical /Optical Characteristics at Ta=25°C

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	590	/	nm
Luminous Intensity	I _v	I _F =20mA	/	600	/	mcd
Half V-angle	2θ _{1/2}	I _F =20mA	/	120	/	deg

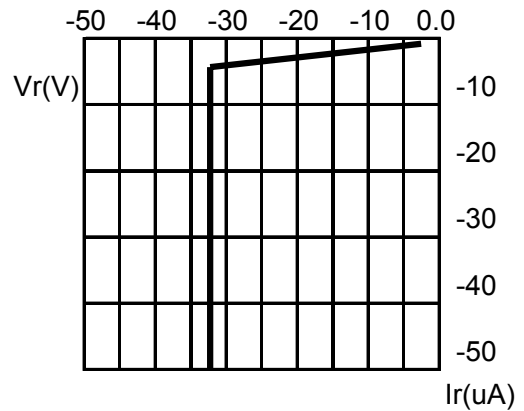
1. V_f maximum tolerance for each bin Include is ±0.1V.
2. I_v maximum tolerance for each bin Include is ±15%.
3. λ_D maximum tolerance for each bin Include is ±1nm.

Typical Optical-Electronic Characteristic Curves

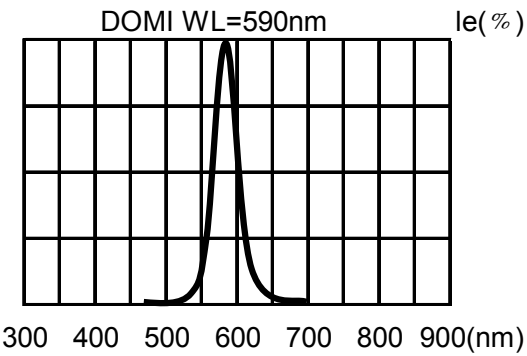
I_f (mA)



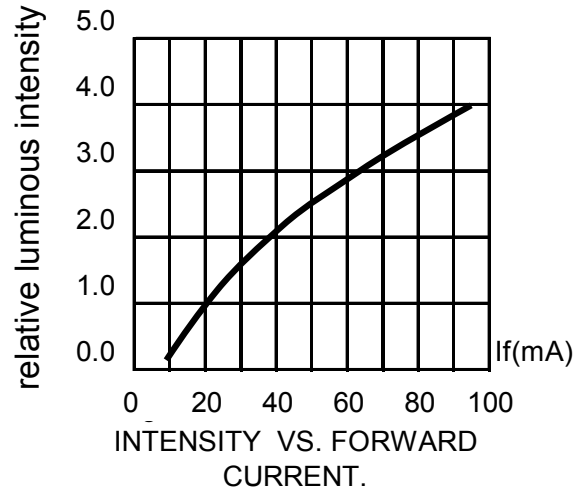
1.8 2 2.2 2.4 2.6
CURRENT VS. FORWARD VOLTAGE.



CURRENT VS. REVERSE VOLTAGE.



300 400 500 600 700 800 900(nm)
Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.



INTENSITY VS. FORWARD CURRENT.

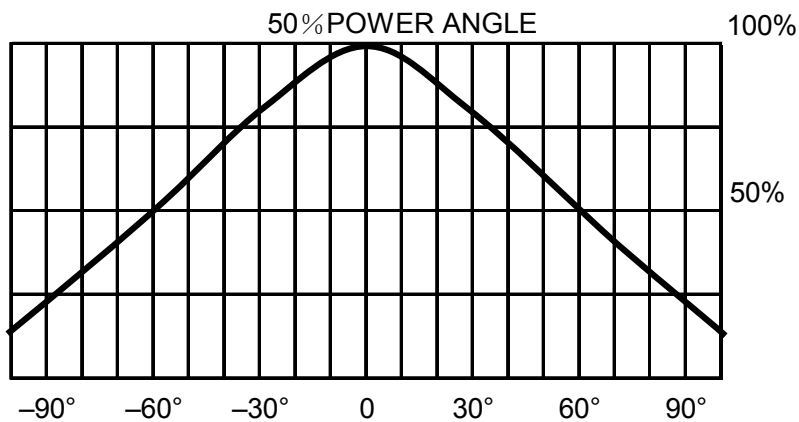
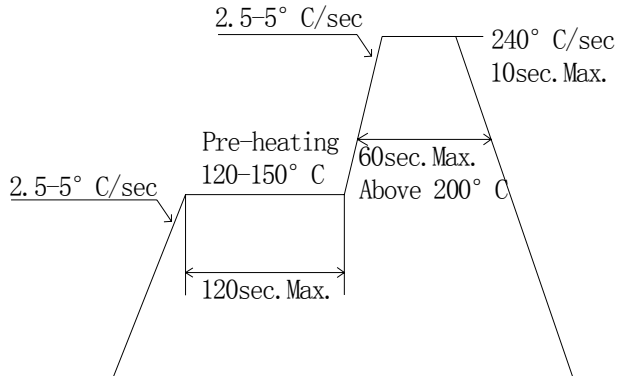


Fig.5 FAR FIELD PATTERN

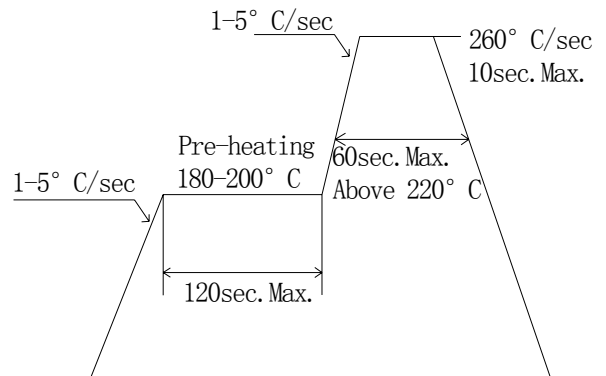
SMT Reflow Soldering Instructions

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

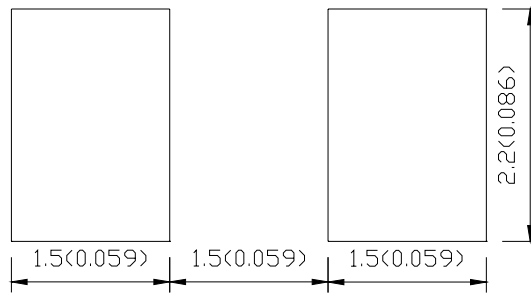


2. Lead-free Solder



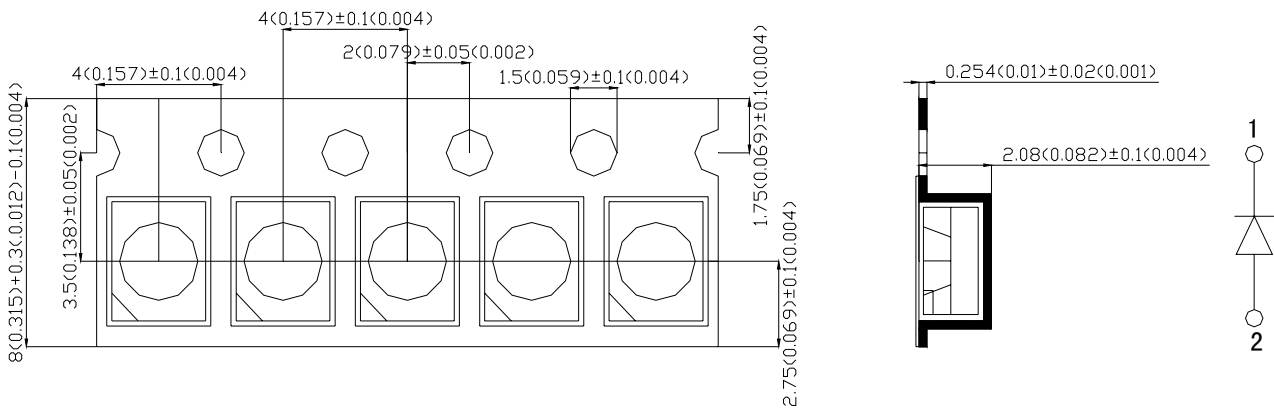
Recommended Soldering Pattern

<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 (Reflow Soldering)	JEITA ED-4701 300 301	Tsld=260°C,10sec. (Pre treatment 30°C,70%,168hrs)	2 times	0/22
Solder ability (Reflow Soldering)	JEITA ED-4701 300 303	Tsld=215 ± 5 °C ,3sec. (using flux, Lead Solder)	1 time over 95%	0/22
Thermal Shock	JEITA ED-4701 300 307	-40°C~110°C 1min (10sec)1min (Pre treatment 30°C,70%,168hrs).	100cycles	0/100
Temperature Cycle	JEITA ED-4701 100 105	-40°C~25°C~110°C~25°C 30min 5min 30min 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
High Temperature Storage	JEITA ED-4701 200 201	Ta=110°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=30mA	1000hrs.	0/100
Steady State Operating Life of Hige Temperature * *		Ta=85°C,IF=25mA	1000hrs.	0/100
Steady State Operating Life of High Humidity Heat * *		60°C,RH=90%,If=20 mA	1000hrs.	0/100
Steady State Operating Life of Low Temperature * *		Ta=-40°C,IF=20mA	1000hrs.	0/100
Permanence of Marking	JEITA ED-4701 500 501	Solvent: Isopropyl Alcohol Solvent Temperature:20-25°C Dipping Time:5min	1 time	0/22
Vibration	JEITA ED-4701 400 403	200m/s ² , 100~2000Hz(Sweep 4min) 48min 3directions	4 times	0/10
Drop		75cm	3 times	0/22
Electrostatic Discharge	JEITA ED-4701 300 304	R=1.5K Ω ,C=100PF Test Voltage=2kV	3 times Negative/Positive	0/22

(2)Criteria For Judging The Damage

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min.	Max.
Forward Voltage	Vf	IF=20mA	-	U.S.L.*) x 1.1
Luminous Intensity Condition 1	Iv	F=20mA	U.S.L.*) x 0.5	-
Luminous Intensity Condition 2	Iv	IF=20mA	L.S.L.***) x 0.7	-

*)U.S.L: Upper Standard Level

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

* * These test items are judged by the criteria of L uminous Intensity Condition2

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