



## SMD 0603 LED SERIES

### OF-SMD1608Y YELLOW



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE

SENSITIVE  
DEVICES



#### Description

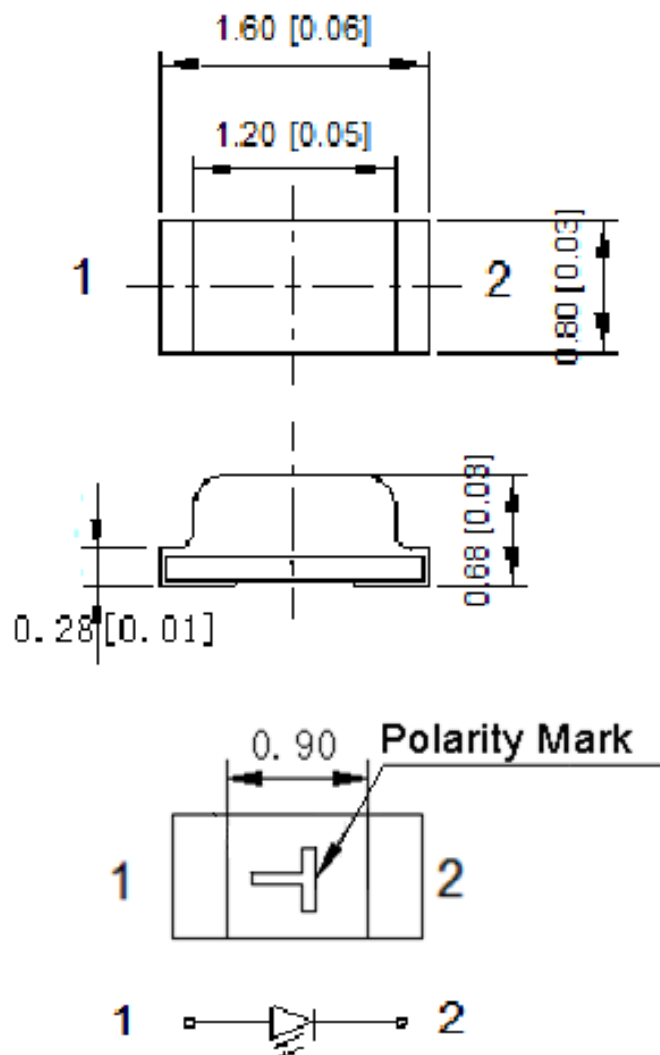
This devices are made with TS InGaAlP.

#### Features

- 0603 pack.
- Low power consumption.
- Wide viewing angle.
- Compatible with infrared and vapor phase feflow solder process.
- Package: 4000pcs/ reel .

#### Applications

- Indicator and backlighting in telephone ard fax.
- Flat backlight for LCD.
- Switch and symbol.
- General use.





## **SMD 0603 LED SERIES**

**Notes:**

1. All dimension units are millimeters.
2. All dimension tolerance is  $\pm 0.2\text{mm}$  unless otherwise noted.
3. An epoxy meniscus may extend about 1.5mm down the leads.
4. Burr around bottom of epoxy may be 0.5mm max..

### **Selection Guide**

Part. No	Dice	Lens Type	Iv(mcd) @20mA		Viewing Angle
			Min.	Typ.	
OF-SMD1608Y	YELLOW (AlGaInP)	Water clear	460	700	130°

**Note:**

1.  $\Theta_{1/2}$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

### **Electrical / Optical Characteristics at TA=25°C**

Parameter	Symbol	Device	Condition	Min	Typ	Max	Unit
Forward Voltage DC	VF	Yellow	IF=20mA	1,8		2,4	V
Reverse Current	IR	Yellow	VR=5V			10	uA
Dominate Wavelength	$\lambda_D$	Yellow	IF=20mA	586		596	nm
Capacitance	IF(rec)	Yellow	VF=0V; f=1MHz		20		pF

### **Absolute Maximum Ratings at TA=25°C**

Parameter	White	Units
Power Dissipation	60	mW
DC Forward Current	25	mA
Peak Forward Current	100	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C to +85°C	

**Note:**

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



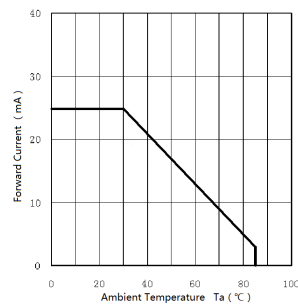
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### Reliability Test Items And Conditions

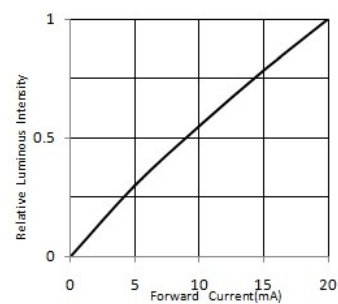
The reliability of products shall be satisfied with items listed below.  
Confidence level :90% LTPD :10%

No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Reflow	Temp:260°Cmax T=10 sec	3 times.	22Pcs.	0/1
3	Thermal Shock	-45-125°C 15min/10s/15min	100 Cycles	22Pcs.	0/1
4	High Temperature Storage	Temp:100°C±5°C	1000Hrs.	11Pcs.	0/1
5	Low Temperature Storage	Temp:-40°C±5°C	1000Hrs.	11Pcs.	0/1
6	DC Operating Life	Ta=25°C±5°C If=20mA	1000Hrs.	11Pcs.	0/1
7	High Temperature/High Humidity	85°C±5°C / H85%RH	1000Hrs.	11Pcs.	0/1

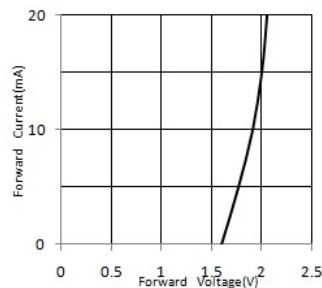
Ambient Temperature vs. Forward Current



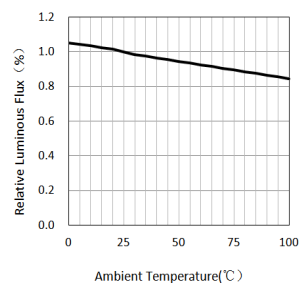
Forward Current VS. Relative Intensity



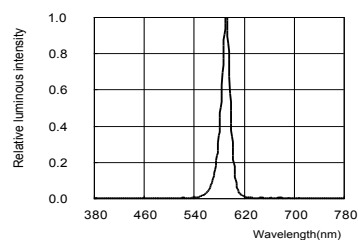
Forward Voltage VS. Forward Current



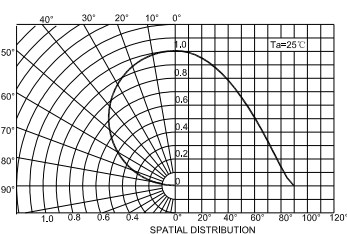
Ambient Temperature VS. Relative Intensity



Relative spectral emission



Radiation diagram

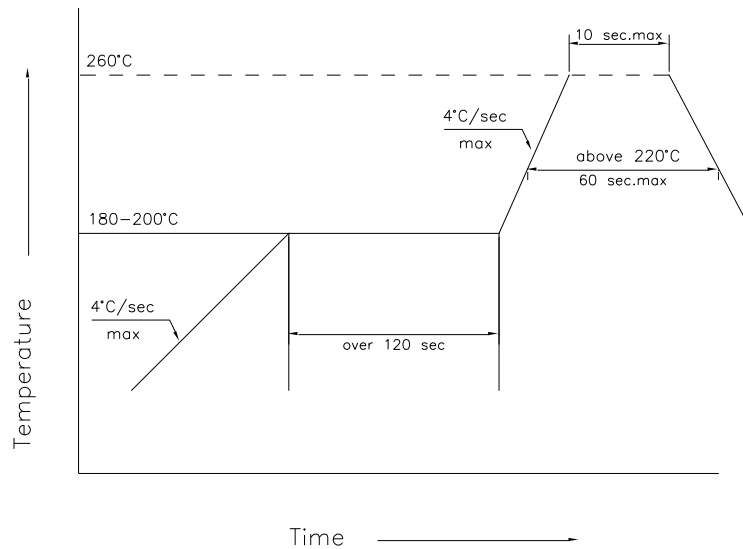




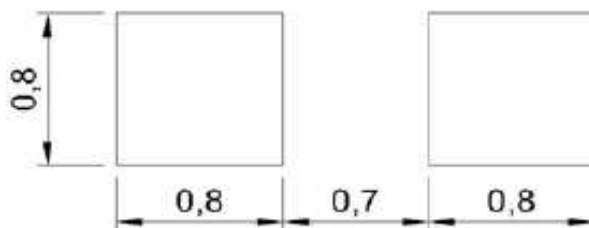
## **SMD 0603 LED SERIES**

### **SMT Reflow Soldering Instructions**

1. Reflow soldering should not be done more than three times.
2. When soldering, do not put stress on the LEDs during heating



### **Recommended Soldering Pattern (Units : mm)**





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### Tape Specifications (Units : mm)

