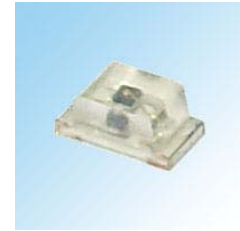




ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

HL-PST-1608U38FC

RED



Features

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

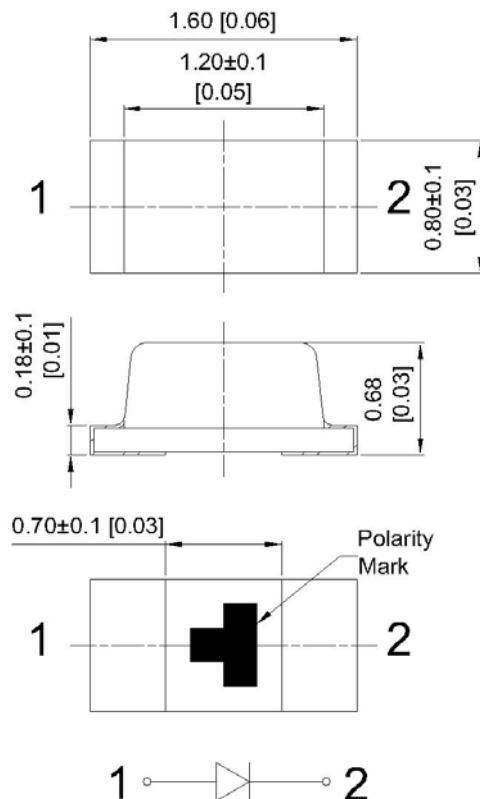
Description

This devices are made with TS AlGaInP.

Applications

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

Package Dimensions



Notes:

1. All dimension units are millimeters.

2. All dimension tolerance is ±0.2mm unless otherwise noted.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
HL-PST-1608U38FC	RED (AlGaInP)	WATER CLEAR	355	510	120°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Tolerance of luminous Intensity ±10%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Min.	Typ.	Units	Test Conditions
λD	Dominate Wavelength	Red	618	621	nm	IF=20mA
C	Capacitance	Red		35	pF	VF=0V;f=1MHz
VF	Forward Voltage	Red	1.6	2.0	V	IF=20mA
IR	Reverse Current	Red	—	5	uA	VR= 5V

Absolute Maximum Ratings at TA=25°C

Parameter	Red	Units
Power dissipation	70	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +100°C	

Note:

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

Red
HL-PST-1608U38FC
Reliability Test Items And Conditions

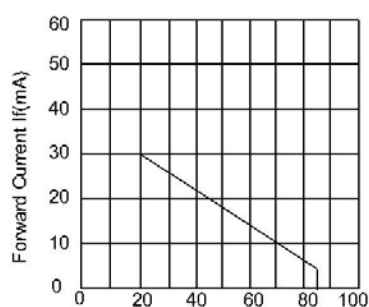
The reliability of products shall be satisfied with items listed below.

Confidence level :90%

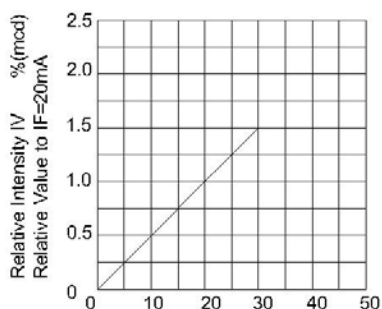
LTPD :10%

No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Reflow	Temp:260℃max T=5 sec max.	1times.	22Pcs.	0/1
2	Temperature Cycle	100℃±5℃ 30 min. ↑↓5 min -40℃±5℃ 30 min.	100 Cycles	22Pcs.	0/1
3	Thermal Shock	100℃±5℃ 5 min. ↑↓ -40℃±5℃ 5 min.	100 Cycles	22Pcs.	0/1
4	High Temperature Storage	Temp.:100℃±5℃	1000Hrs.	22Pcs.	0/1
5	Low Temperature Storage	Temp.: -40℃±5℃	1000Hrs.	22Pcs.	0/1
6	DC Operating Life	Ta=25℃±5℃ IF=20mA	1000Hrs.	22Pcs.	0/1
7	High Temperature/High Humidity	85℃±5℃/ 85%RH IF=5mA	1000Hrs.	22Pcs.	0/1

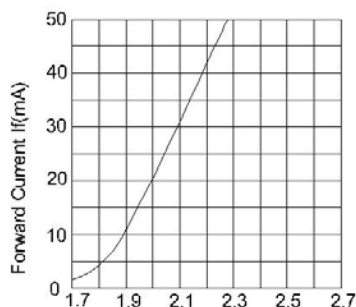
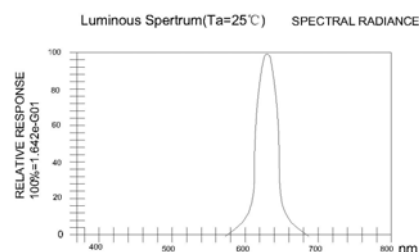
*The technical information shown in the data sheets are limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.



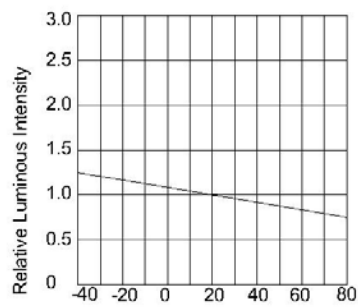
Ambient Temperature TA(℃)
Forward current
Derating Curve



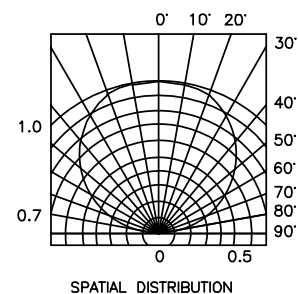
IF-Forward Current (mA)
Luminous Intensity vs.
Forward Current



Forward Voltage (V)
Forward Current VS.
Forward Voltage



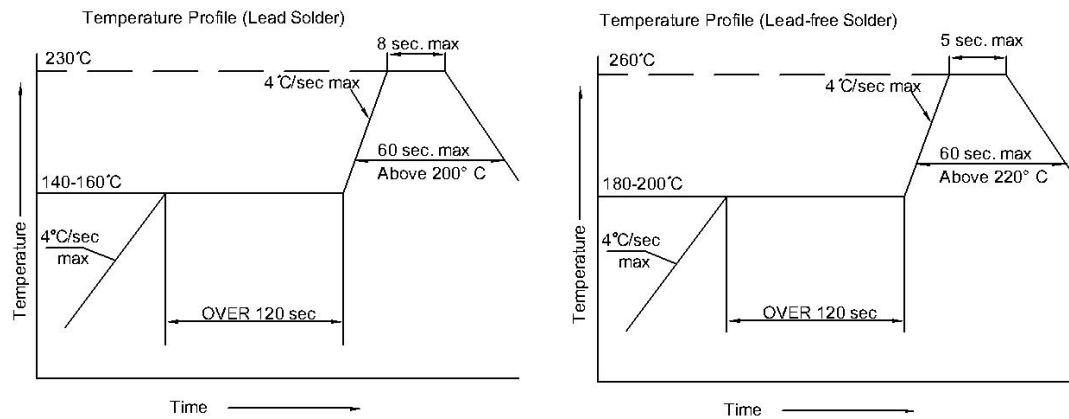
Ambient Temperature Ta(℃)
Luminous Intensity
Ambient Temperature



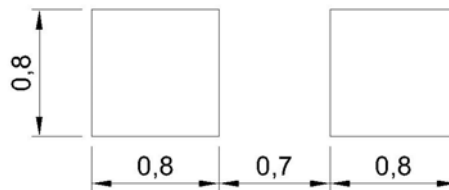
HL-PST-1608U38FC

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.



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)

