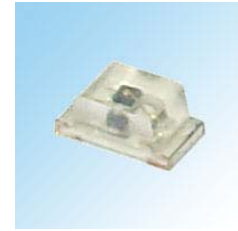




ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

HL-PST-1608S9AC

RED



Features

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

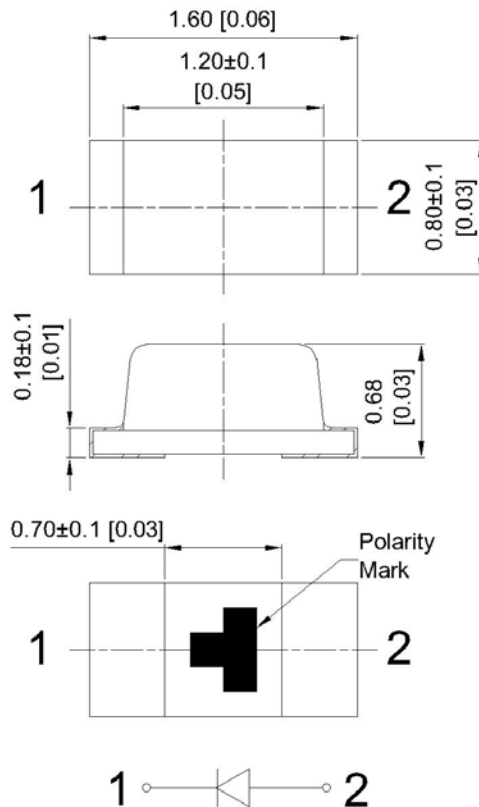
Description

This devices are made with TS AlGaInP.

Applications

- Indicator and backlighting in telephone ard 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-1608S9AC | RED (AlGaInP) | WATER CLEAR | 70 | 90 | 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 | 630 | 635 | nm | IF=20mA |
| C | Capacitance | Red | | 15 | 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 | 65 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 160 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40°C To +85°C | |
| Storage Temperature | -40°C To +100°C | |

Note:

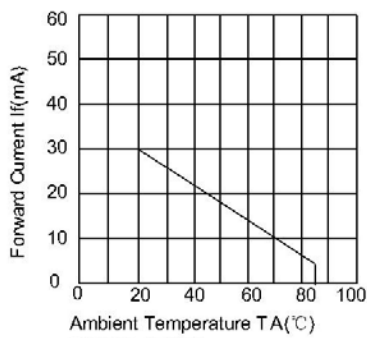
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

Red HL-PST-1608S9AC
Reliability Test Items And Conditions

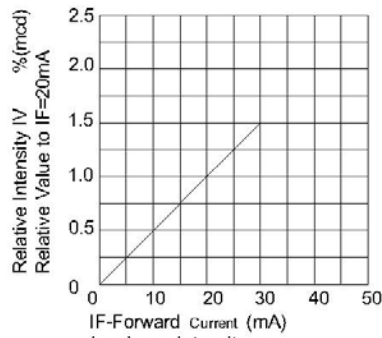
The reliability of products shall be satisfied with items listed below.
 Confidence level :90% LTPD :10%

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

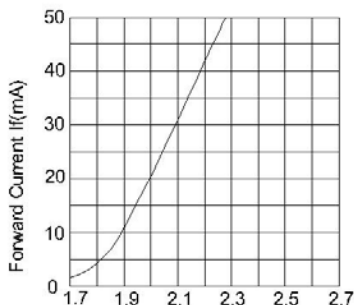
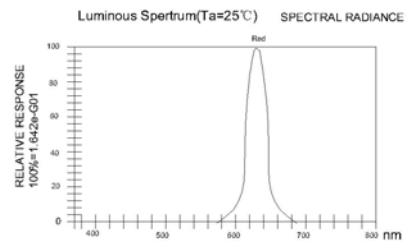
*The technical information shown in the data sheets are limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.



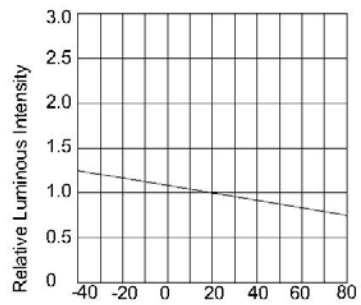
Ambient Temperature TA(°C)
 Forward current
 Derating Curve



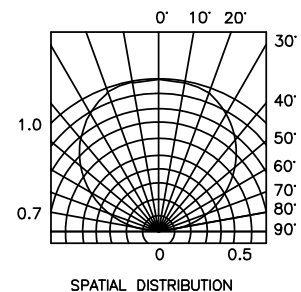
IF-Forward Current (mA)
 Luminous Intensity vs.
 Forward Current



Forward Voltage (V)
 Forward Current VS.
 Forward Voltage



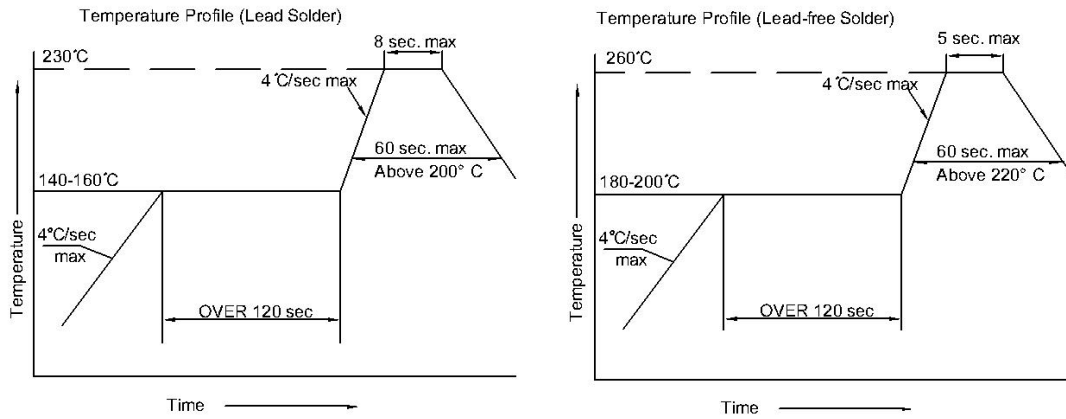
Ambient Temperature Ta(°C)
 Luminous Intensity
 Ambient Temperature



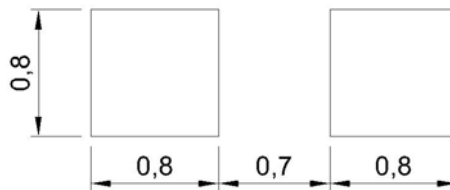
HL-PST-1608S9AC

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)

