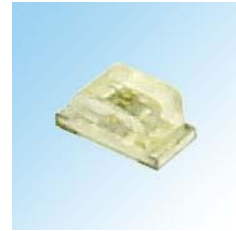




**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

**HL-PST-1608H203BC**

**BLUE**



**Features**

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

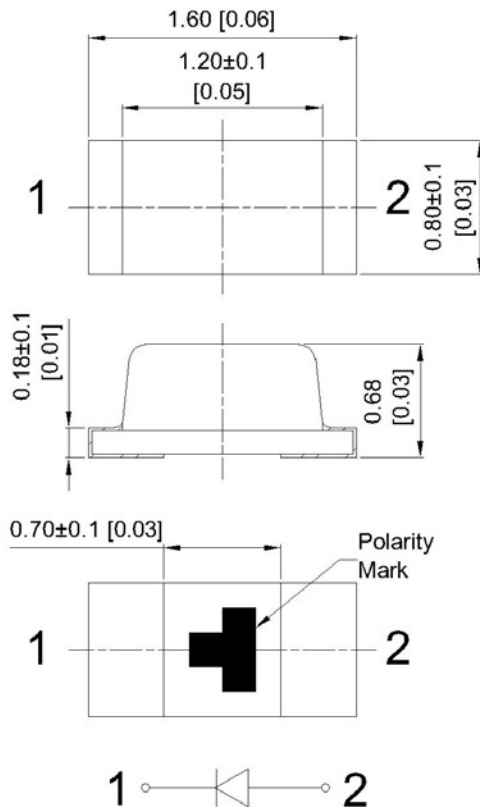
**Description**

This devices are made with TS GaN.

**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)<br>@ 20mA |      | Viewing<br>Angle |
|-------------------|------------|-------------|--------------------|------|------------------|
|                   |            |             | Min.               | Typ. | 2θ1/2            |
| HL-PST-1608H203BC | BLUE (GaN) | WATER CLEAR | 125                | 160  | 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 | Blue   | 465  | 470  | nm    | IF=20mA         |
| C      | Capacitance         | Blue   |      | 110  | pF    | VF=0V;f=1MHz    |
| VF     | Forward Voltage     | Blue   | 3.0  | 3.2  | V     | IF=20mA         |
| IR     | Reverse Current     | Blue   |      | 5    | uA    | VR = 5V         |

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

| Parameter                | Blue            | Units |
|--------------------------|-----------------|-------|
| Power dissipation        | 114             | 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:

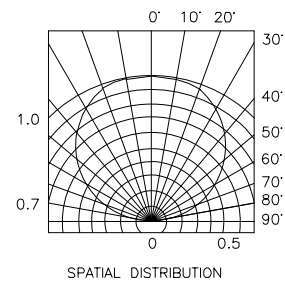
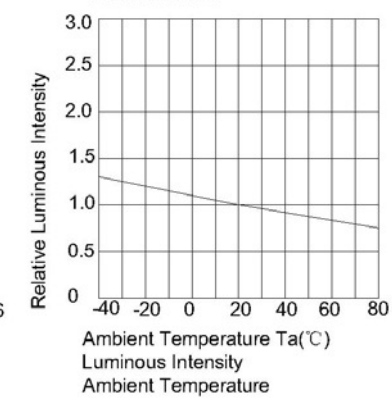
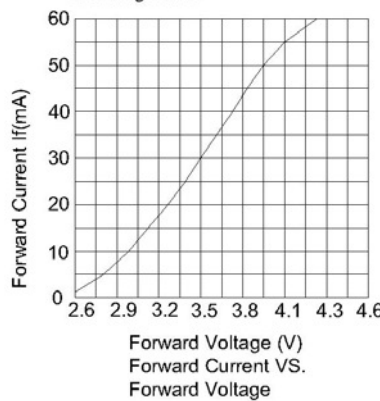
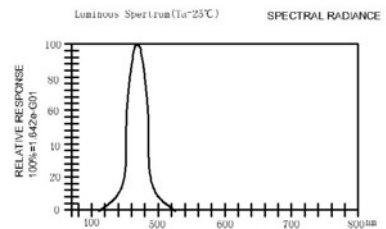
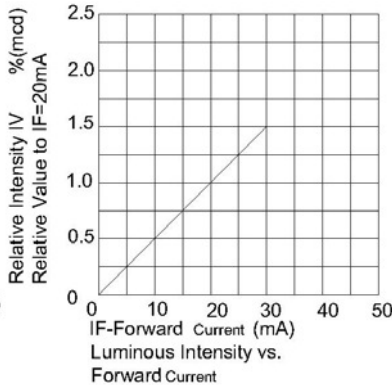
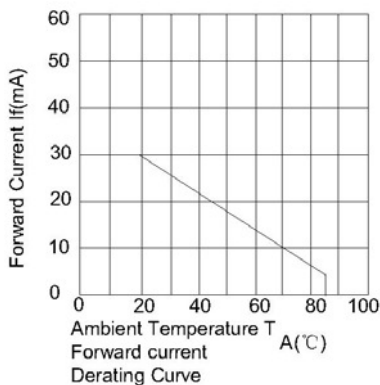
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

**Blue**
**HL-PST-1608H203BC**
**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°C max T=5 sec max.                       | 1times.           | 22Pcs.      | 0/1   |
| 2   | Temperature Cycle              | 100°C±5°C 30 min.<br>↑↓5 min<br>-40°C±5°C 30 min. | 100 Cycles        | 22Pcs.      | 0/1   |
| 3   | Thermal Shock                  | 100°C±5°C 5 min.<br>↑↓<br>-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   |

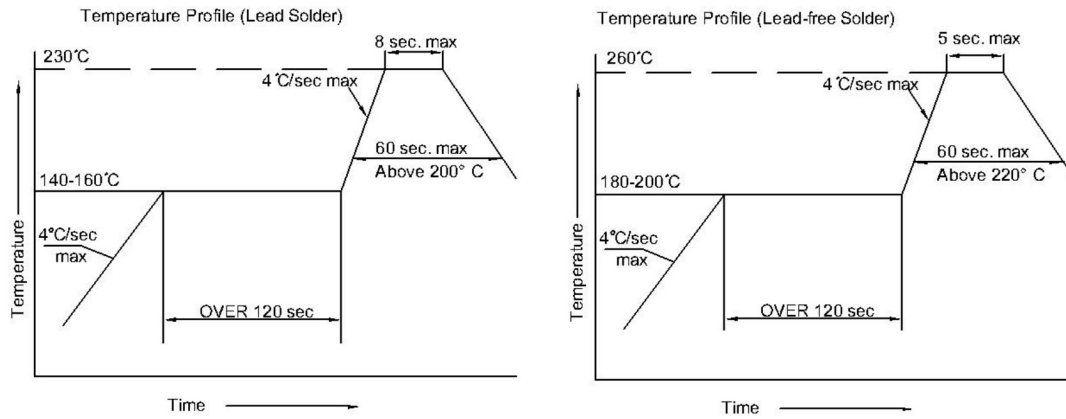
\*The technical information shown in the data sheets are limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.



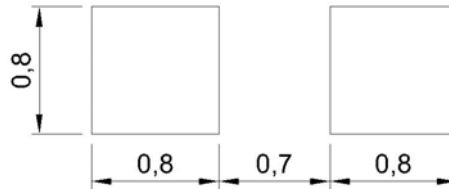
### HL-PST-1608H203BC

#### 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)

