**EN:** This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

# SMD 5060 LED SERIES

# OF-SMD5060W-H WHITE

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

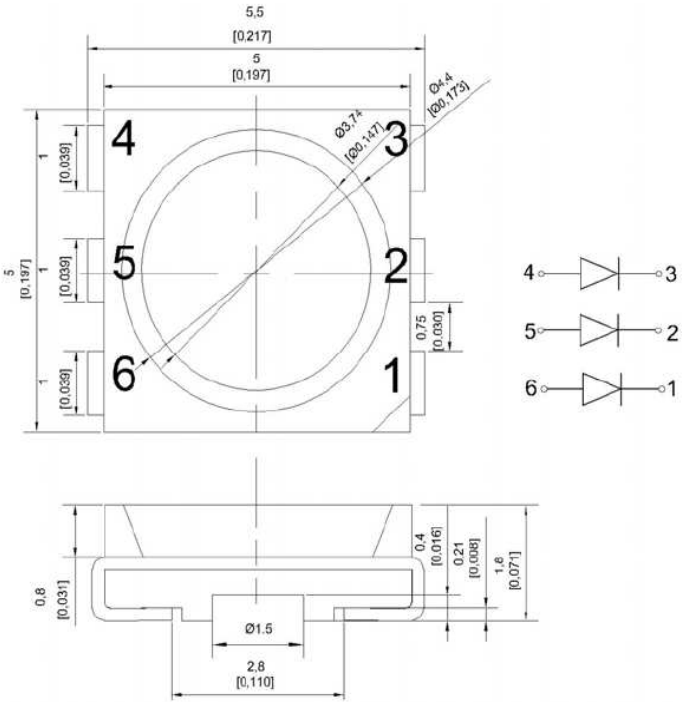
## Description

The White source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide White Light Emitting Diode.
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs. All devices, equipment and machinery must be electrically grounded.

## Features

- CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 1000PCS / REEL.

## Package Dimensions




Notes:

1. All dimension units are millimeters.
2.All dimension tolerance is ±0.2mm unless otherwise noted.
3.An epoxy meniscus may extend about 1.5mm down the leads.

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## Selection Guide

| Part. No | Dice | Lens Type | Iv(mcd) @20mA | | Viewing Angle |
|---|---|---|---|---|---|
| | | | Min. | Typ. | 2Θ1/2 |
| OF-SMD5060W-H | WHITE(InGaN) | Yellow Diffused | 3550 | 5000 | 110° |

**Note:**
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at TA=25℃

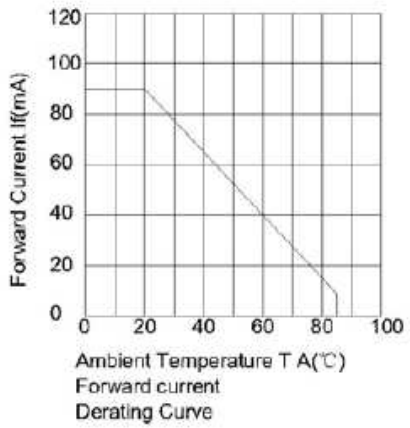
| Parameter | Symbol | Device | Condition | Min | Typ | Unit |
|---|---|---|---|---|---|---|
| Forward Voltage DC | VF | white | IF=3x20mA | 3.0 | 3.2 | V |
| Reverse Current | IR | white | VR=5V | | 5 | uA |
| Chromacity Coordinates | x | white | | | 0.29 | |
| | y | white | | | 0.30 | |
| Capacitance | IF(rec) | white | VF-0V; f=1MHz | | 100 | pF |

**Absolute Maximum Ratings at $T_A$=25℃**

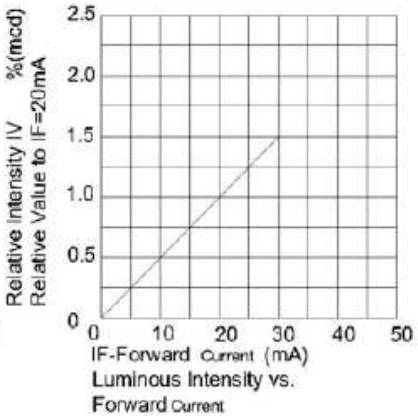
| Parameter | White | Units |
|---|---|---|
| Power Disspation | 315 | mW |
| DC Forward Current | 90 | mA |
| Peak Forward Current | 300 | mA |
| Reverse Voltage | 5 | V |
| Operating/Storage Temperature | -40℃ to +85℃ | |

**Note:**
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

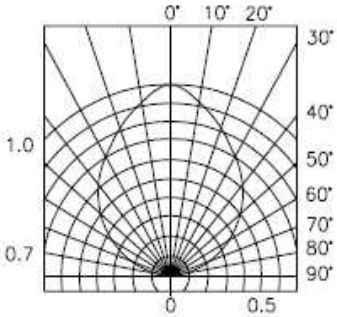
# SMD 5060 LED SERIES



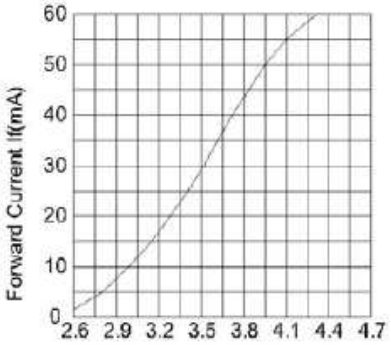

Forward current
Derating Curve



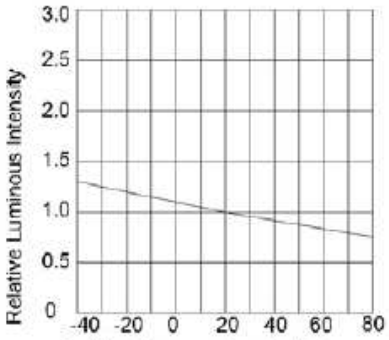

Luminous Intensity vs.
Forward Current




SPATIAL DISTRIBUTION




Forward Current VS.
Forward Voltage




Luminous Intensity
Ambient Temperature

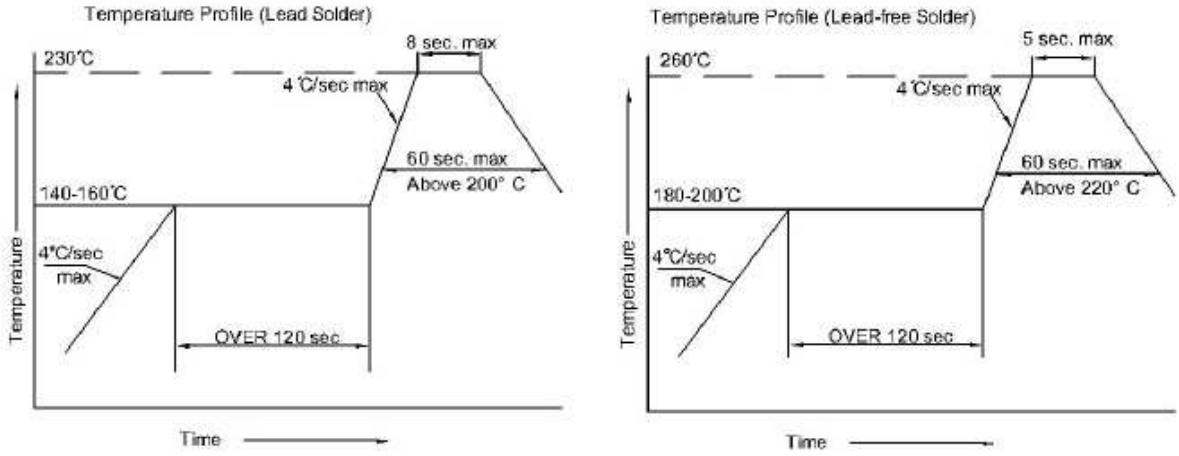
## Chromacity coordiantes

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| G区<br>X:0.24<br>Y:0.22 | X | 0.205 | 0.235 | 0.270 | 0.240 | C区<br>X:0.35<br>Y:0.36 | X | 0.305 | 0.350 | 0.380 | 0.345 |
| | Y | 0.190 | 0.250 | 0.235 | 0.175 | | Y | 0.360 | 0.395 | 0.365 | 0.330 |
| F区<br>X:0.265<br>Y:0.26 | X | 0.235 | 0.260 | 0.295 | 0.270 | B区<br>X:0.38<br>Y:0.38 | X | 0.350 | 0.390 | 0.410 | 0.380 |
| | Y | 0.250 | 0.290 | 0.270 | 0.235 | | Y | 0.395 | 0.410 | 0.380 | 0.365 |
| E区<br>X:0.285<br>Y:0.30 | X | 0.260 | 0.280 | 0.315 | 0.295 | A区<br>X:0.41<br>Y:0.40 | X | 0.390 | 0.440 | 0.440 | 0.410 |
| | Y | 0.290 | 0.325 | 0.300 | 0.270 | | Y | 0.410 | 0.425 | 0.395 | 0.380 |
| D区<br>X:0.31<br>Y:0.33 | X | 0.280 | 0.305 | 0.345 | 0.315 | Tolerance for each Bin limit is ±0.15 . | | | | | |
| | Y | 0.325 | 0.360 | 0.330 | 0.300 | | | | | | |

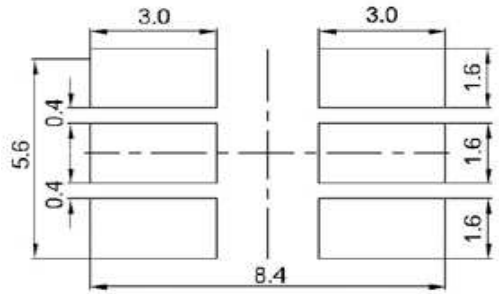
## SMT Reflow Soldering Instructions

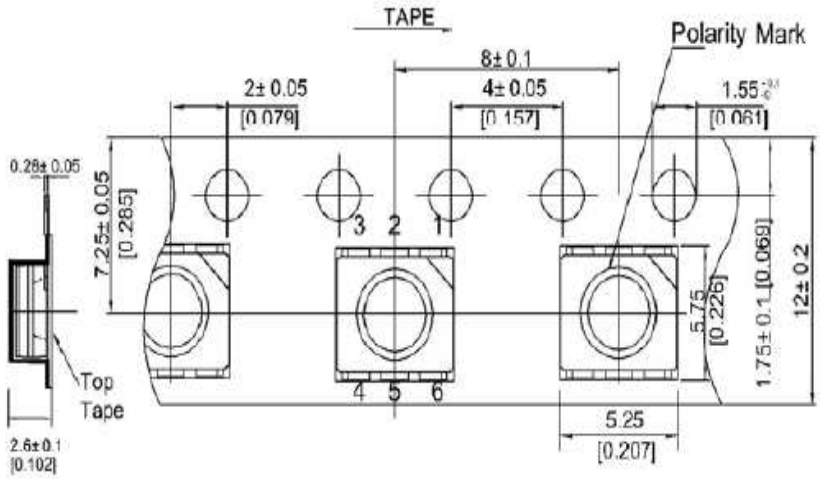
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first end second soldering process.

# SMD 5060 LED SERIES




Recommended Soldering Pattern
(Units : mm)




Tape Specifications
(Units : mm)