

# 0603 Package SMD LED 0.2mm Height

# **VS 2988M**

### **Description**

The major breakthrough in VS 2988M yellow-orange color emitted is package in dimension L x W x H, 1.6 \* 0.8 \* 0.2 mm. The dice used in this series is AlGalnP material .The advantages of AlGalnP technology are low power consumption and obtaining high luminous intensity under low current driving condition. The wavelengths and Luminous Intensities of this series are grouped under 5mA for uniformity. These LED are suitable for multiple usages in series connection applications.



### **Application**

- · Cellular phone display
- Backlight keypads
- Industrial control systems signal indicator
- Automotive features





### **Electronic Optical Characteristics (at 5mA):**

| Part Number | Emitted Color | λ (nm) |     | Lens  | lv(mcd) |      | View  | VF   | (V)  |
|-------------|---------------|--------|-----|-------|---------|------|-------|------|------|
|             |               | λd     | λр  | Color | Min.    | Тур. | Angle | Min. | Max. |
| VS 2988M    | Yellow-orange | 605    | 611 | Clear | 18      | 30   | 130   | 1.7  | 2.2  |

### Absolute Maximum Ratings (at Ta=25℃)

| P <sub>D</sub> (mW) | IFP(mA) | IF(mA) | Iron Solder (℃)          | IR(uA)@V <sub>R=</sub> 5V | Topr(℃) | Tstg(℃)  |
|---------------------|---------|--------|--------------------------|---------------------------|---------|----------|
| 60                  | 60*     | 25     | $350 \pm 5$ for $3$ sec. | 10                        | -40~+85 | -40~+100 |

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specify ratings in this table will result degradation of LED life-span and may cause LED to fail.

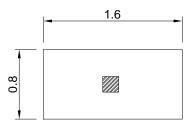
\*IFP: Peak Forward Current under 1/10 duty, 1KHz condition

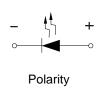
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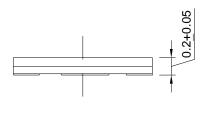


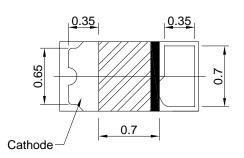
## **Package Dimension:**

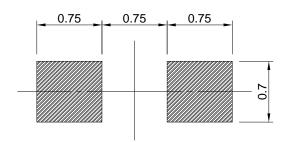
unit:mm











Recommended Soldering Pad

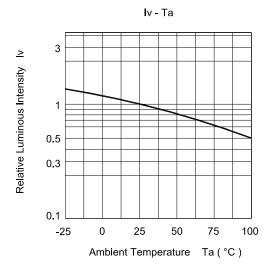
### Notes:

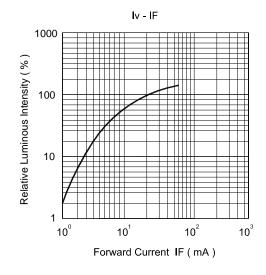
- 1. All dimensions are millimeters.
- 2. Tolerance is  $\pm$  0.2mm unless otherwise specified.
- 3. Specifications are subject to change without notice.

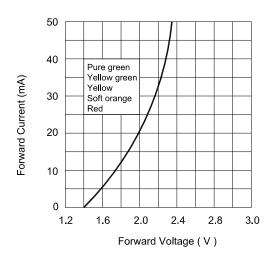
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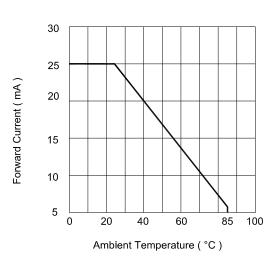


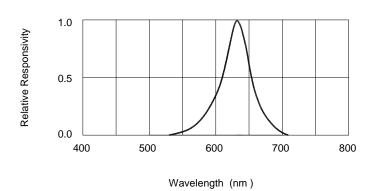
# **Optical Characteristics Curves**







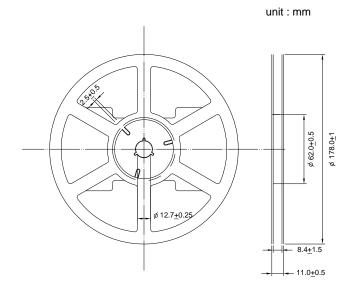




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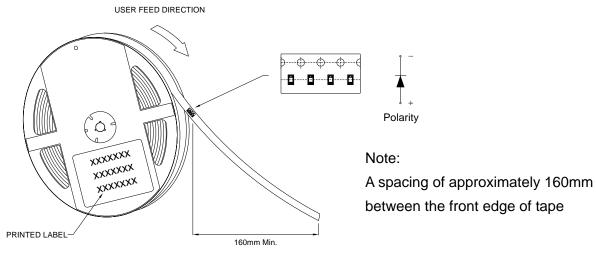


### **Reel Dimension:**

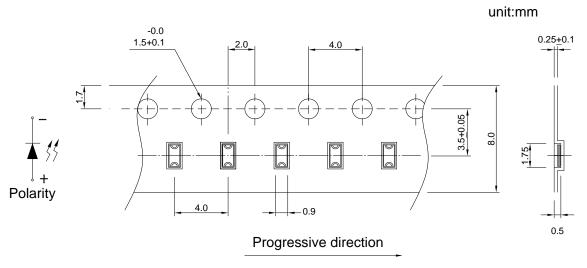


### Note:

Available in 8mm carrier tape on 178mm diameter reels. (3000 pieces)



# **Tape Dimension:**



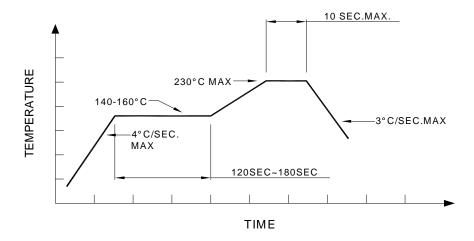
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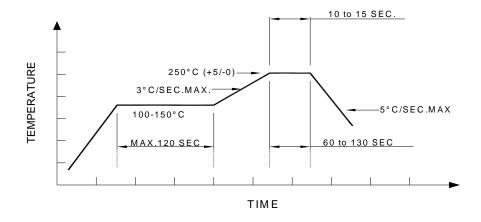
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### Recommended re-flow soldering profile:



## Recommended Pb-free re-flow soldering profile:



### Note:

All the specifications listed in this data sheet are suitable for general electronic equipment, office equipment and communication devices. Kindly consult Sales Representatives for specific reliabilities request, Forward Voltage, Luminous Intensity, Wavelength, Radiant Power or Viewing Angle.

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