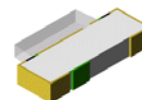


## Side View SMD LED 0.3mm Height

### VS 77E8M

#### Description

The major breakthrough in VS 77E8M is Red color emitted package in 1.8 \* 1.0 \* 0.3mm dimension side look SMD LED. The dice used in this series is AlGaInP rather than the conventional GaP and GaAsP/GaP. The advantages of AlGaInP 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 5 mA for uniformity. These LED are suitable for multiple usages in series connection applications.



#### Applications

- Backlighting applications
- Automotive features
- Status indication
- General lighting indicator



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

| Part Number | Emitted Color                                                                           | $\lambda$ (nm) |             | Lens Color | Iv(mcd) |      | View Angle | VF(V) |      |
|-------------|-----------------------------------------------------------------------------------------|----------------|-------------|------------|---------|------|------------|-------|------|
|             |                                                                                         | $\lambda_d$    | $\lambda_p$ |            | Min.    | Typ. |            | Typ.  | Max. |
| VS 77E8M    | Red  | 624            | 632         | Clear      | 18      | 35   | 130        | 1.9   | 2.2  |

#### Absolute Maximum Ratings (at Ta=25°C)

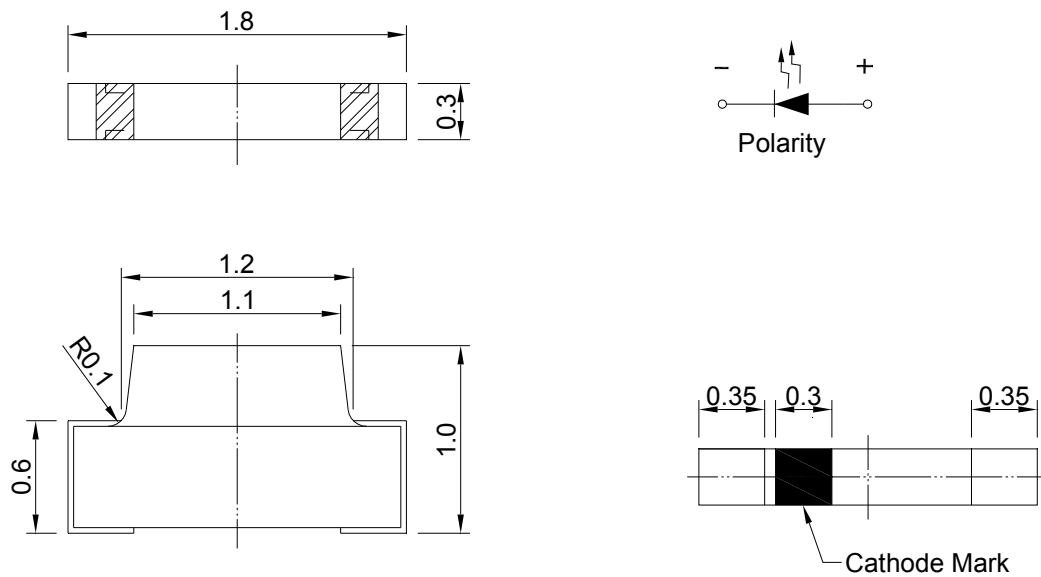
| P <sub>D</sub> (mW) | I <sub>PF</sub> (mA) | I <sub>F</sub> (mA) | Iron Solder(°C)   | I <sub>R</sub> (uA)@V <sub>R</sub> =5V | Topr(°C) | Tstg(°C) |
|---------------------|----------------------|---------------------|-------------------|----------------------------------------|----------|----------|
| 60                  | 100                  | 25                  | 350 ± 5 for 3 sec | 10                                     | -40~+85  | -40~+100 |

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

\* I<sub>PF</sub>: Peak Forward Current under 1/10 duty, 1KHz condition

## Package Dimension:

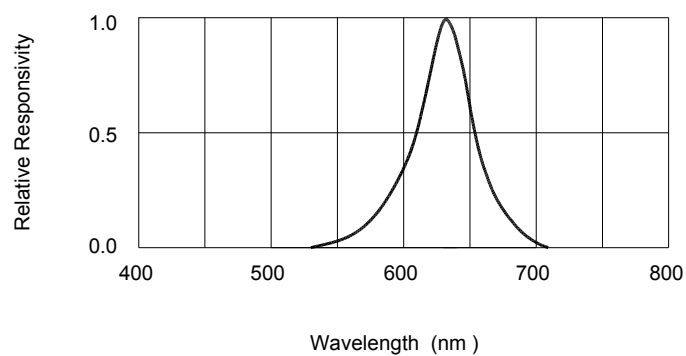
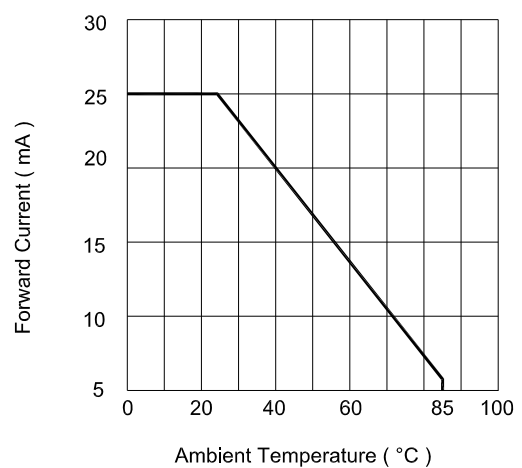
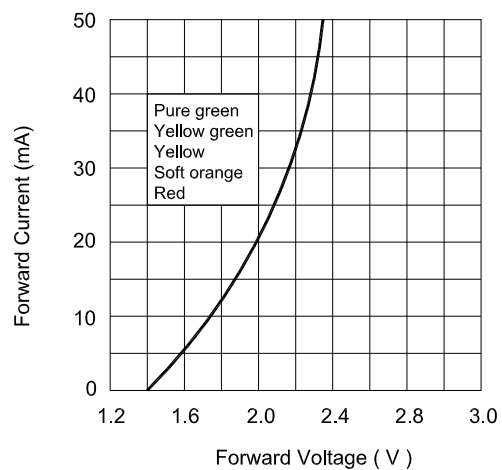
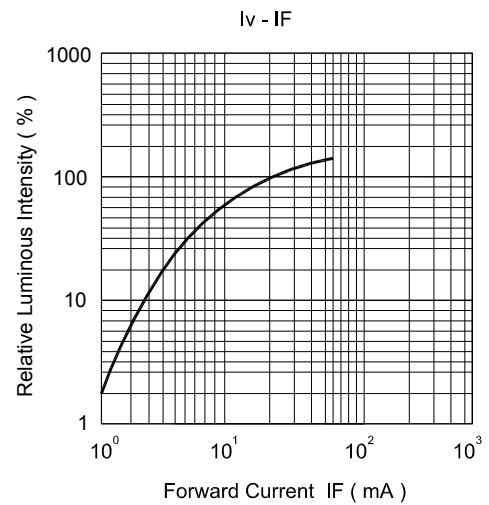
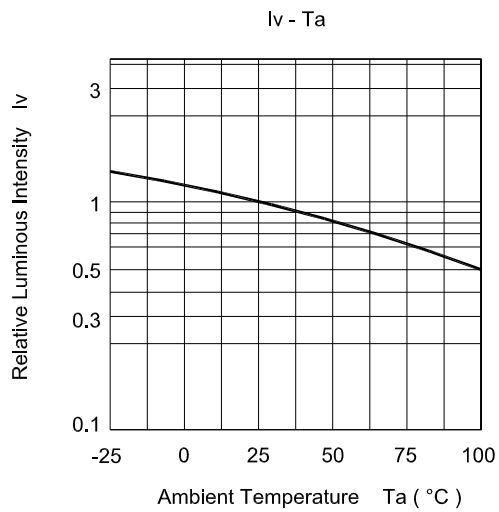
unit:mm



## Notes:

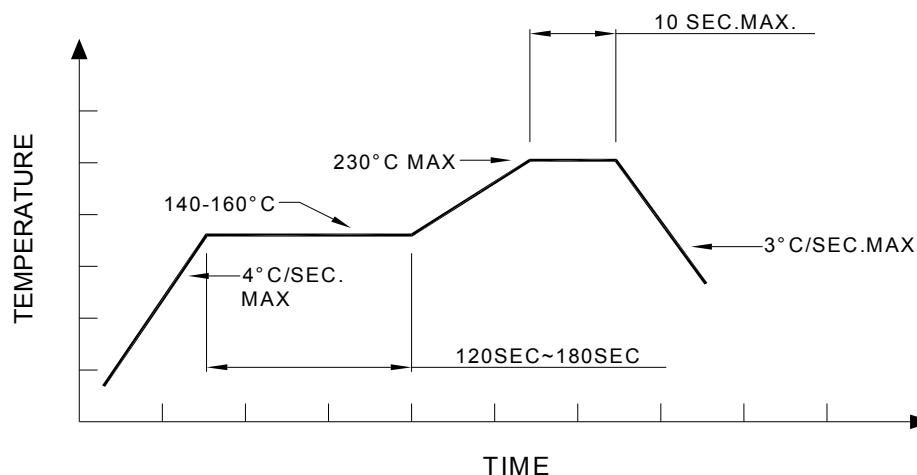
1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2\text{mm}$  unless otherwise specified.
3. Specifications are subject to change without notice.

## Optical Characteristics Curves

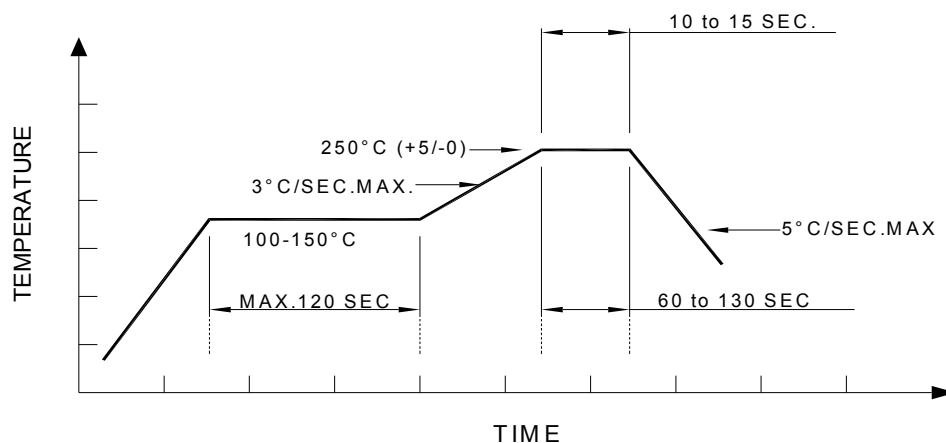




### Recommended re-flow soldering profile:



### 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.