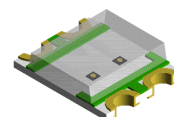


## 1613 SMD Package Bi-Color LED

### VS 3JD8

#### Description

This is Bi-Color SMD LED series with dimension 1.6 mm (L) \* 1.3 mm (W) \* 0.4mm (H). The unique of these LED are made from AlGaInP chips that provide high luminous intensity at low driving current. The lens design provides 120 degree viewing angle and suitable for backlighting purpose. The available colors are Red/Yellow or even Red/Blue. Any color combinations specified by customers can be accepted.



#### Applications

- Industrial control systems signal indicator
- Automotive features
- Front panel indicator
- Status indication



#### Electronic Optical Characteristics (at 20mA):

| Part Number | Emitted Color                                                                             | $\lambda$ (nm) |             | Iv(mcd) |      | VF(Volt) |      | View Angle | Lens  |
|-------------|-------------------------------------------------------------------------------------------|----------------|-------------|---------|------|----------|------|------------|-------|
|             |                                                                                           | $\lambda_d$    | $\lambda_p$ | Min.    | Typ. | Typ.     | Max. |            |       |
| VS 3JD8     | Red    | 624            | 632         | 22.4    | 37   | 2.0      | 2.4  | 120        | Clear |
|             | Green  | 573            | 575         | 9.0     | 15   | 2.0      | 2.4  |            |       |

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

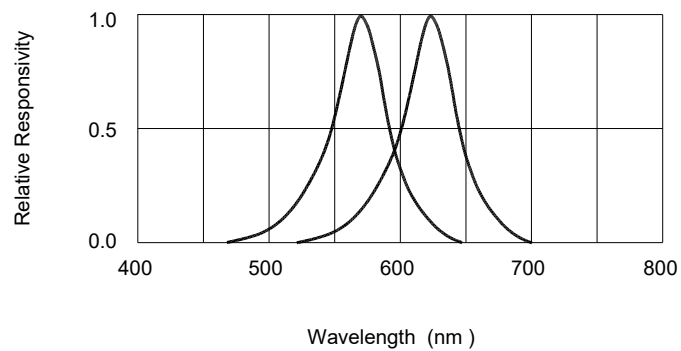
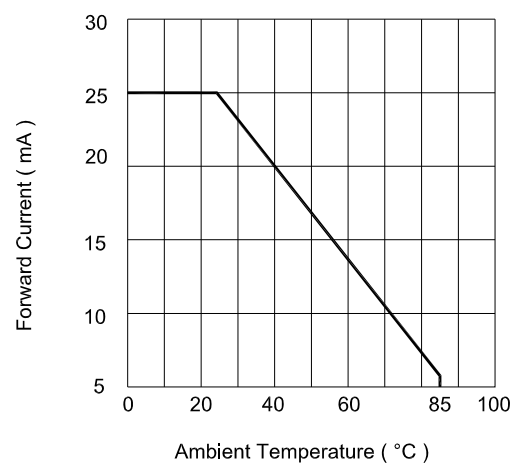
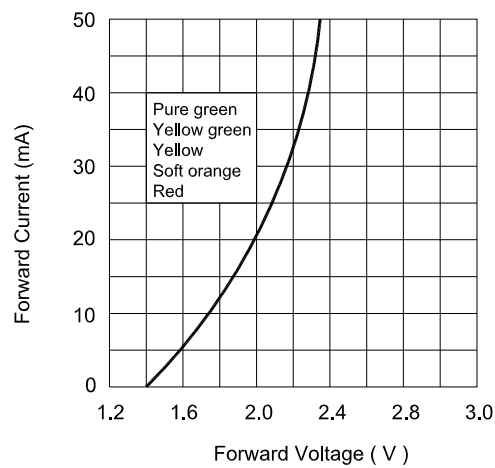
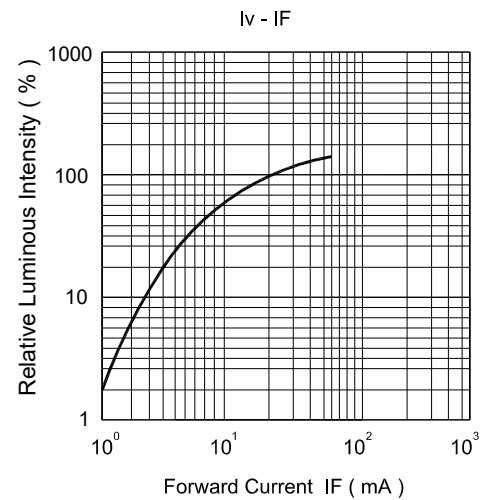
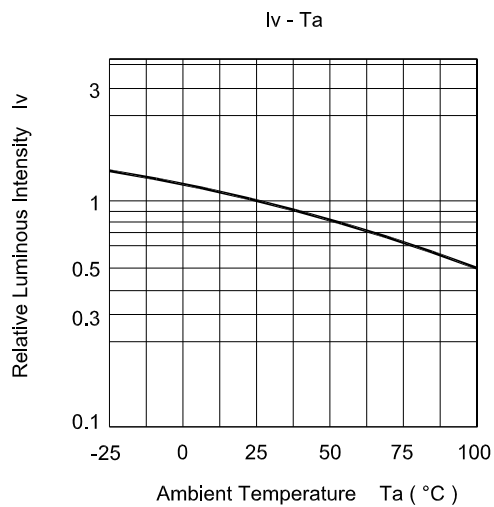
| Emitted Color | P <sub>D</sub> (mW) | I <sub>F</sub> (mA) | I <sub>FP</sub> (mA) | Iron Solder(°C)       | IR@VR=5V | Topr(°C) | Tstg(°C) |
|---------------|---------------------|---------------------|----------------------|-----------------------|----------|----------|----------|
| Red           | 60                  | 25                  | 60*                  | 350 ± 5 for<br>3 sec. | 10       | -40~+85  | -40~+90  |
| Green         | 60                  | 25                  | 60*                  |                       | 10       | -40~+85  | -40~+90  |

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.

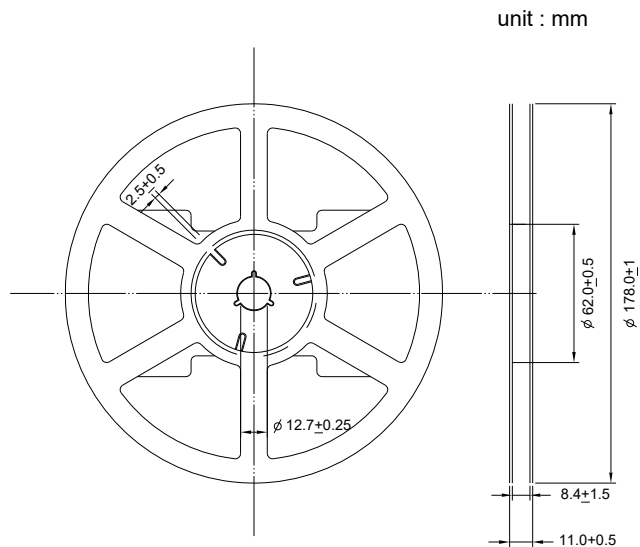
\* Peak forward current (duty 1/10 at 1KHz)



## Optical Characteristics Curves



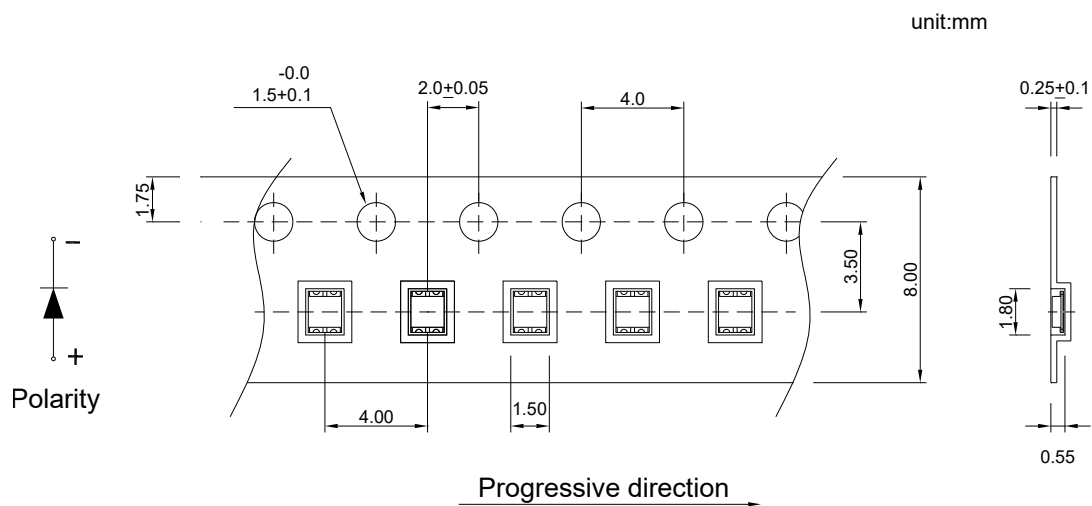
## Reel Dimension:



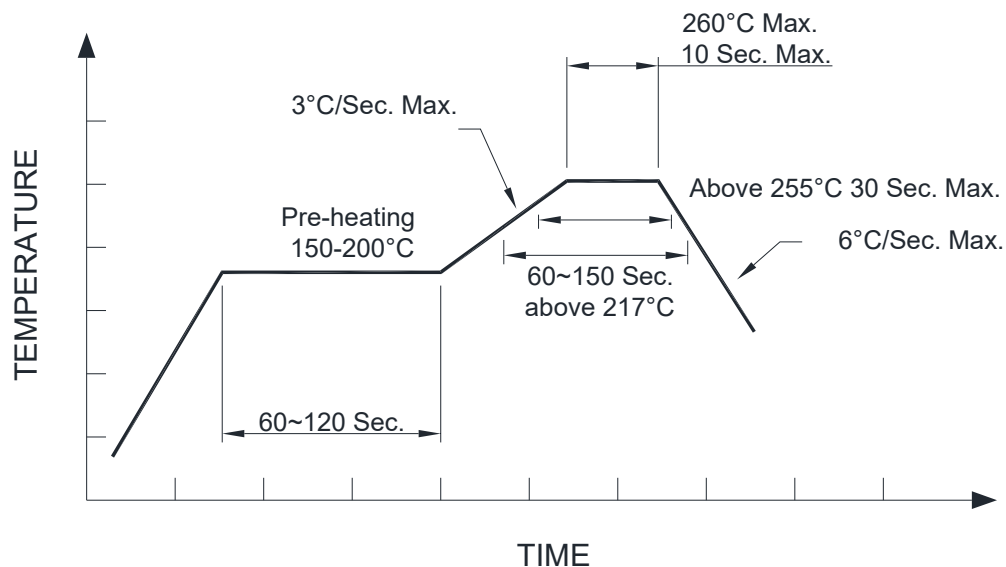
### Note:

Available in 8mm carrier tape on 178mm diameter reels. (2,000 pieces)

## Tape Dimension:



# 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.