

# 0402 Package SMD LED 0.2mm Height

## **VS 1698M**

## **Description**

The major breakthrough in VS 1698M Yellow color emitted is package in dimension L x W x H, 1.0 \* 0.5 \* 0.2 mm ns. The dice used in this series is AlGaInP material. 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 5mA for uniformity. These LED are suitable for multiple usages in series connection applications.



## **Applications**

- 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)	
	Emitted Color	λd	λр	Color	Min.	Тур.	Angle	Тур.	Max.
VS 1698M	Yellow	589	591	Clear	18	30	120	2.0	2.4

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

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

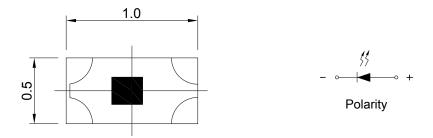
Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specify ratings in this table will result degradation of LED life-span and may cause LED to fail.

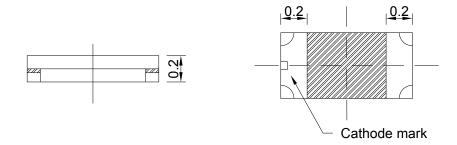
\*IFP: Peak Forward Current under 1/10 duty, 1KHz condition

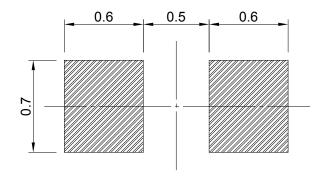
Version:1.2 Spec: VS 1698M Page 1 of 5



## **Package Dimension:**







Recommended Soldering Pad

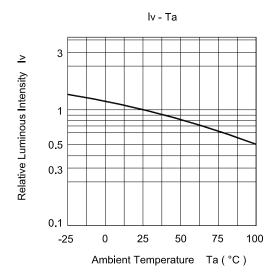
## Notes:

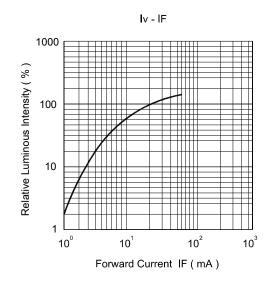
- 1. All dimensions are millimeters.
- 2. Tolerance is  $\pm$  0.2mm unless otherwise specified.
- 3. Specifications are subject to change without notice.

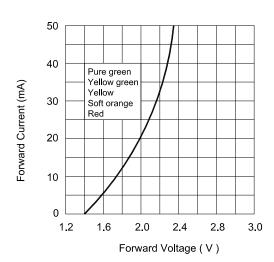
Version:1.2 Spec: VS 1698M Page 2 of 5

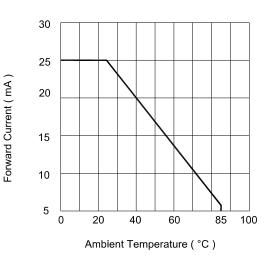


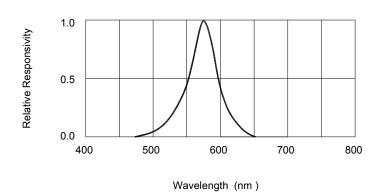
## **Typical Electro-optical Characteristics Curves**







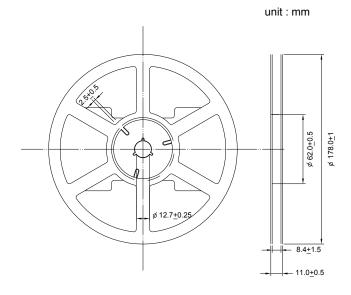




Version:1.2 Spec: VS 1698M Page 3 of 5

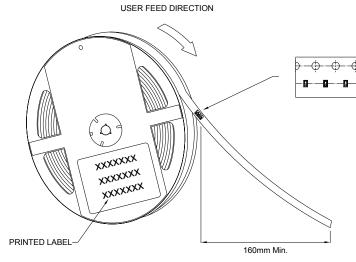


### **Reel Dimension:**



### Note:

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

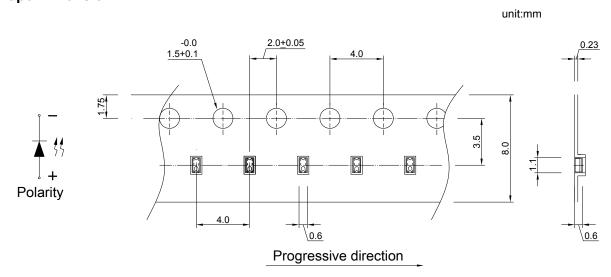


# Note:

Polarity

A spacing of approximately 160mm between the front edge of tape

## **Tape Dimension:**



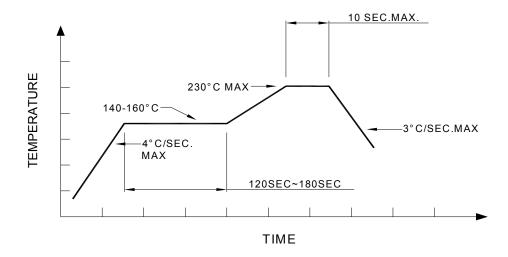
Version:1.2

Spec: VS 1698M

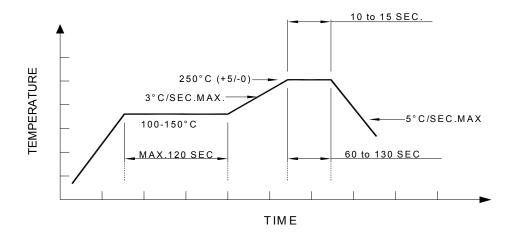
Page 4 of 5



## 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.

Version:1.2 Spec: VS 1698M Page 5 of 5