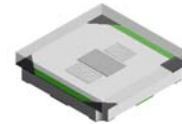


# 1.0x1.0x0.25mm RGB LED

## VS AR98M

### Description

This is full color top view package SMT LED with dimension 1.0mm (L) \* 1.0 mm (W) \* 0.25 mm (H), common anode configuration. The unique of these LEDs are made from AlGaInP chips and InGaN technology that provide high luminous intensity at low driving current. The lens design provides 120 degree viewing angle and suitable for lighting indicator purpose.






### Applications

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



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

Part Number	Emitted Color	$\lambda$ (nm)		Lens Color	Iv(mcd)		View Angle (2 $\theta$ 1/2)	VF(V)	
		$\lambda$ d	$\lambda$ p		Min.	Typ.		Typ.	Max.
VS AR98M	Red 	624	632	Clear	57	90	120	1.7	2.2
	Green 	525	518		57	90		2.7	3.2
	Blue 	470	468		28	60		2.7	3.2

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

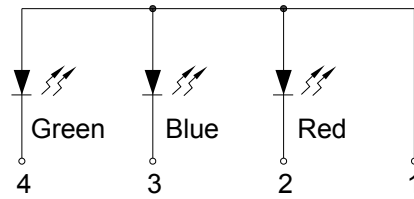
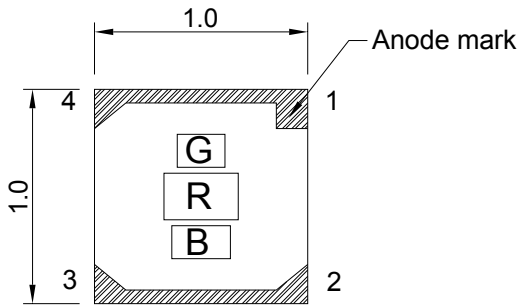
Emitted Color	P <sub>D</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)	I <sub>R</sub> (uA)@V <sub>R</sub> =5V	Topr (°C)	Tstg (°C)
Red	60	25	60 *	10	-40~+85	-40~+100
Green	110	25	100 *	50	-40~+85	-40~+100
Blue	110	25	100 *	50	-40~+85	-40~+100

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.

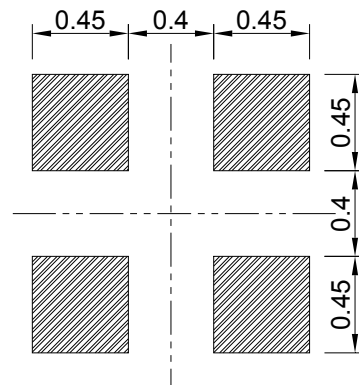
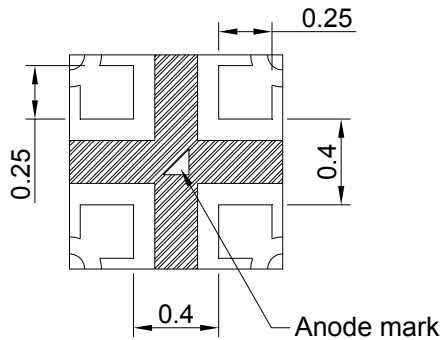
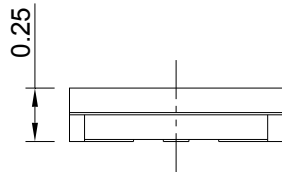
\* I<sub>FP</sub> = Peak Forward Current under 1/10 duty, 1KHz condition

**Package Dimension:**

unit:mm



Polarity

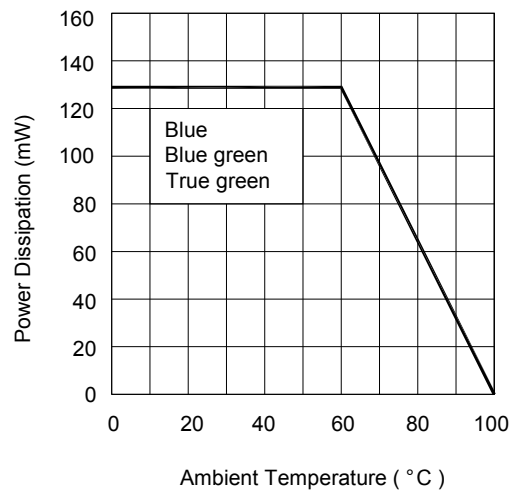
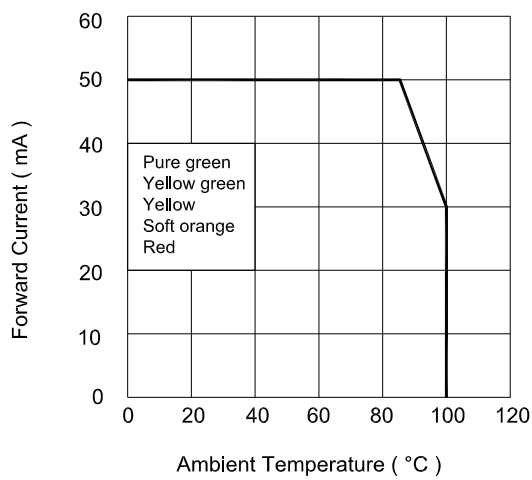
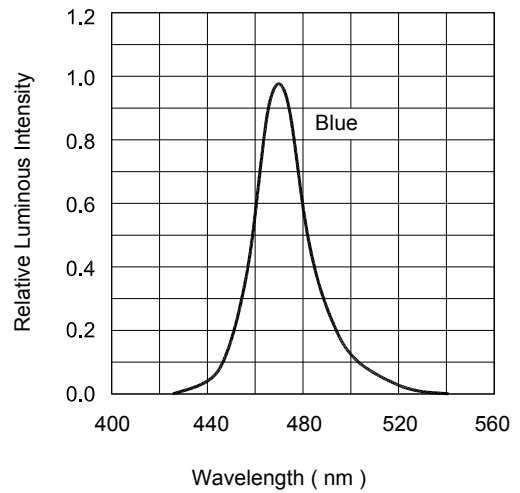
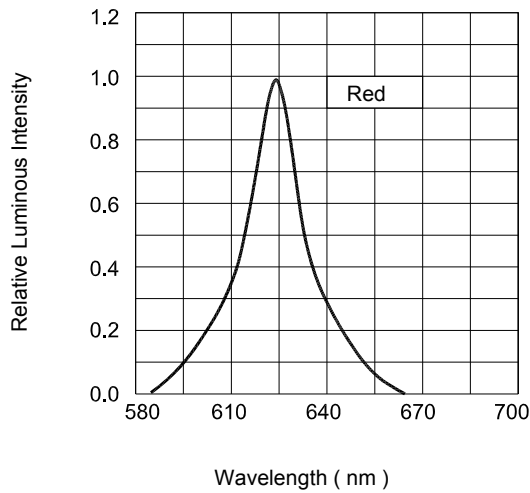
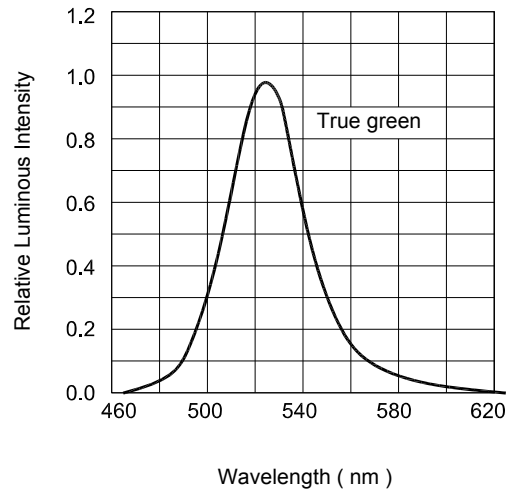
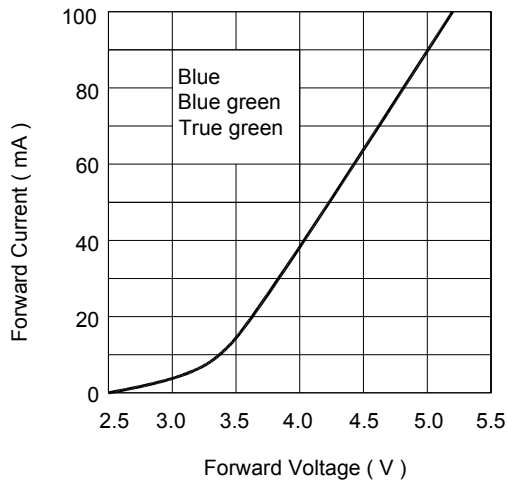


Recommended Soldering Pad

**Notes:**

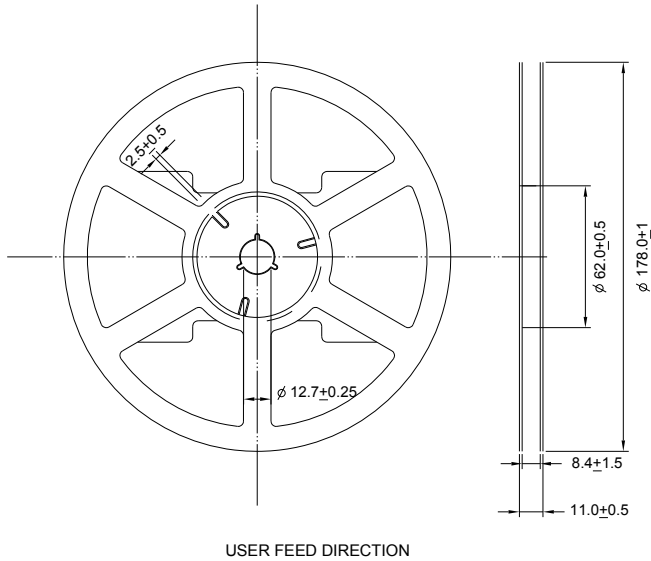
1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2$ mm unless otherwise specified.
3. Specifications are subject to change without notice.

### Optical Characteristics Curves



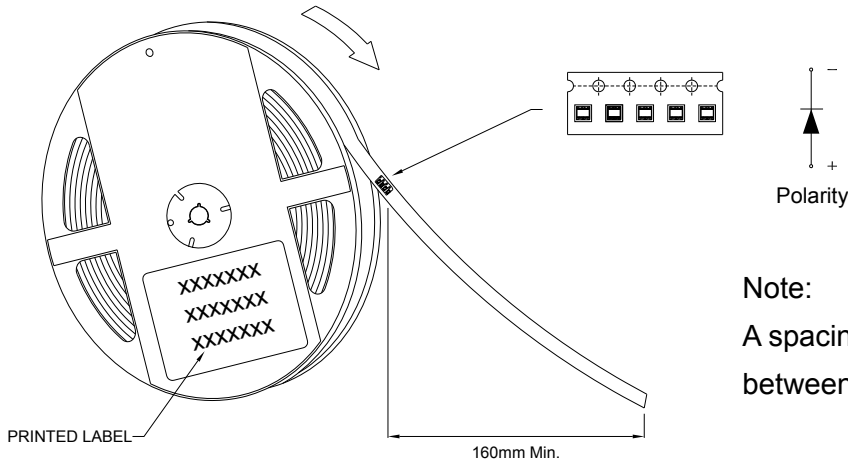
### Reel Dimension:

unit : mm



Note:

Available in 8mm carrier tape on 178mm diameter reels. (2000 pieces)

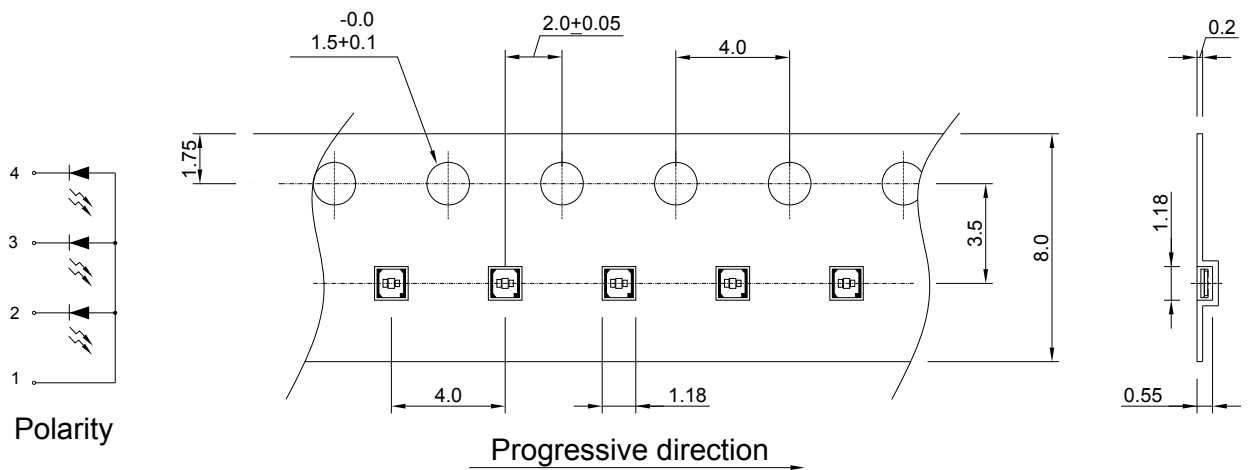


Note:

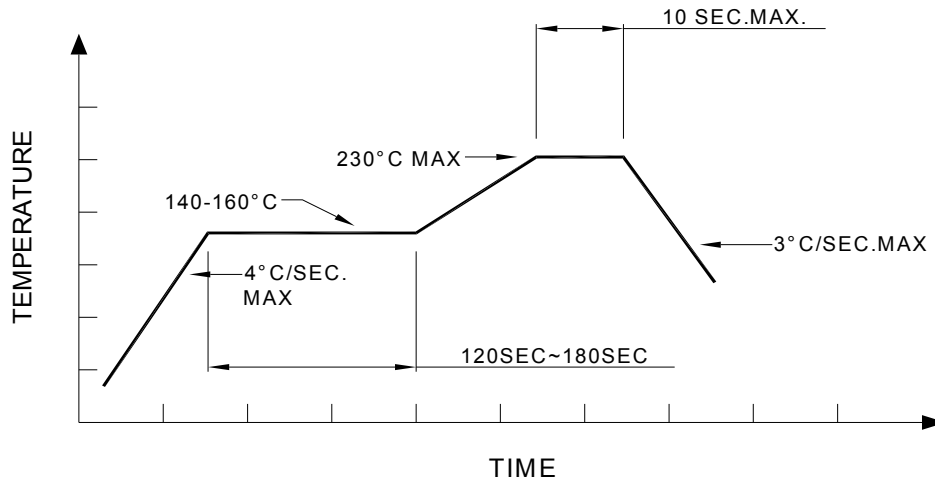
A spacing of approximately 160mm between the front edge of tape

### Tape Dimension:

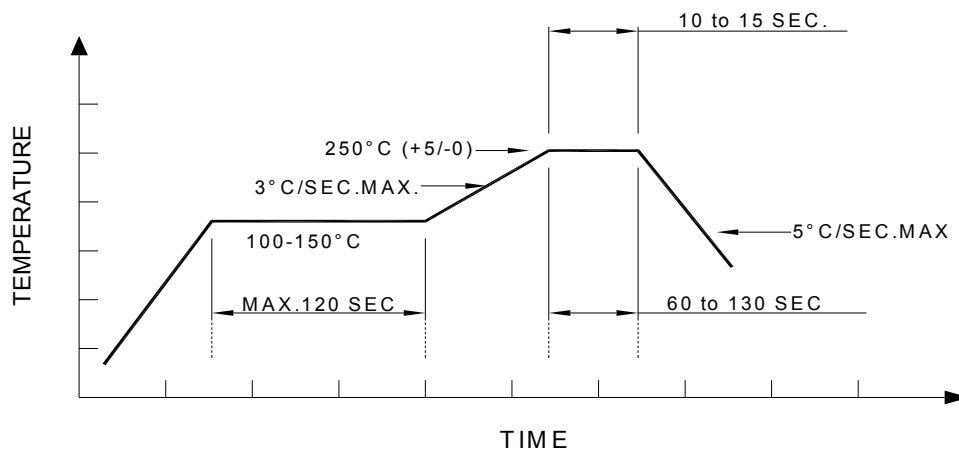
unit:mm



**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.