

Side View 4.5x1.25mm RGB SMD LED

VR 3RA8

Description

This is Full Color SMD LED series with dimension 4.50 mm (L) * 1.25 mm (W) * 0.80 mm (H). The unique of these LED are made from AlGaInP and InGaN chips that provide high luminous intensity at low driving current. The lens design provides 120 degree viewing angle and suitable for backlighting purpose.



Applications

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



Electronic Optical Characteristics (at 20mA):

Part Number	Color	λ (nm)		Iv(mcd)		VF(V)		View Angle (2 θ 1/2)	Lens
		λ_d	λ_p	Min.	Typ.	Typ.	Max.		
VR 3RA8	True-green 	525	518	500	900	3.3	3.7	120	Clear
	Red 	624	632	224	650	2.0	2.4		
	Blue 	470	468	112	340	3.3	3.7		

Absolute Maximum Ratings (at Ta=25°C)

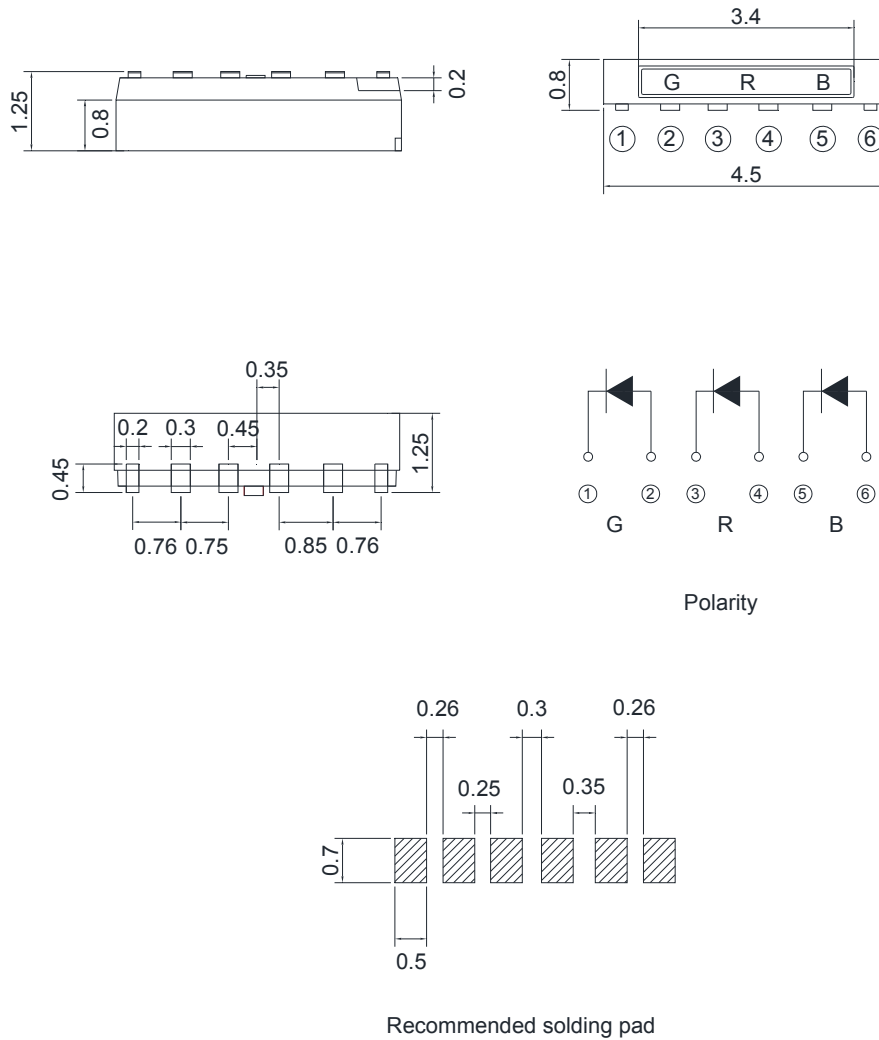
Emitted Color	P _D (mW)	I _F (mA)	I _{FP} (mA)	I _R (uA)@VR=5V	Topr(°C)	Tstg(°C)
Ture-green	110	30	100 *	50	-40~+85	-40~+100
Red	130	50	100 *	10	-40~+85	-40~+100
Blue	110	30	100 *	50	-40~+85	-40~+100

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_{FP} = Peak Forward Current under 1/10 duty, 1KHz condition

Package Dimension:

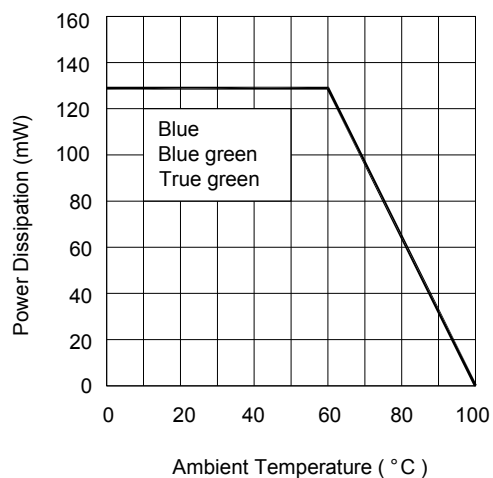
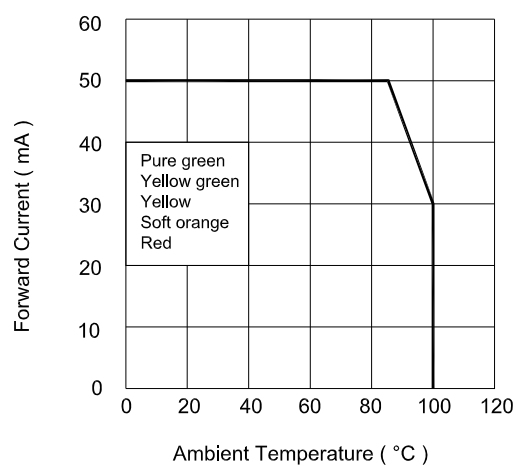
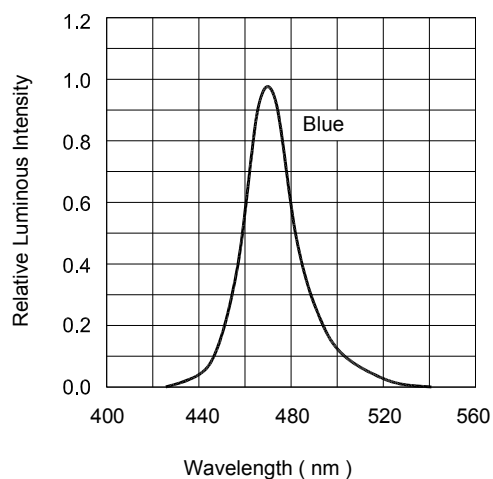
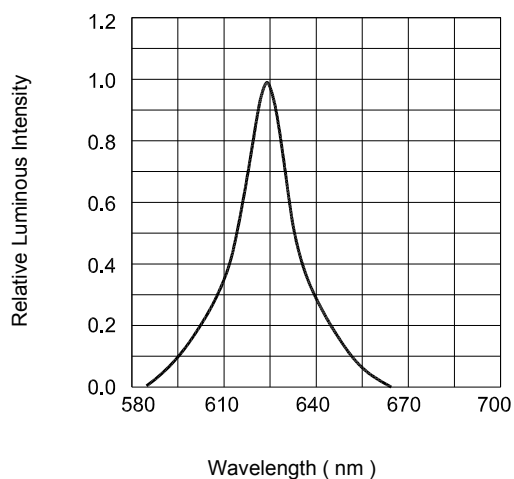
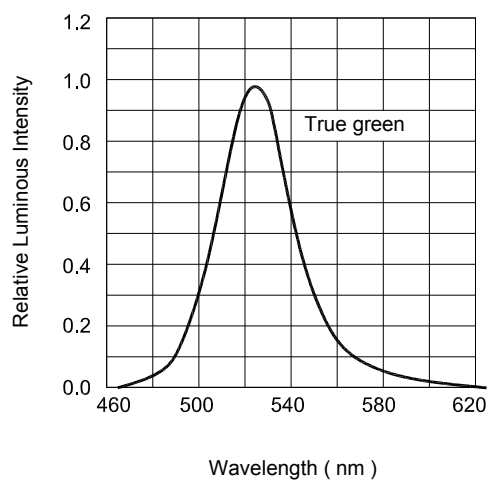
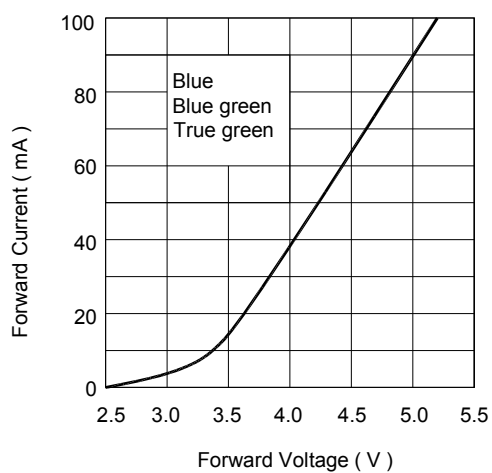
unit : mm



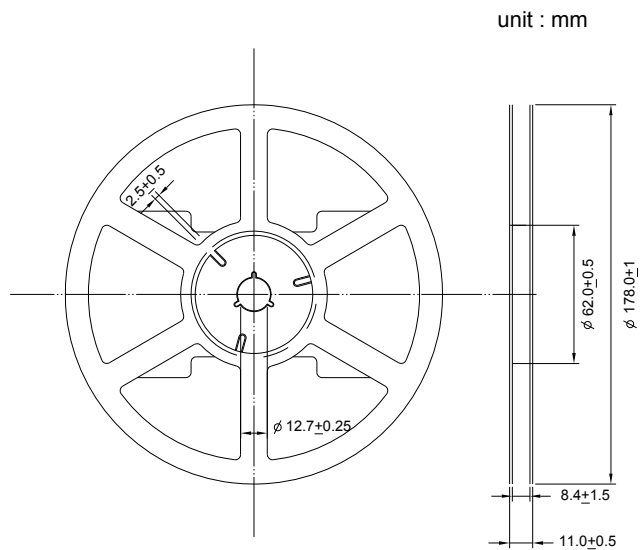
Notes:

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



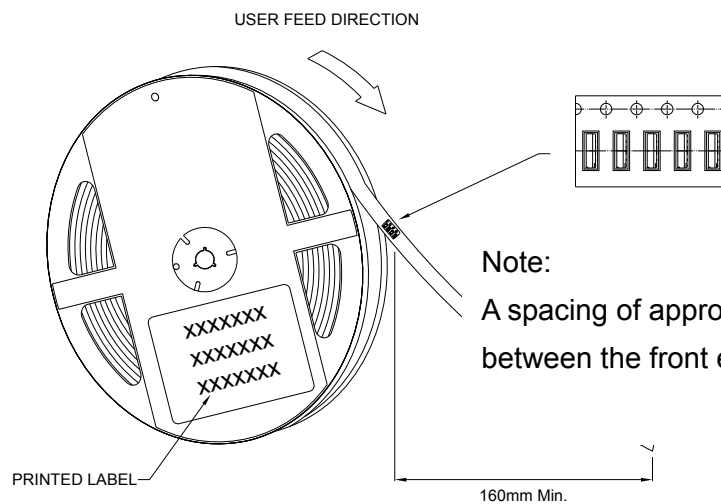
Reel Dimension:



Note:

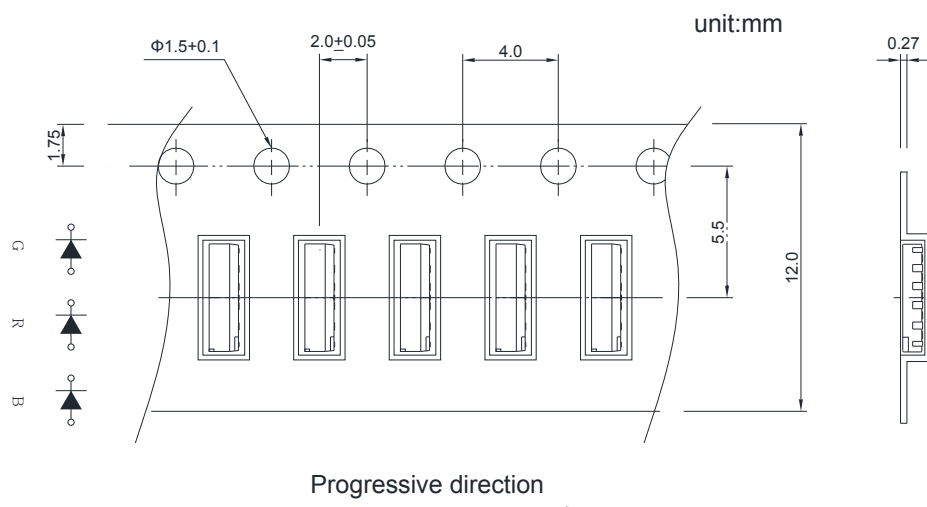
Available in 8mm carrier tape on 178mm diameter reels. (2000 pieces)

Tape Dimension:

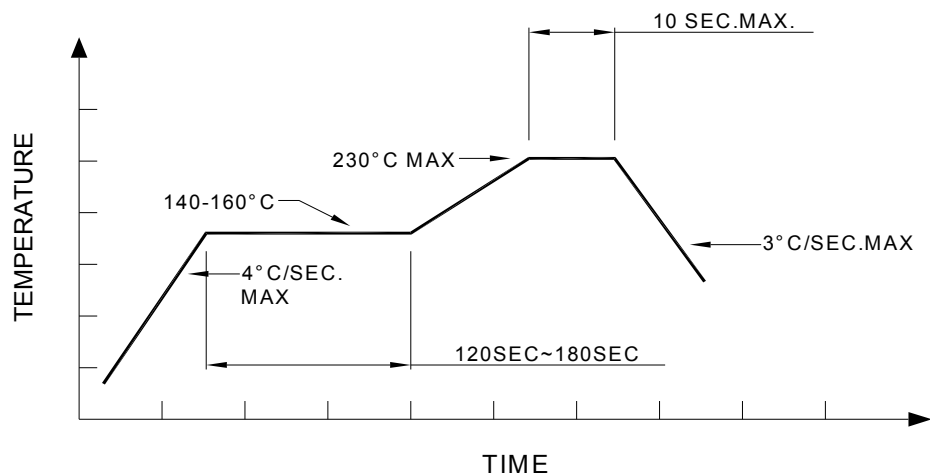


Note:

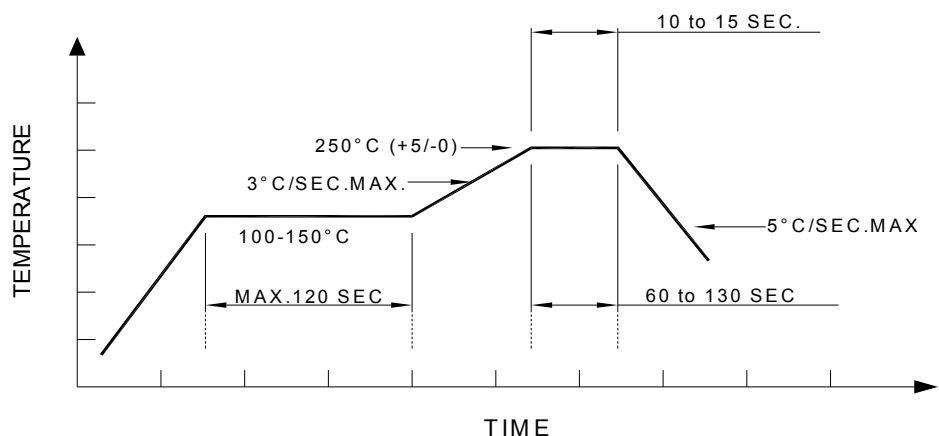
A spacing of approximately 160mm between the front edge of tape



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.