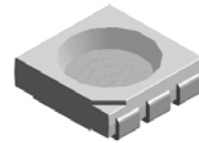


5050 Package SMD RGB LED

Description

The constructive of this series of LEDs are different from the PCB type SMD LED. The lead-frame is of metal, reflector is made of thermoplastic and construct into this unique type of SMD LED. The Wavelengths and Luminous Intensities of this series are grouped under 20mA for uniformity.

VR KRA9D






Applications

- Dashboards and switch
- Backlight keypads
- Industrial control systems signal indicator
- Automotive features



Electronic Optical Characteristics (at 20mA):

Part Number	Emitted Color	λ (nm)		Lens Color	Iv(mcd)		View Angle (2 θ 1/2)	VF(V)	
		λ d	λ p		Min.	Typ.		Typ.	Max.
VR KRA9D	Red 	624	632	Clear	600	800	110	2.0	2.4
	Green 	525	518		2000	2500		3.2	3.8
	Blue 	470	468		400	500		3.2	3.8

Absolute Maximum Ratings (at Ta=25°C)

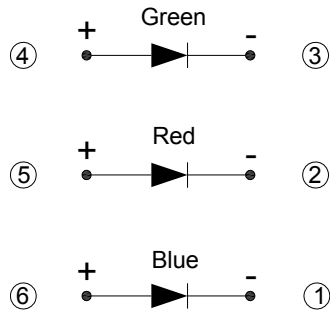
Emitted Color	P _D (mW)	I _F (mA)	I _{FP} (mA)	ESD(V)	I _R (μ A) @VR=5V	Topr (°C)	Tstg (°C)
Red	120	50	100 *	2000	10	-40~+85	-40~+100
Green	110	30	100 *	2000	50	-40~+85	-40~+100
Blue	110	30	100 *	2000	50	-40~+85	-40~+100

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.

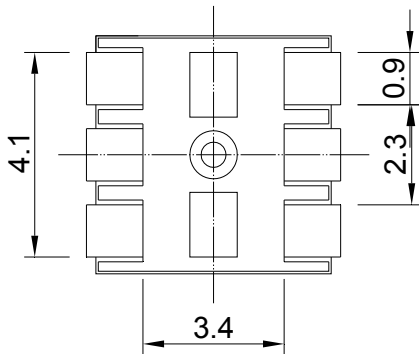
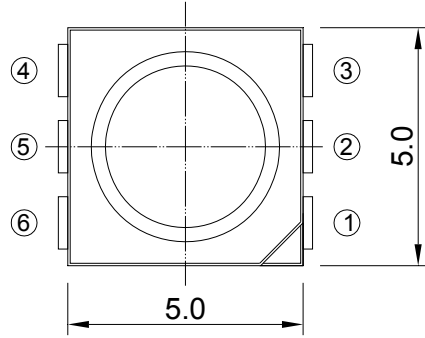
*I_{FP} = Peak Forward Current under 1/10 duty, 1KHz condition

Package Dimension:

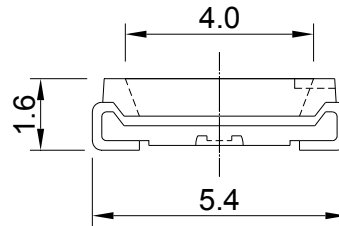
unit:mm



Polarity



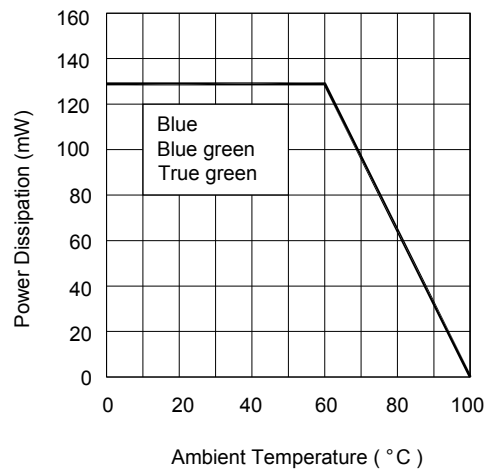
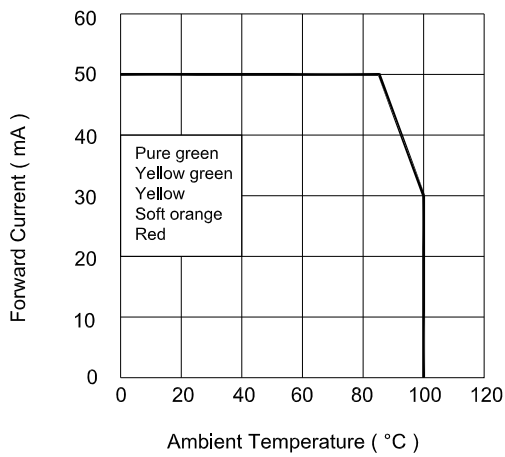
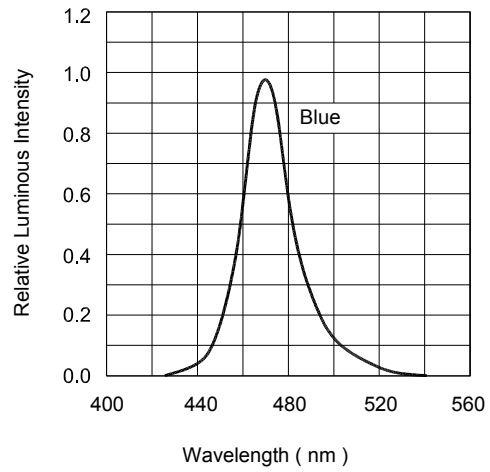
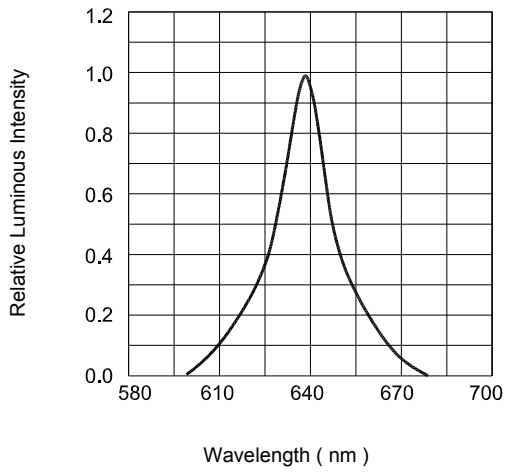
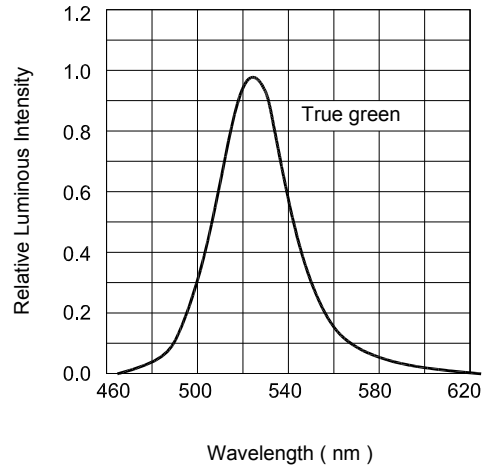
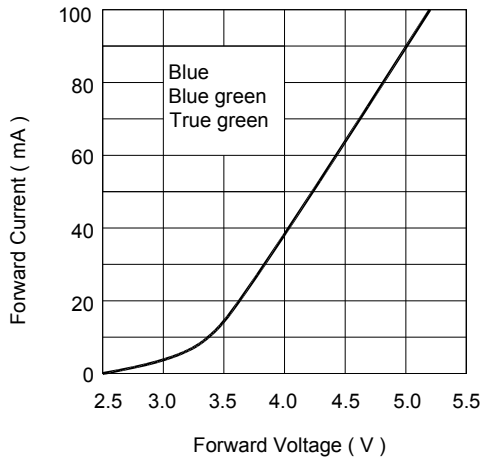
Recommended Soldering Pad



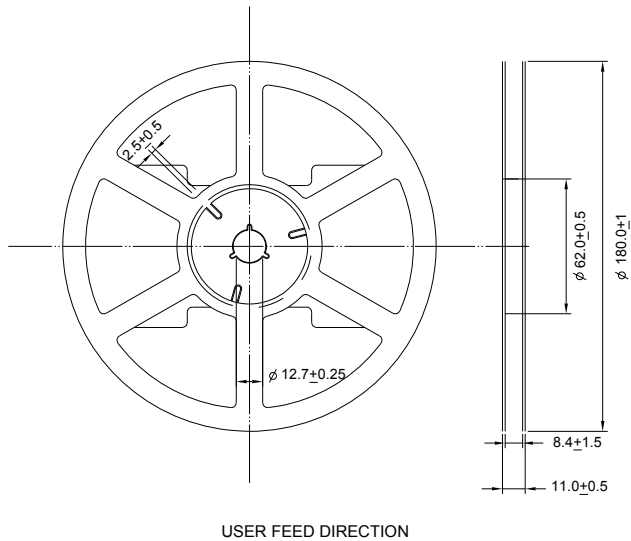
Notes:

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

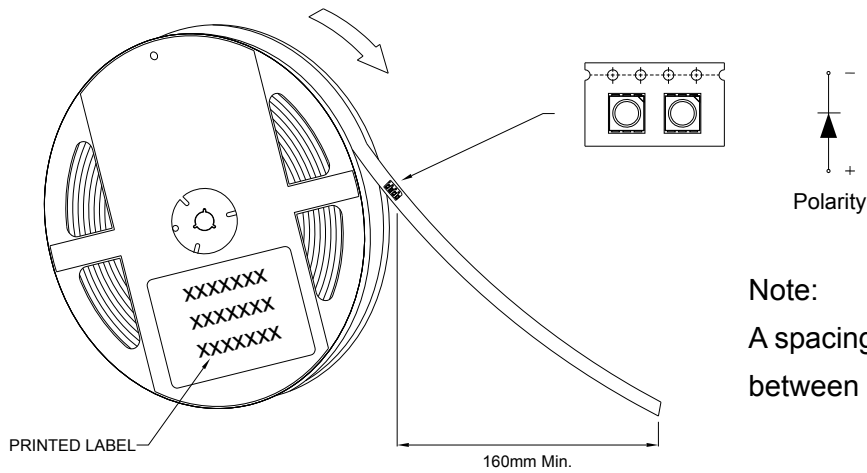


Reel Dimension:



Note:

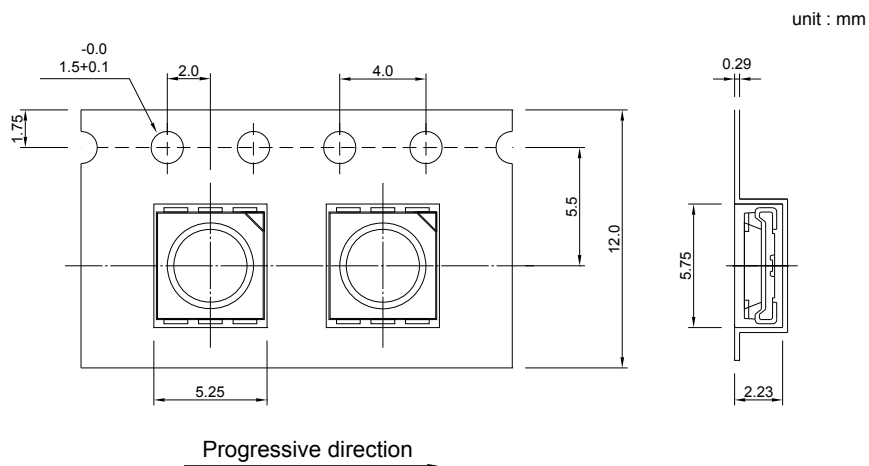
Available in 8mm carrier tape on 178mm diameter reels. (1000 pieces)



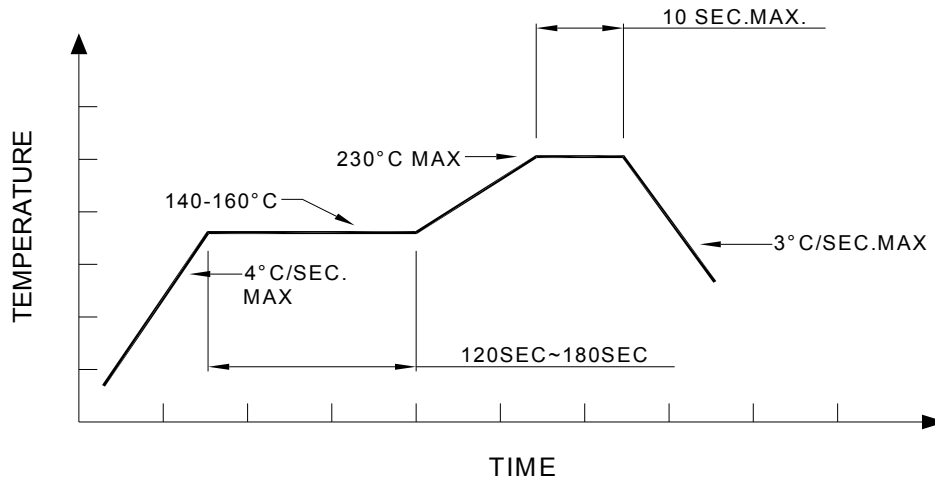
Note:

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

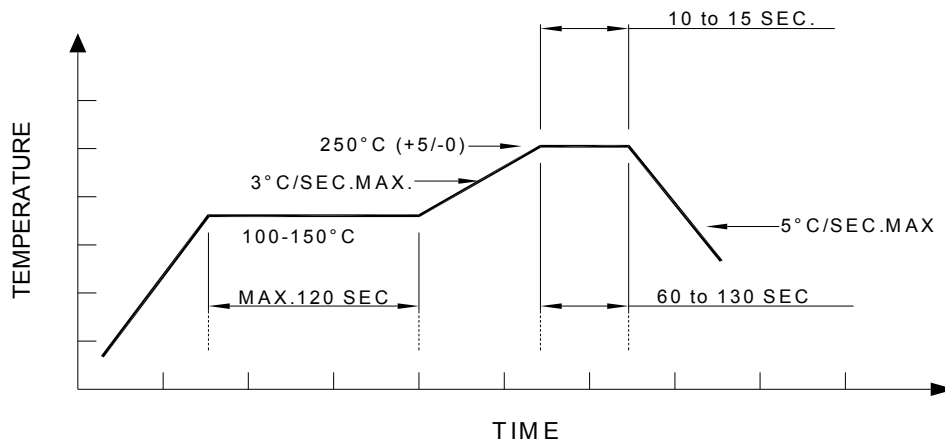
Tape Dimension:



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.