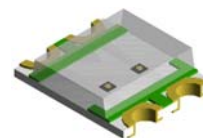


1613 Package Bi-Color SMD LED

VS 3QD8

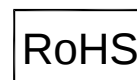
Description

This is Bi-Color SMD LED series with dimension 1.6 mm (L) * 1.3 mm (W) * 0.4mm (H). The unique of these LEDs 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 GREEN, YELLOW/YELLOW GREEN 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	λ (nm)		Iv(mcd)		VF(Volt)		View Angle	Lens
		λ_d	λ_p	Min.	Typ.	Min.	Typ.		
VS 3QD8	True-green 	525	518	90	135	3.2	3.5	120	Clear
	Red 	624	632	71	115	2.0	2.4		

Absolute Maximum Ratings (at Ta=25°C)

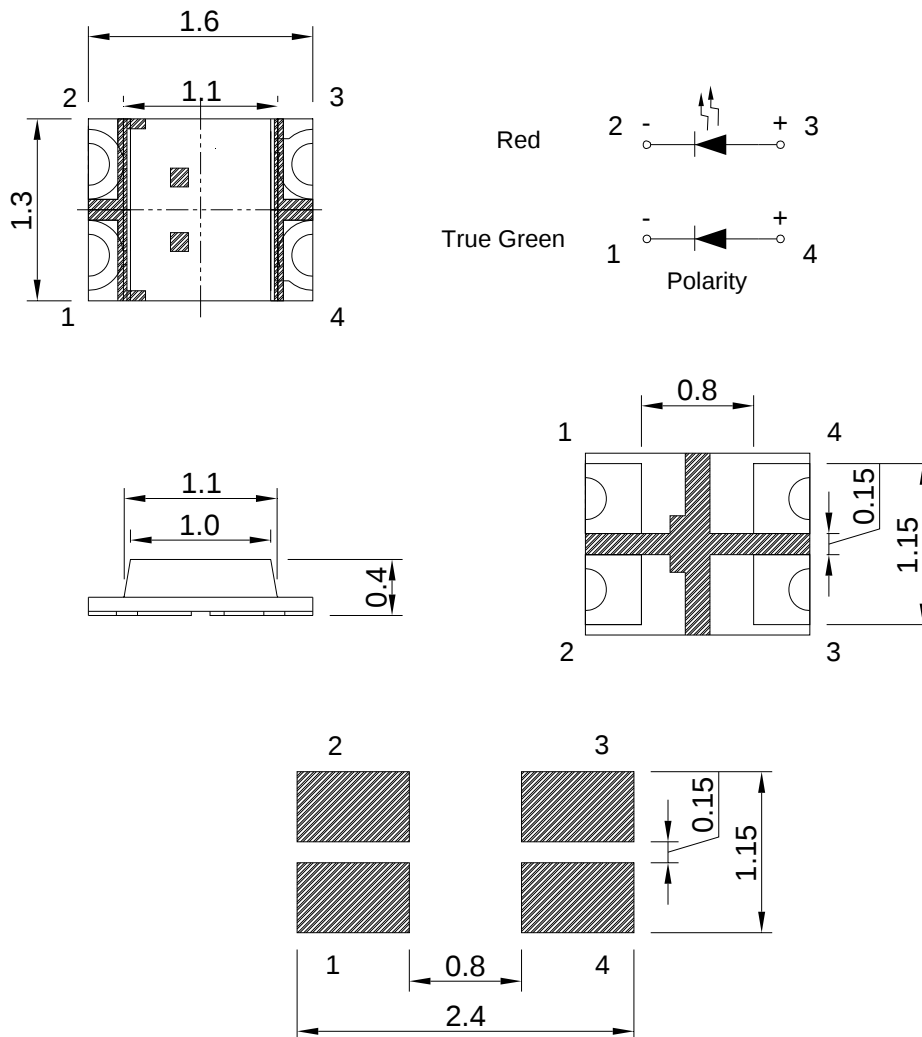
Emitted Color	P _D (mW)	I _F (mA)	I _{FP} (mA)	I _R (uA)@VR=5V	Topr (°C)	Tstg (°C)
True-green	110	25	100 *	50	-40~+85	-40~+90
Red	60	25	100 *	10	-40~+85	-40~+90

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.

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

Package Dimension:

unit:mm

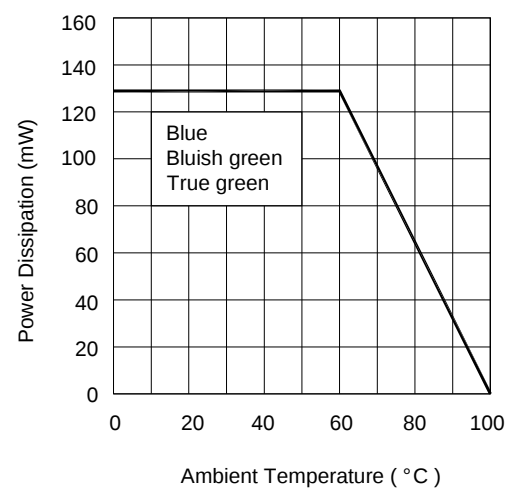
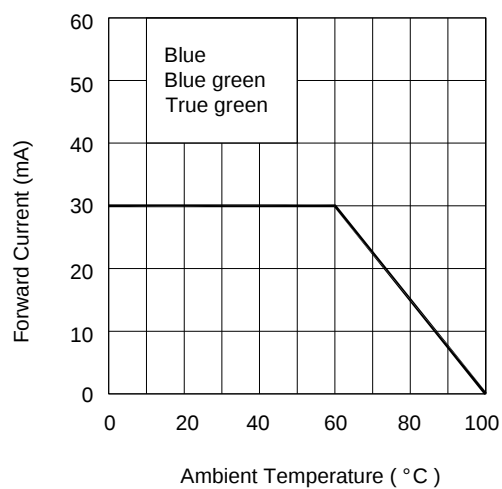
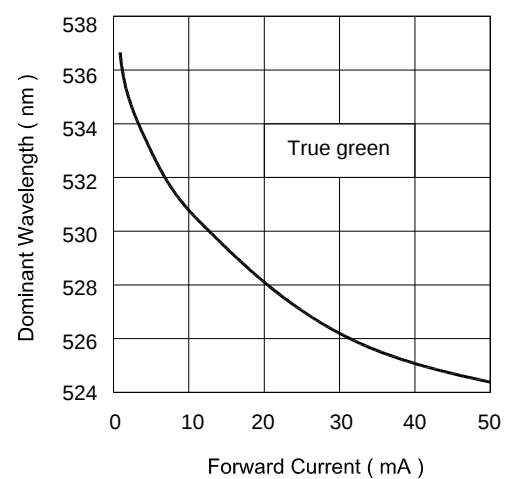
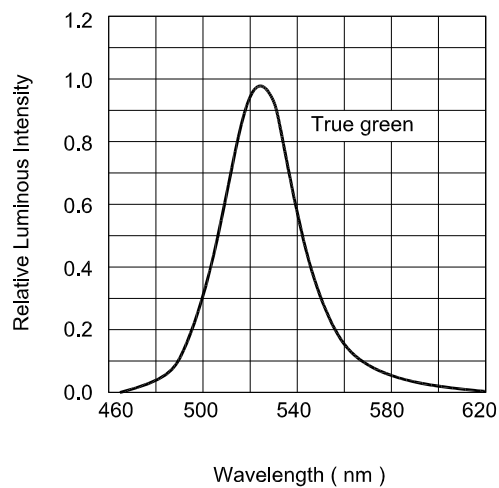
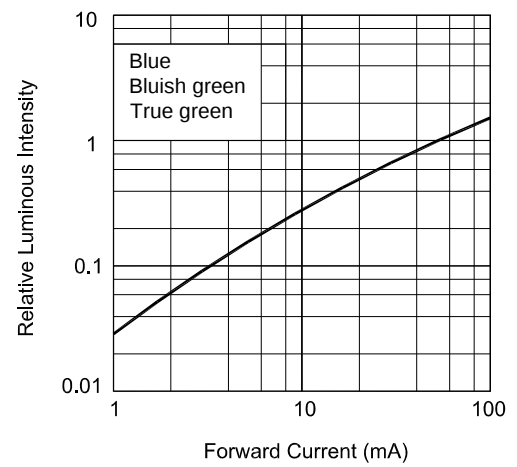
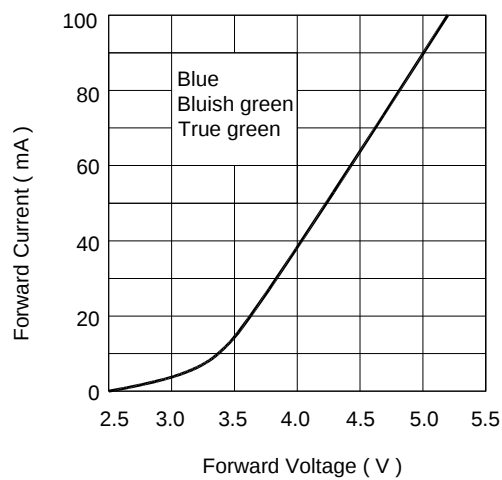


Recommended Soldering Pad

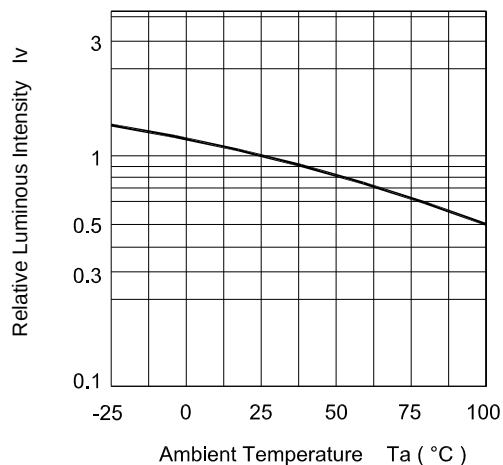
Notes:

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

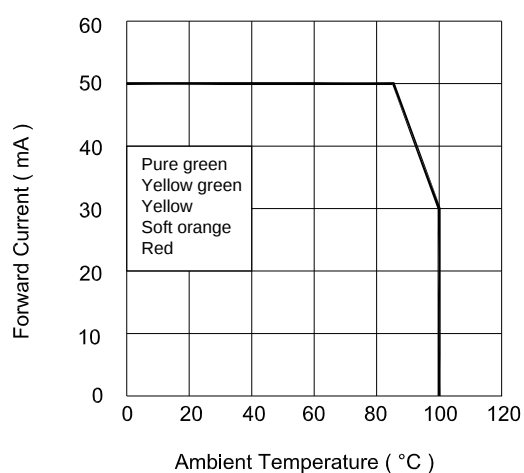
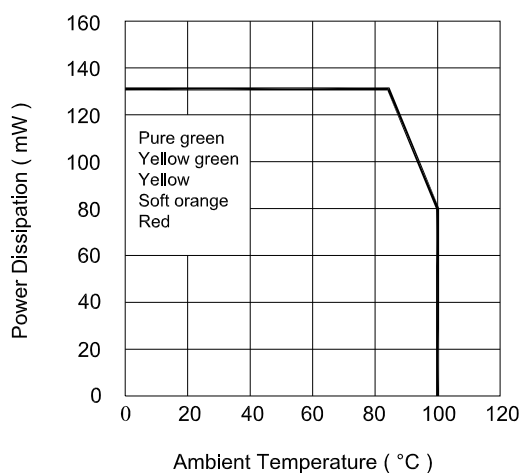
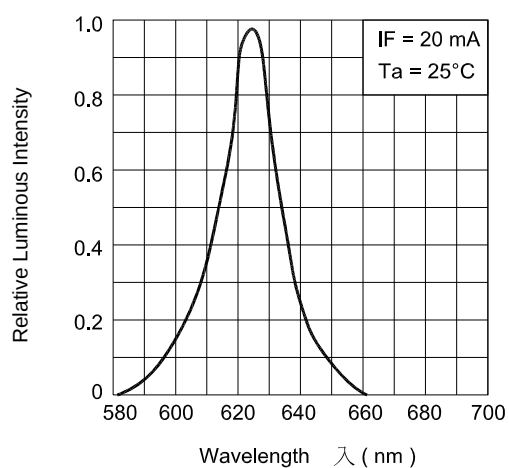
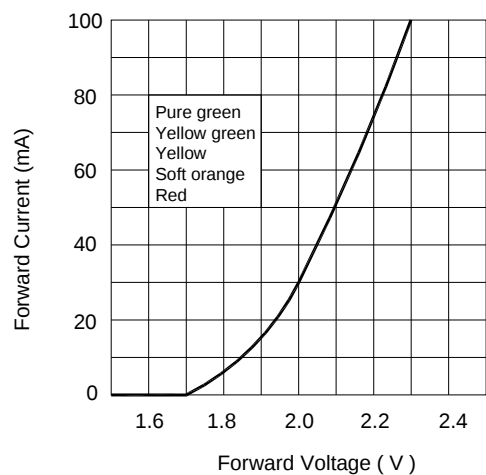
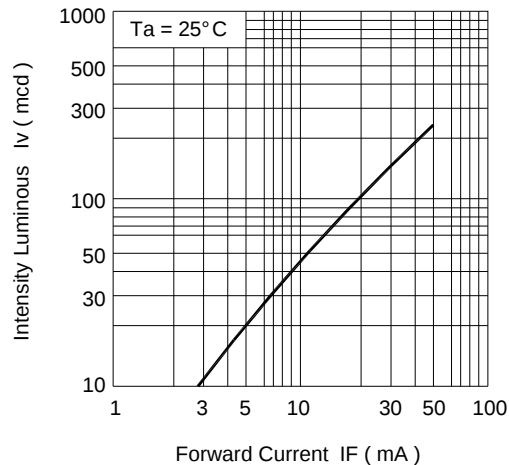
Optical Characteristics Curves



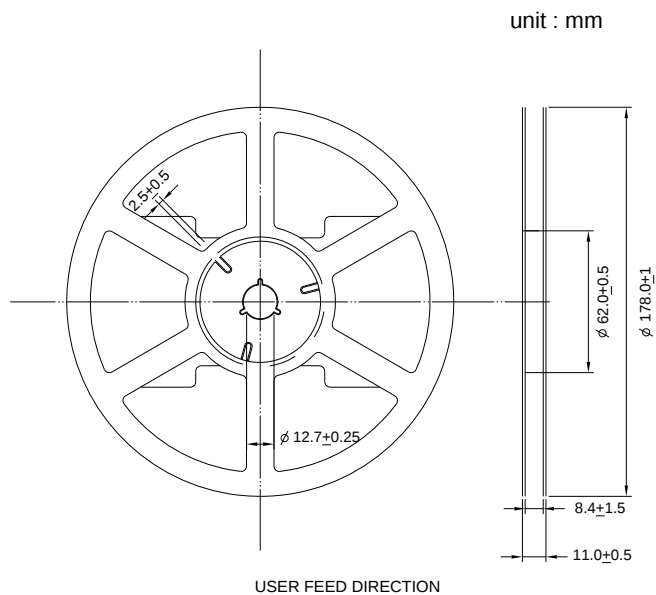
Iv - Ta



Iv - IF

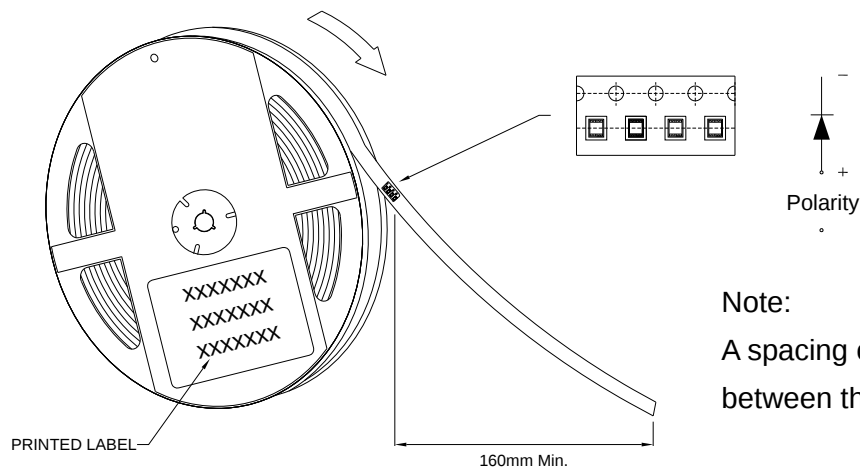


Reel Dimension:



Note:

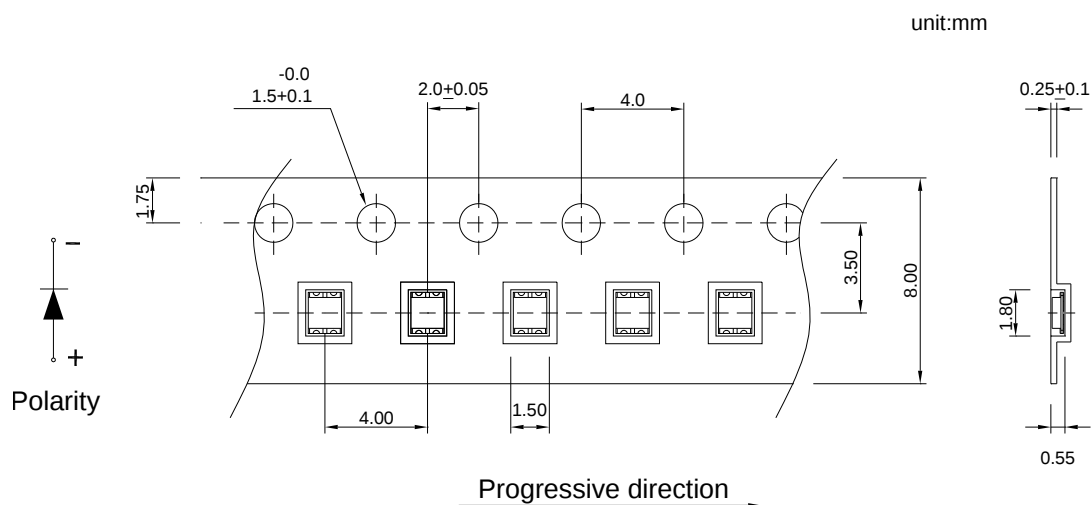
Available in 8mm carrier tape on 178mm diameter reels. (2000 pieces)



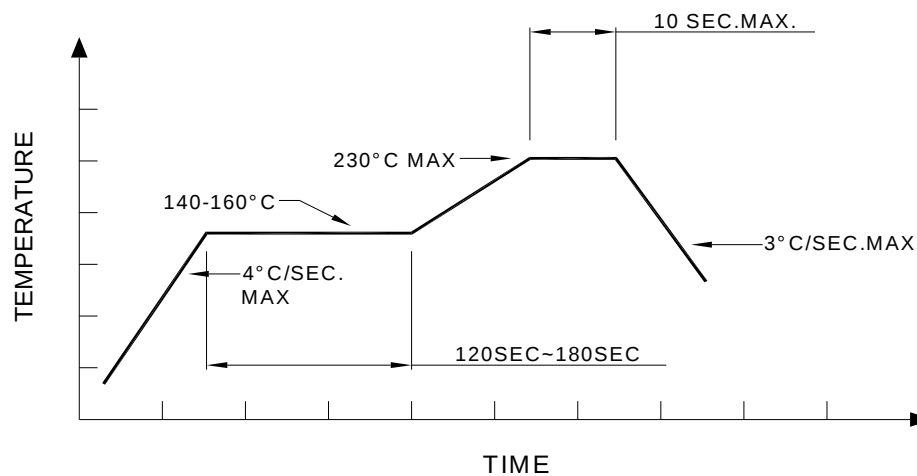
Note:

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

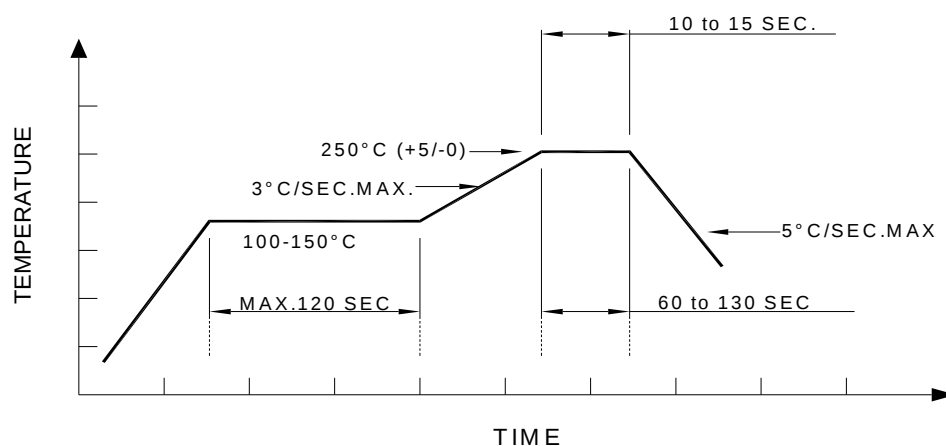
Tape Dimension:



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.