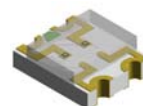


## 3227 SMD Package Bi-Color LED

### VS QKH8

#### Description

This is Bi-Color SMD LED series with dimension 3.2 mm (L) \* 2.7 mm (W) \* 1.1 mm (H). The unique of these LED are made from AlGaInP chips that provide high luminous intensity at low driving current. The lens design provides 140 degree viewing angle and suitable for backlighting purpose. The available colors are Blue/Red, Yellow-green/Red or even Red/Yellow. 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	$\lambda$ (nm)		Iv(mcd)		VF(Volt)		View Angle	Lens
		$\lambda_d$	$\lambda_p$	Min	Typ.	Typ.	Max.		
VS QKH8	Green 	573	575	15	30	2.0	2.4	140	Clear
	Yellow 	589	591	20	40	2.0	2.4		

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

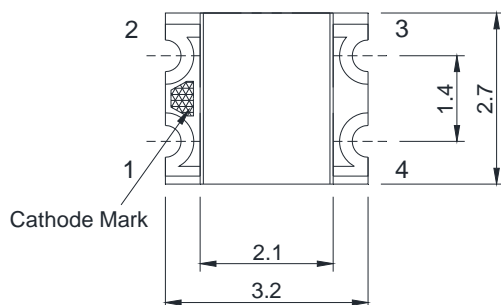
Emitted Color	P <sub>D</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)	Iron Solder(°C)	I <sub>R</sub> (uA)@V <sub>R</sub> =5V	Topr(°C)	Tstg(°C)
Green	60	25	100 *	350 ± 5 3 sec	10	-40~+85	-40~+90
Yellow	60	25	100 *		10	-40~+85	-40~+90

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

## Package Dimension:

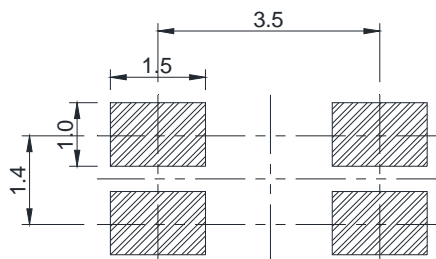
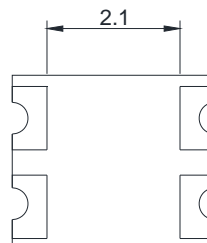
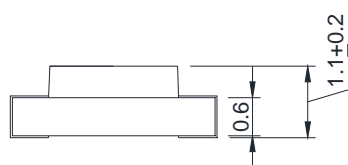
unit:mm



Yellow  
2 -  + 3

Green  
1 -  + 4

Polarity

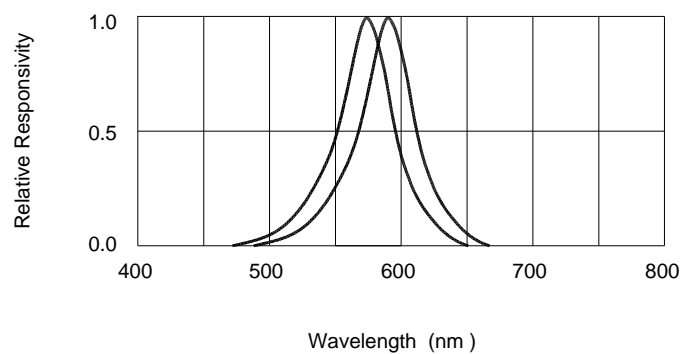
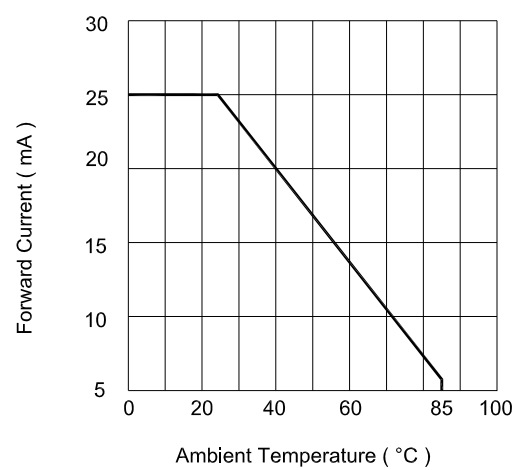
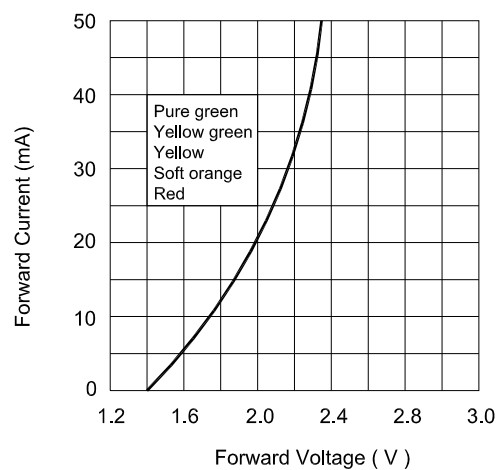
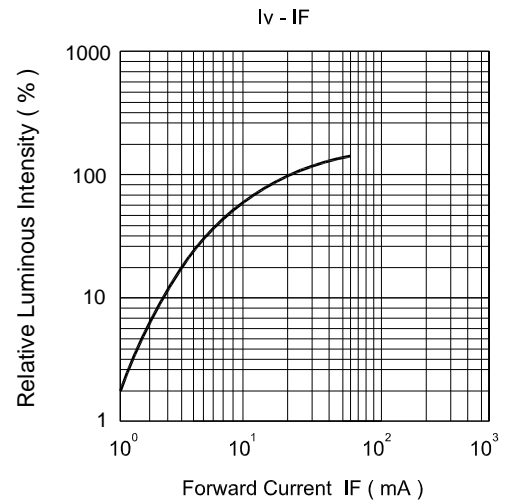
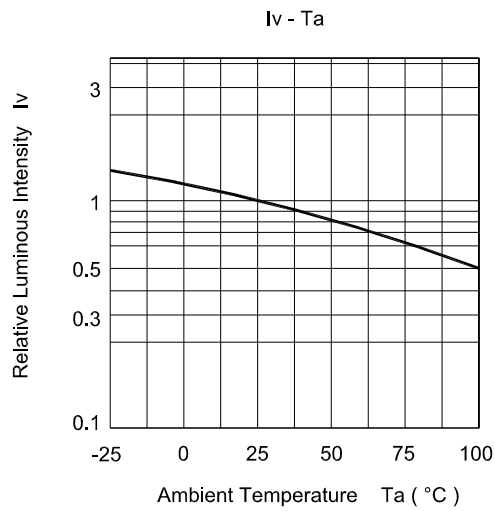


Recommended Soldering Pad

## Notes:

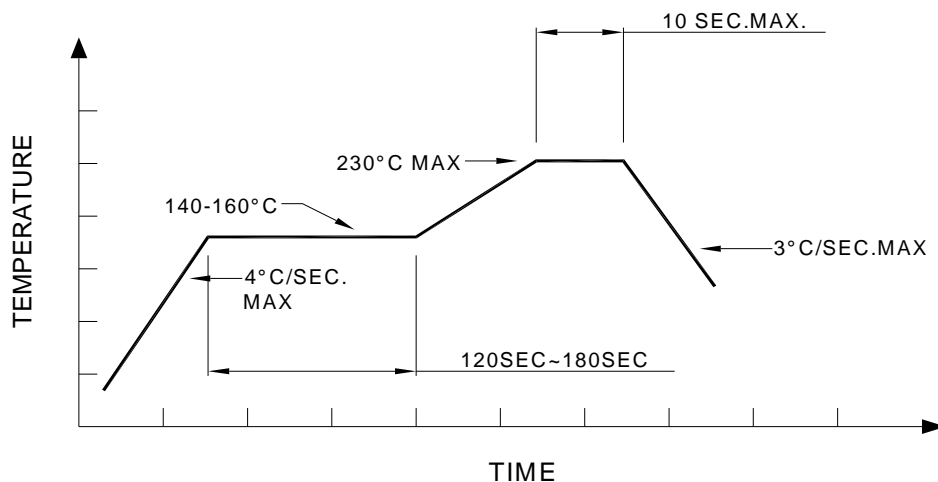
1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2\text{mm}$  unless otherwise specified.
3. Specifications are subject to change without notice.

## Optical Characteristics Curves

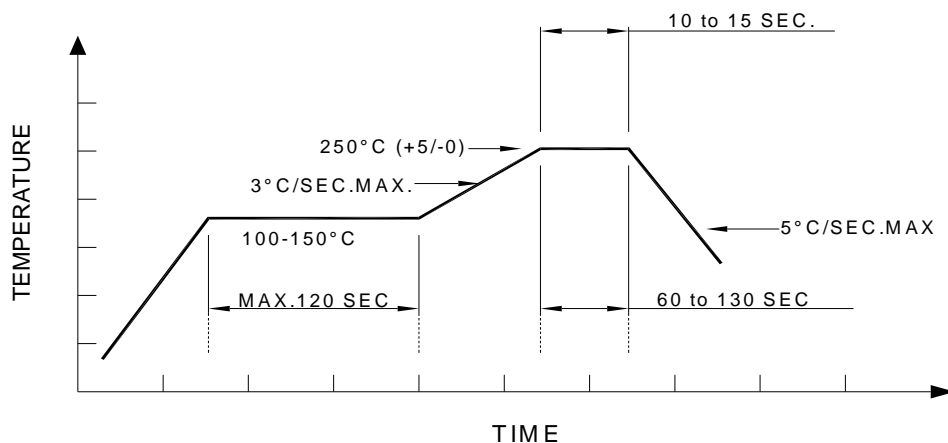




### Recommended re-flow soldering profile:



### 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.