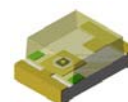


0805 SMD LED 0.8mm Height

VS 4WD9

Description

The major breakthrough in VS 4WD9 is White color emitted package in 0805 dimension SMD LED. This series are operating under low current driving condition suitable for backlighting applications or applications call for light emitting from unique angle.



Feature

- Package: Side emitting SMD-package, brightness, VF and color categorized for each reel
- Technology: InGaN with phosphor
- Assembly: Suitable for all SMD assembly methods

Application

- General lighting indicator
- Backlighting (LCD, switches , keys, display)
- Interior automotive



Electronic Optical Characteristics (at 20mA):

Part Number	Emitted Color	C.C		Lens Color	Iv(mcd)		View Angle	VF(V)	
		X	Y		Min.	Typ.		Typ.	Max.
VS 4WD9	White	0.29	0.30	Yellow Diff.	140	240	130	3.5	3.8

Absolute Maximum Ratings (at Ta=25°C)

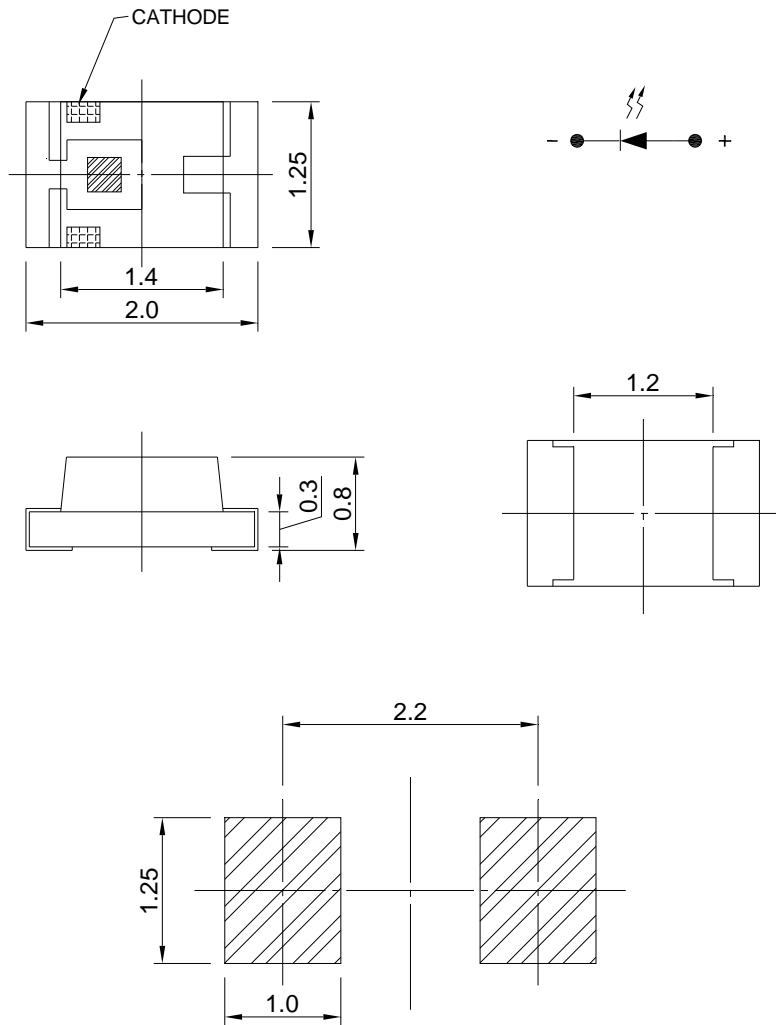
P _D (mW)	I _{FP} (mA)	I _F (mA)	Iron solder(°C)	I _R (uA)@V _R =5V	Topr(°C)	Tstg(°C)
110	100*	25	350 ± 5 for 3 sec.	50	-40~+85	-40~+100

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

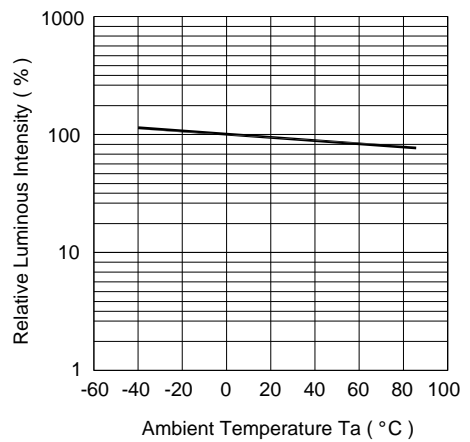
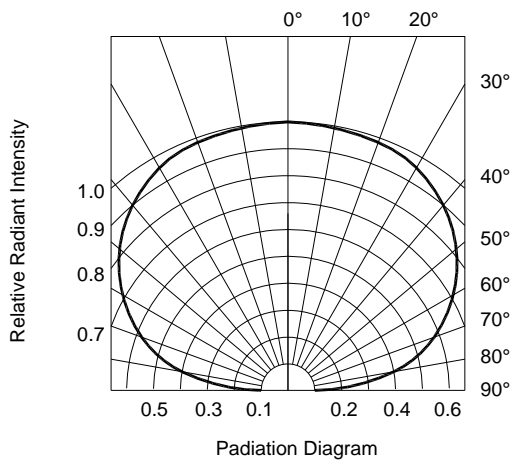
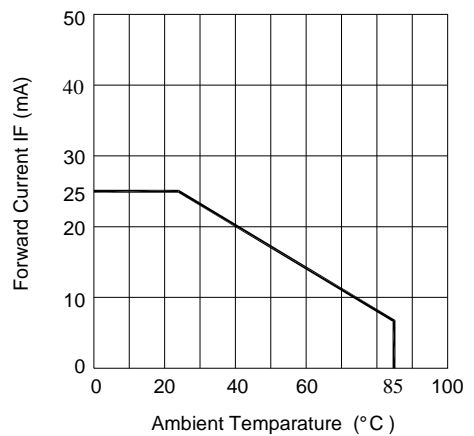
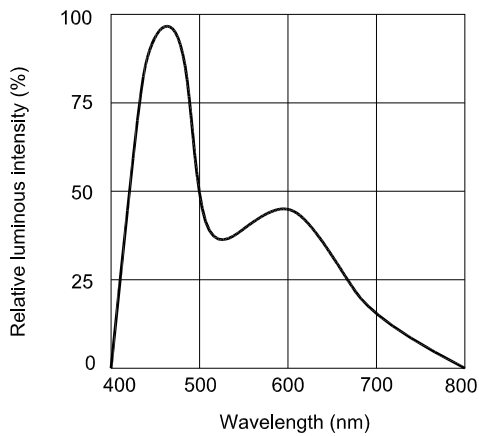
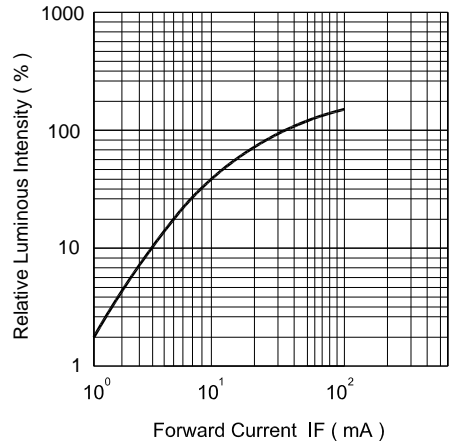
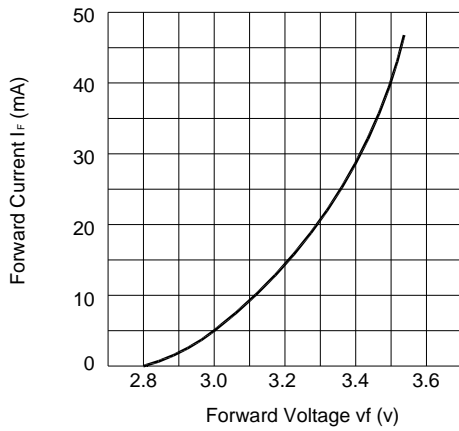


Recommended soldering Pad

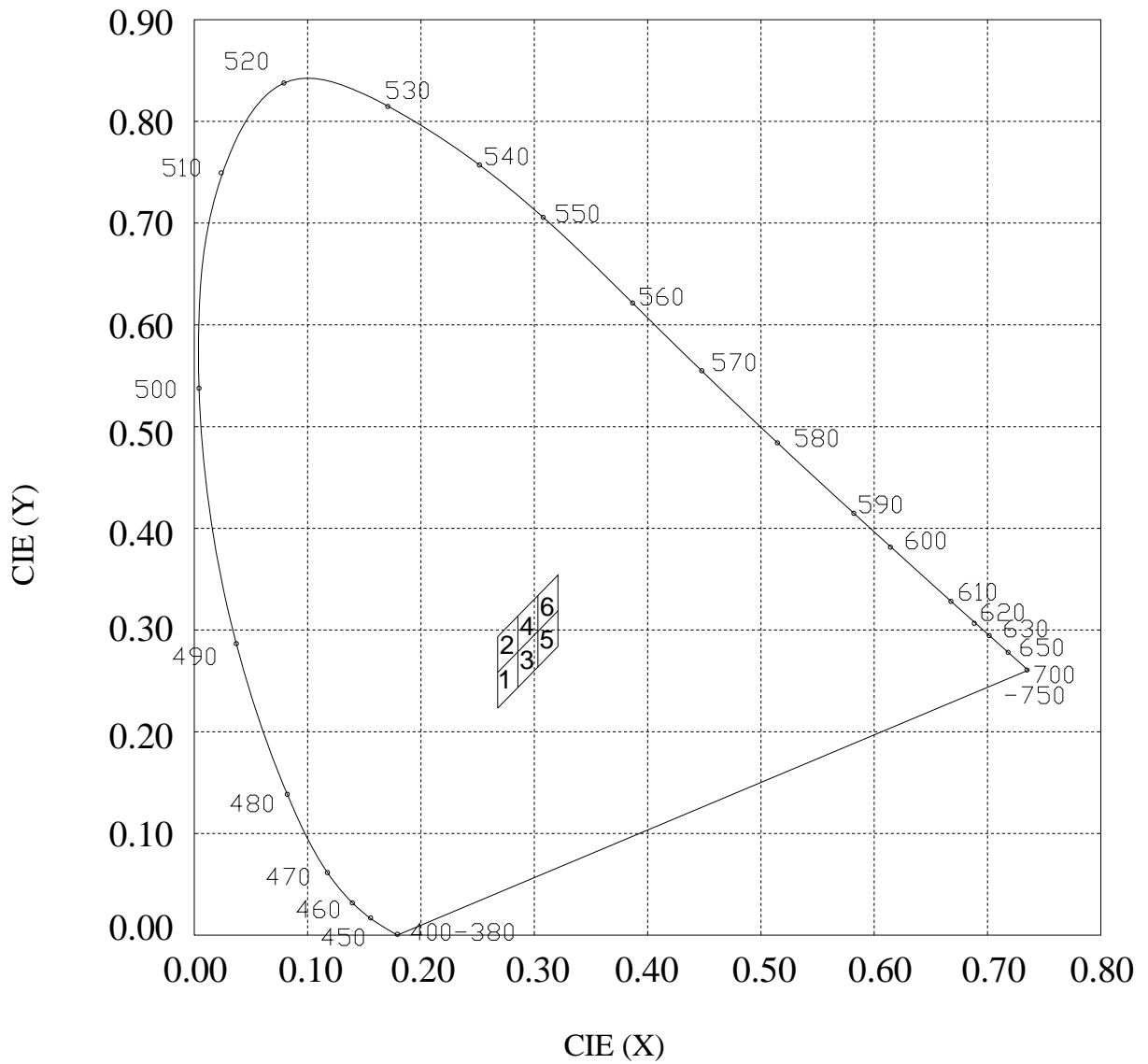
Notes:

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

Typical Electro-optical Characteristics Curves



CIE Chromaticity Diagram



Color Ranks ($I_f=20\text{mA}$, $T_a=25^\circ\text{C}$)

Rank	CIE x	CIE y
1	0.274	0.226
	0.274	0.258
	0.294	0.286
	0.294	0.254
2	0.274	0.258
	0.274	0.291
	0.294	0.319
	0.294	0.286
3	0.294	0.254
	0.294	0.286
	0.314	0.315
	0.314	0.282
4	0.294	0.286
	0.294	0.319
	0.314	0.347
	0.314	0.315
5	0.314	0.282
	0.314	0.315
	0.334	0.343
	0.334	0.311
6	0.314	0.315
	0.314	0.347
	0.334	0.376
	0.334	0.343

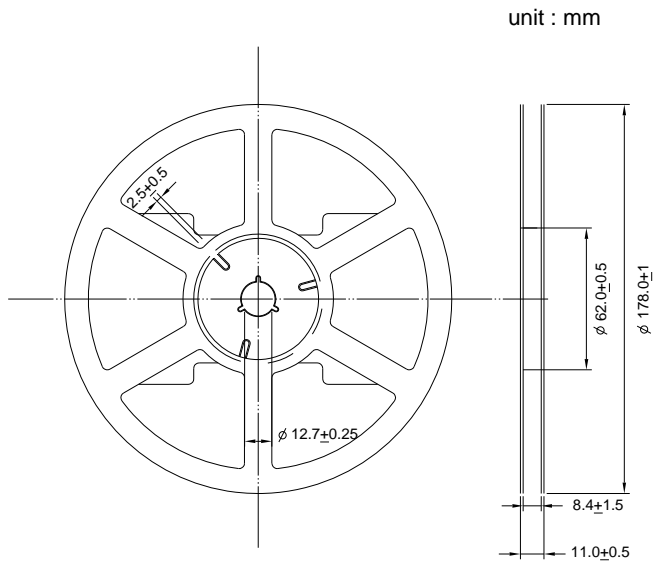
Measurement uncertainty of the color coordinates: ± 0.01

Forward Voltage Ranks (at 20mA)

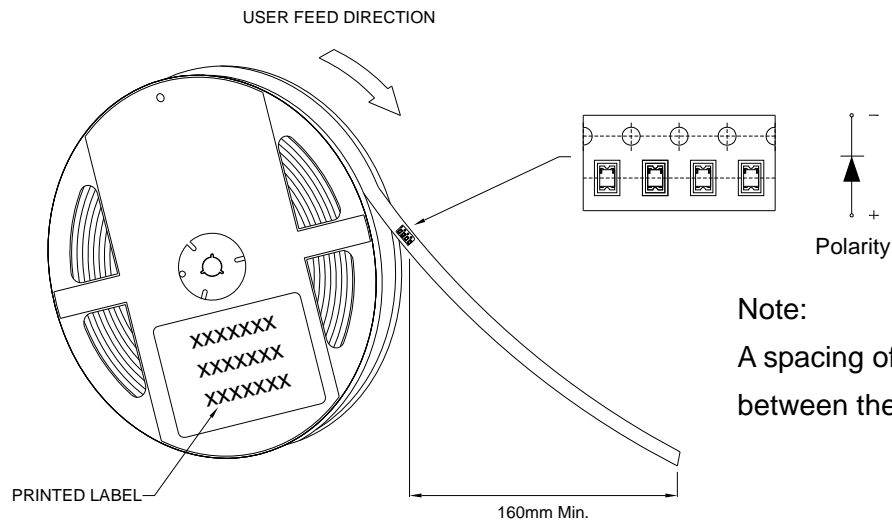
V _F Ranks	10	11	12	13	14
Min.	2.7	2.9	3.1	3.3	3.5
Max.	2.9	3.1	3.3	3.5	3.7

Luminous Intensity Ranks (at 20 mA)

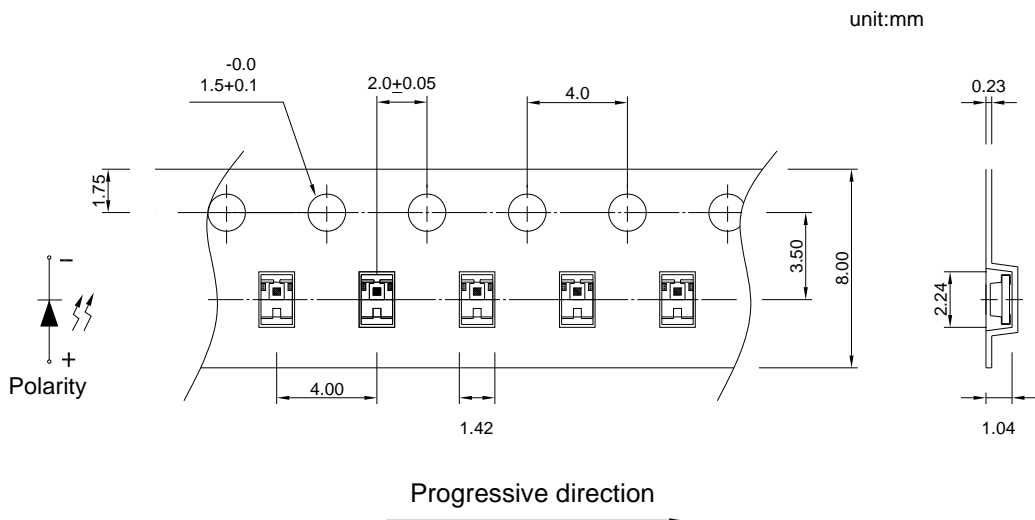
I _v Rank	R2	S1	S2
Min.	140	180	225
Max.	180	225	285

Reel Dimension:

Note:

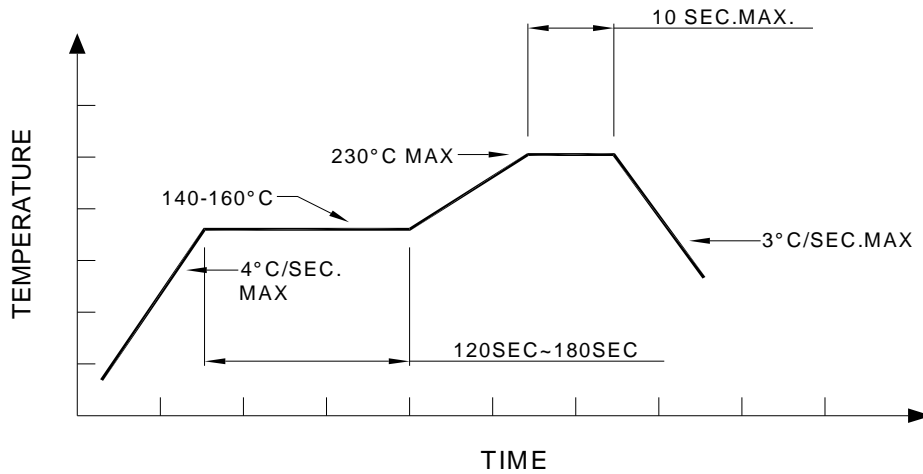
Available in 8mm carrier tape on 178mm diameter reels. (3000 pieces)


Note:

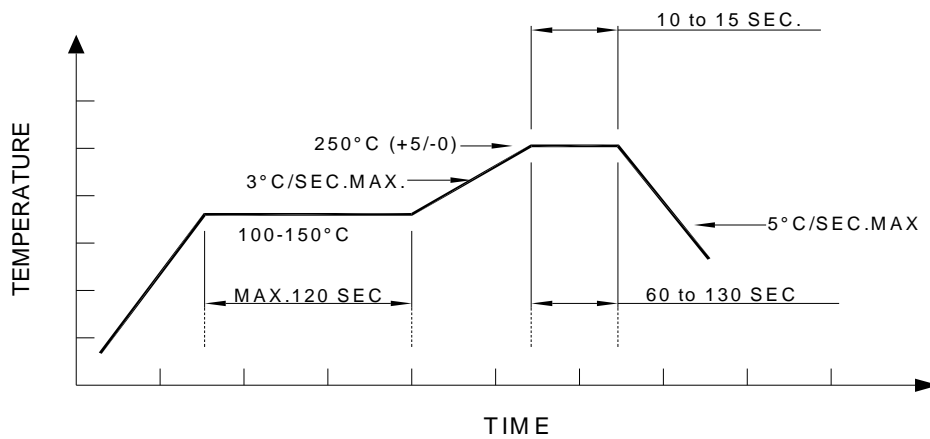
A spacing of approximately 160mm between the front edge of tape

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.