

0603 Package SMD LED 0.2mm Height

VS 2W89M

Description

The major breakthrough in VS 2W89M is White color emitted package in dimension L x W x H, 1.6 * 0.8 * 0.2 mm. This series of top emitting devices are operating under low current driving condition suitable for backlighting applications or applications call for light emitting from unique angle.

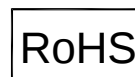


Feature

- Package: Top 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 5mA):

Part Number	Emitted Color	C.C		Lens Color	Iv(mcd)		View Angle	VF(V)	
		X	Y		Min.	Typ.		Min.	Typ.
VS 2W89M	White	0.29	0.30	Yellow	140	200	130	2.6	2.8

Absolute Maximum Ratings (at Ta=25°C)

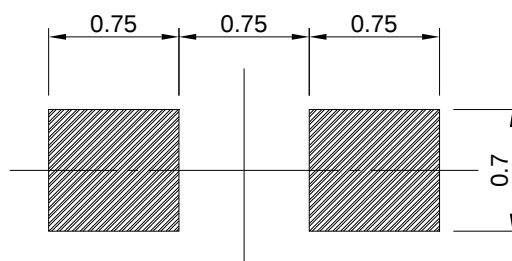
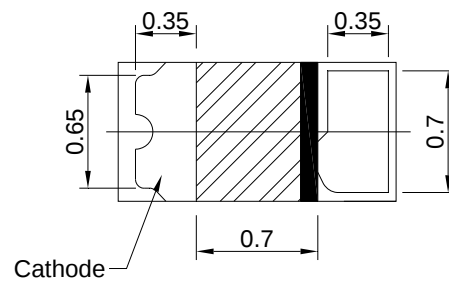
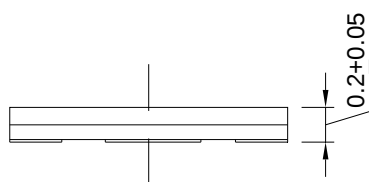
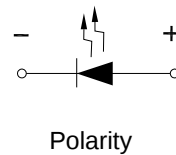
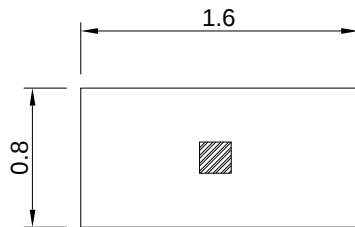
P _D (mW)	I _{FP} (mA)	I _F (mA)	Iron Solder (°C)	I _R (uA)@V _R =5V	Topr(°C)	Tstg(°C)
90	100*	25	350 ± 5 for 3 sec.	50	-40~+85	-40~+100

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

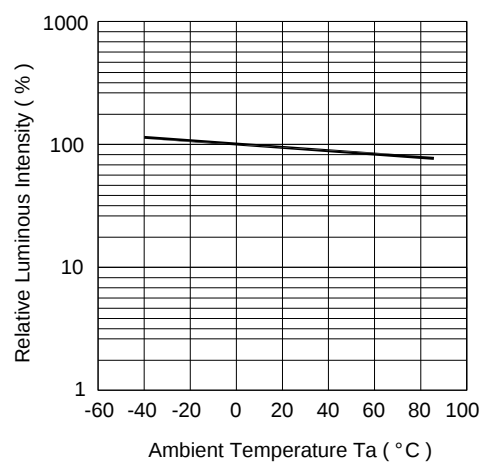
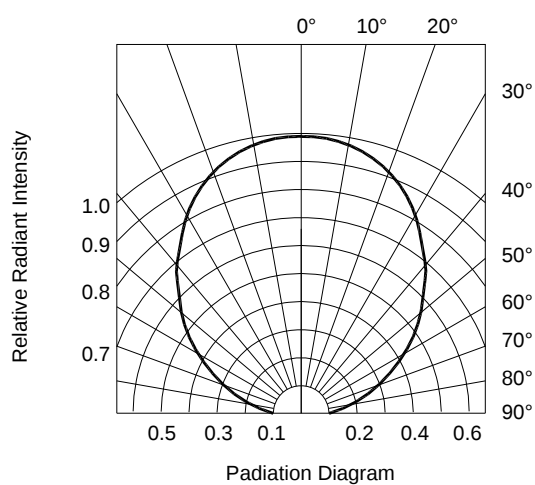
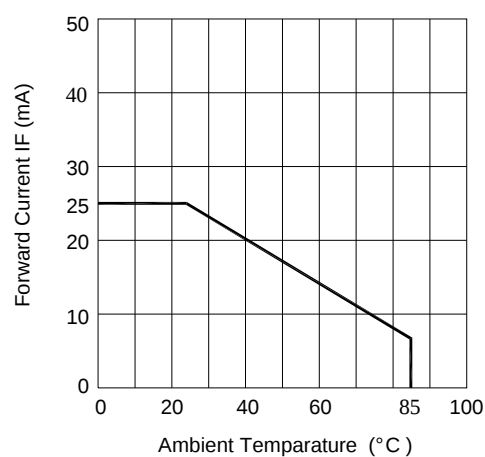
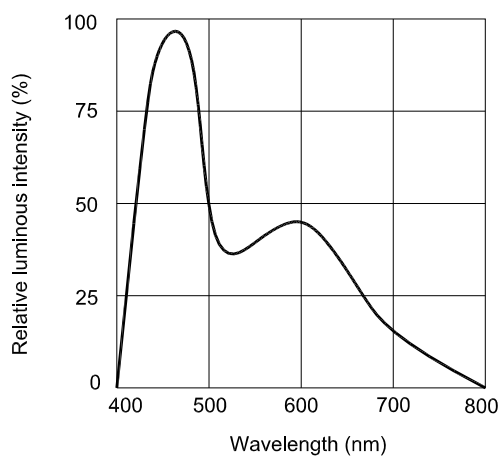
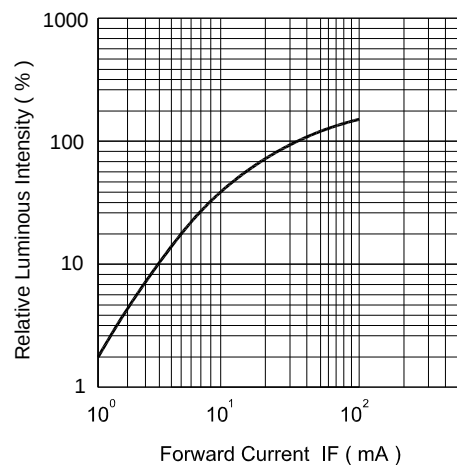
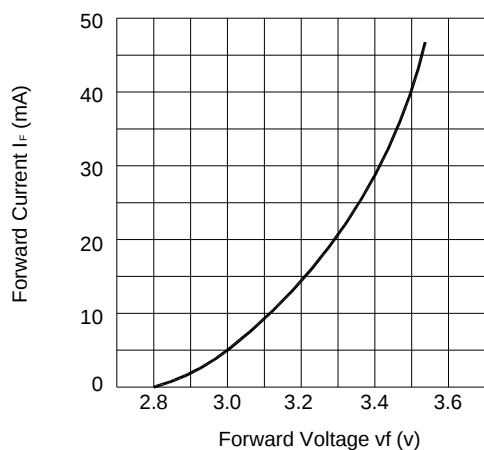


Recommended Soldering Pad

Notes:

1. All dimensions are millimeters.
2. Tolerance is $\pm 0.1\text{mm}$ unless otherwise specified.
3. Specifications are subject to change without notice.

Optical Characteristics Curves



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

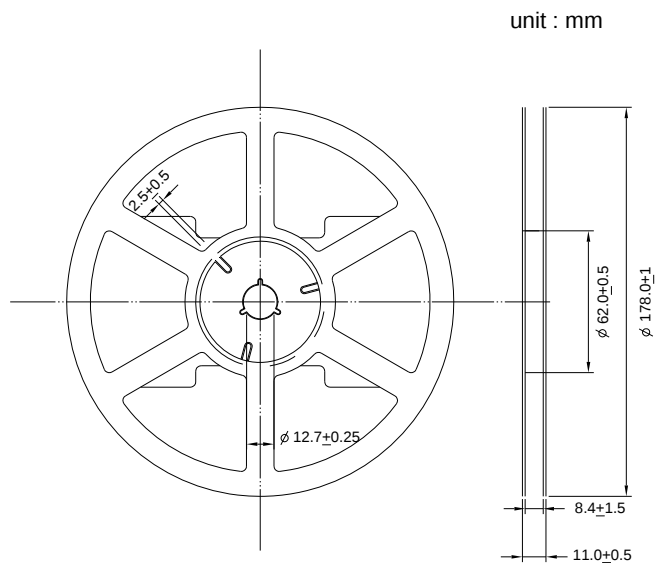
Forward voltage ranks (at 5mA)

$V_F(\text{V})$	28	29	30	31
Min.	2.6	2.7	2.8	2.9
Max.	2.7	2.8	2.9	3.0

Luminous intensity ranks (at 5mA)

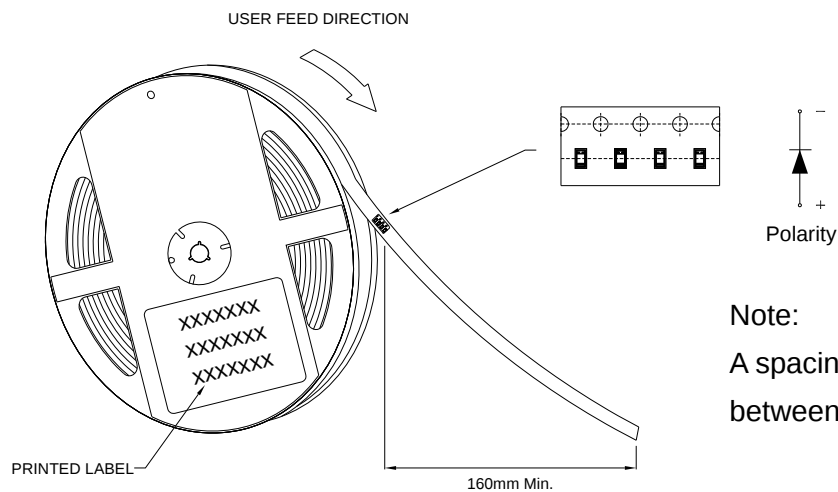
$I_v(\text{mcd})$	R2	S1	S2
Min.	140	180	225
Max.	180	225	285

Reel Dimension:



Note:

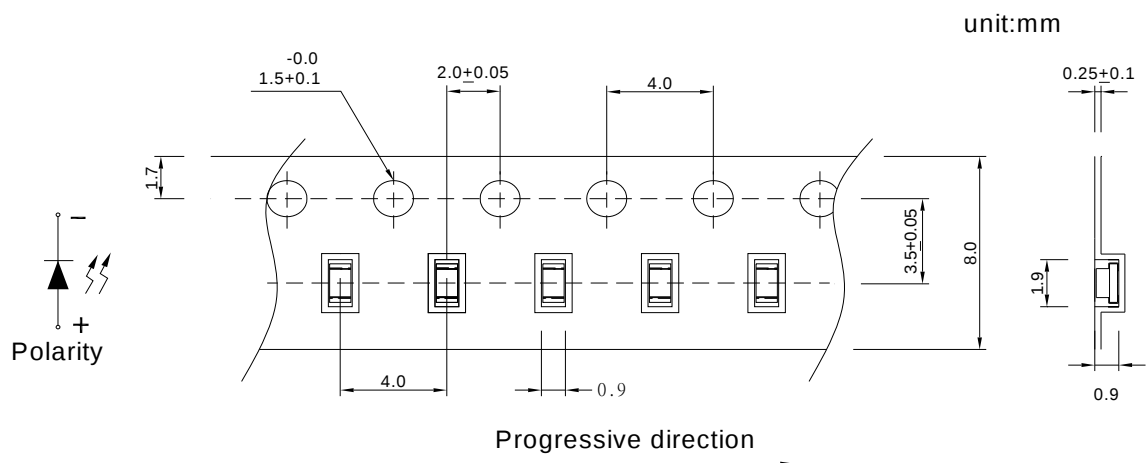
Available in 8mm carrier tape on 178mm diameter reels. (3000 pieces)



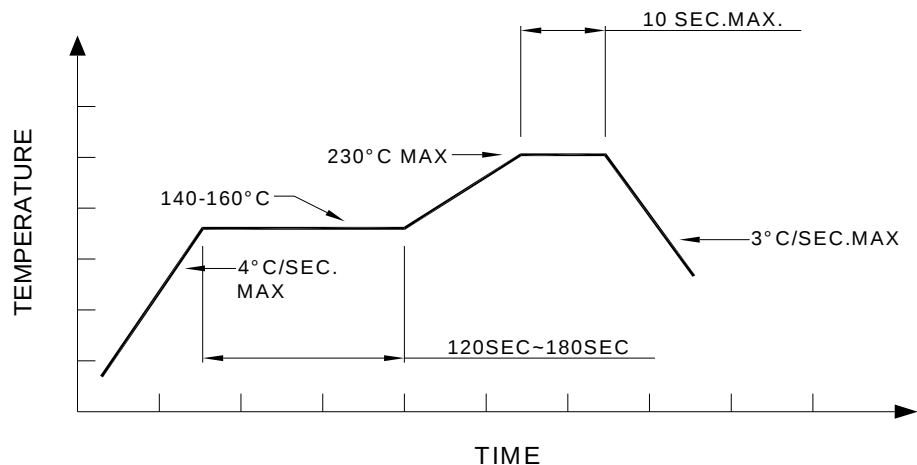
Note:

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

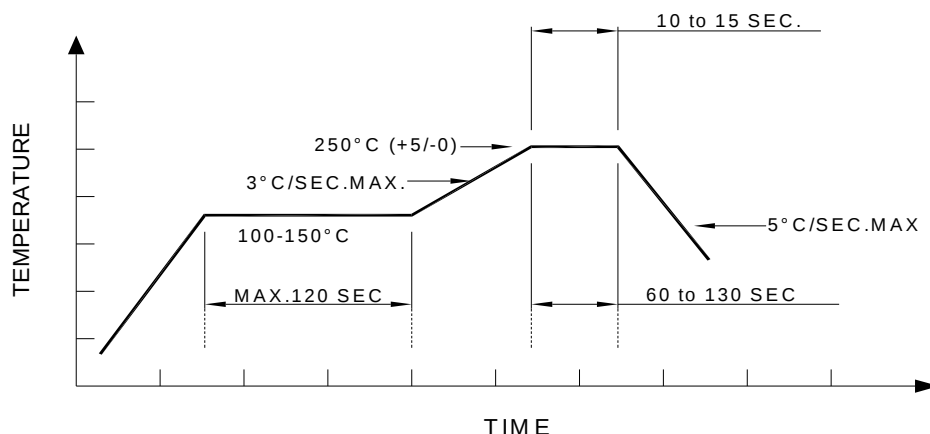
Tape Dimension:



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.