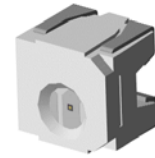


4.0 X 4.0 mm Side Emitting LED

VR 27D8.44

Description

The major breakthrough in VR 27D8 is Red color emitted package in 4.0 * 4.0 * 3.6mm dimension side look SMD LED. The dice used in this series is AlGaInP rather than the conventional GaP and GaAsP/GaP. The advantages of AlGaInP are low power consumption and obtaining high luminous intensity under low current driving condition.




Applications

- Backlighting applications
- Automotive features
- Status indication
- General lighting indicator



Electronic Optical Characteristics (at 20mA):

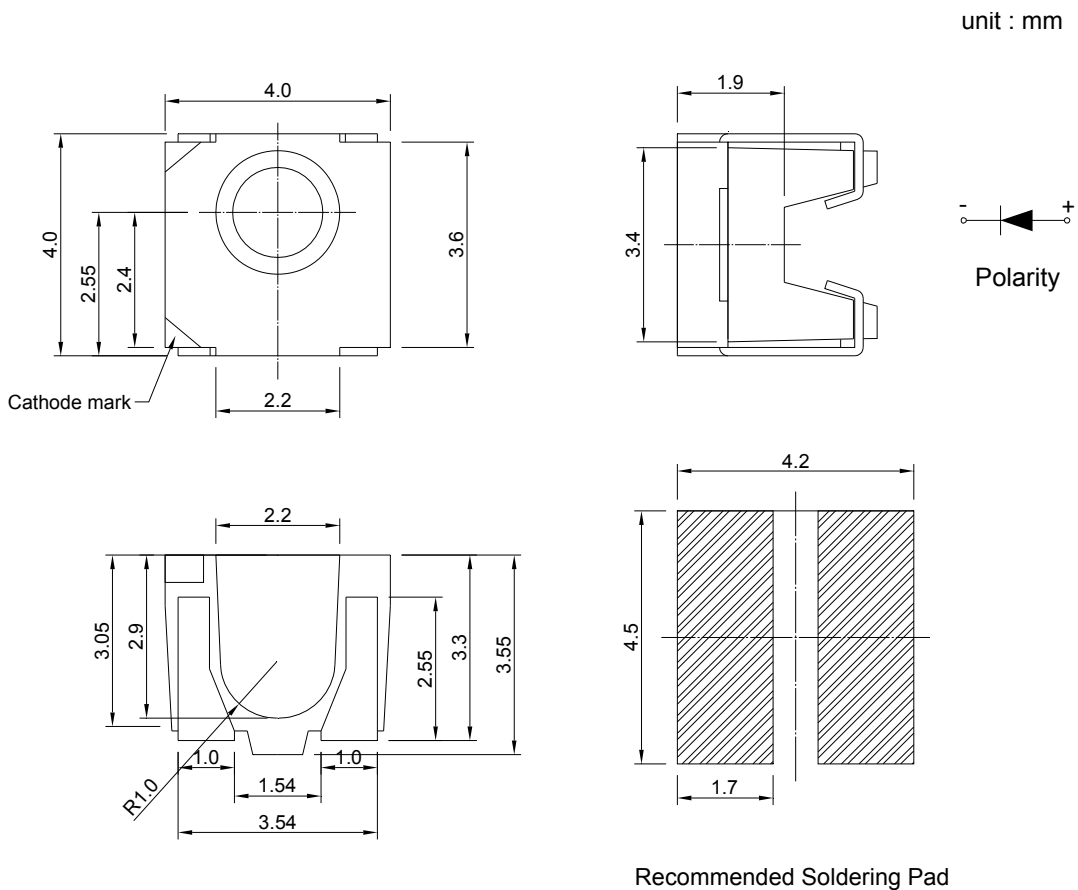
Part Number	Emitted Color	λ (nm)		Lens Color	Iv(mcd)		View Angle	VF(V)	
		λd	λp		Min.	Typ.		Typ.	Max
VR 27D8.44	Red 	624	632	Clear	900	1800	120	2.0	2.4

Absolute Maximum Ratings (at Ta=25°C)

P _D (mW)	I _{FP} (mA)	I _F (mA)	T _j (°C)	Iron Sol. (°C)	I _R (uA) @ V _R =5V	Topr (°C)	Tstg (°C)
120	100*	30	115	350±5 for 3 sec	10	-40~+85	-40+100

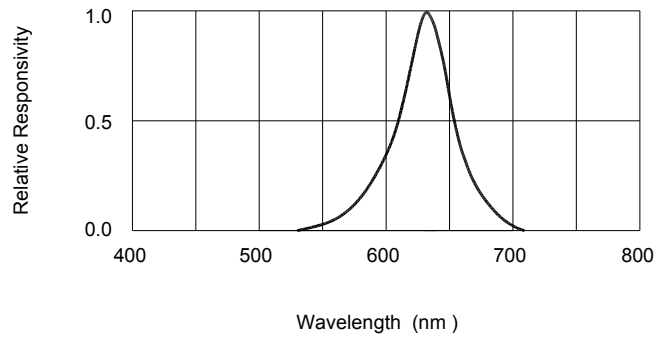
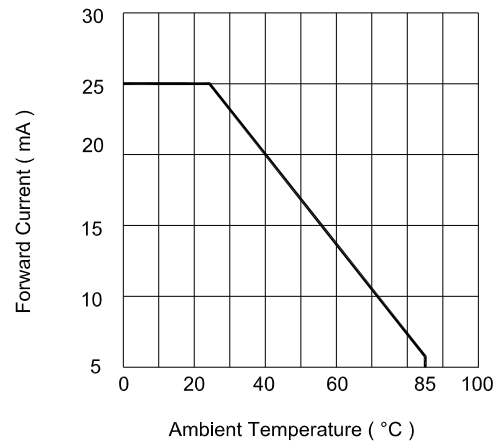
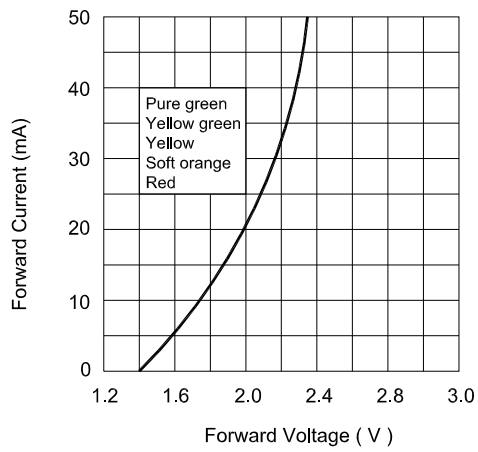
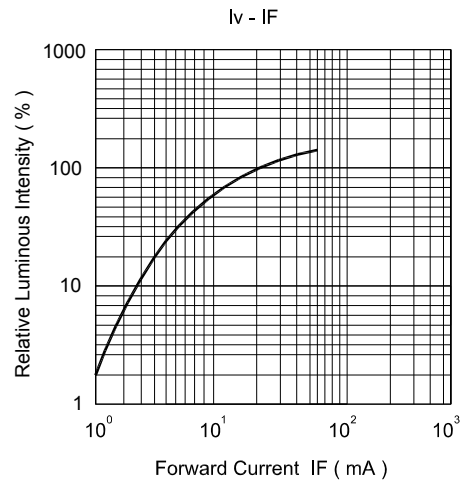
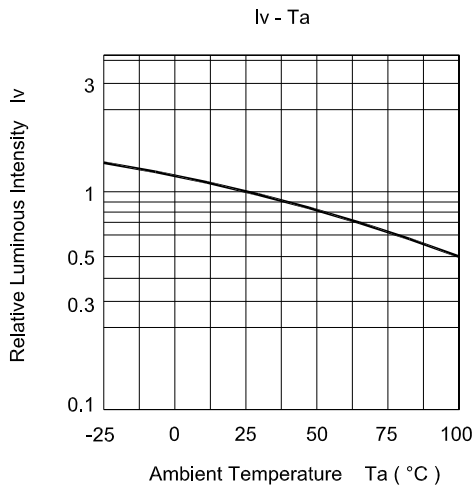
Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life- span and may cause LED to fail.

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

Package Dimension:

Notes:

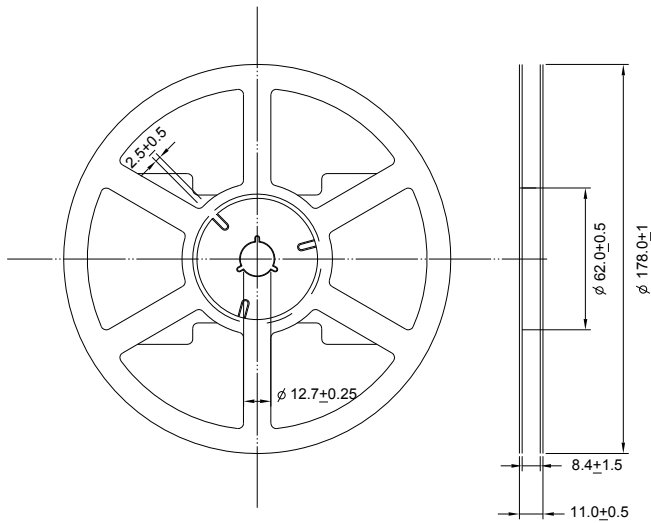
1. All dimensions are millimeters.
2. Tolerance is $\pm 0.2\text{mm}$ unless otherwise specified.
3. Specifications are subject to change without notice.
4. MSL rate 3

Optical Characteristics Curves



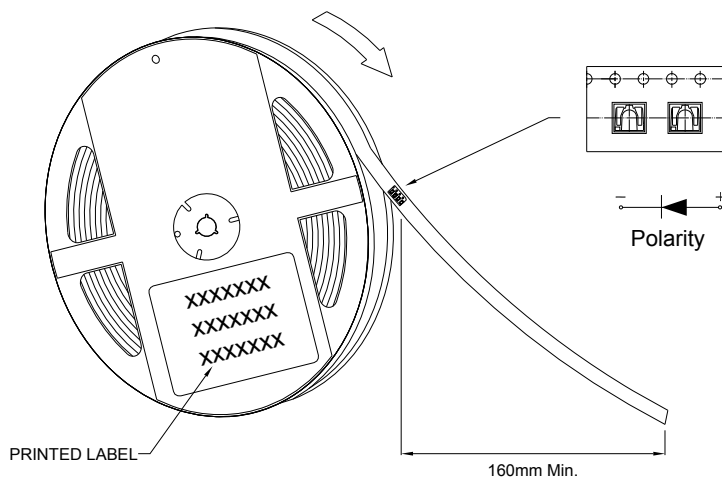
Reel Dimension:

unit : mm


Note:

Available in 8mm carrier tape on 178mm diameter reels. (500 pieces)

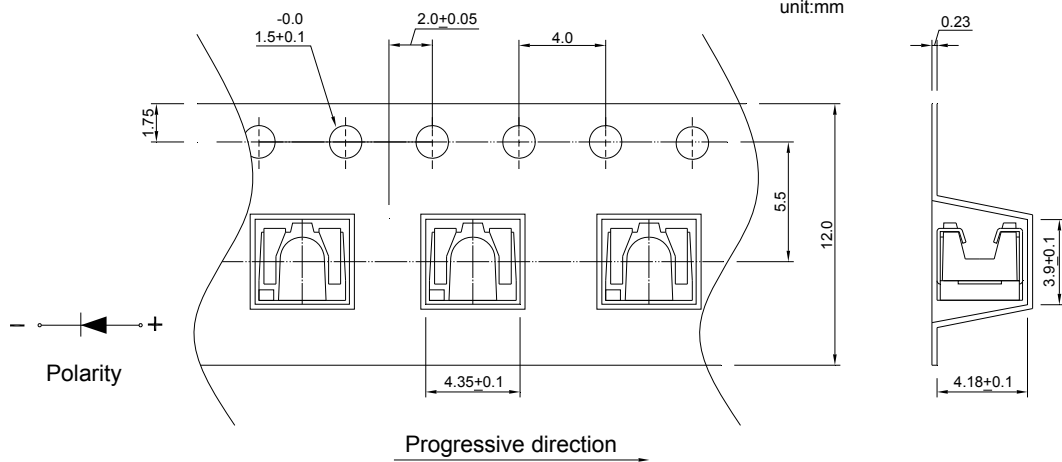
USER FEED DIRECTION


Note:

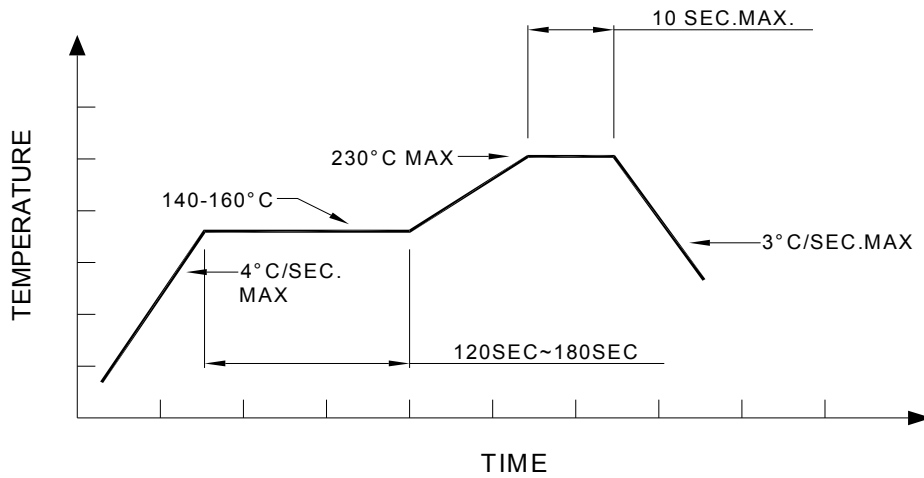
A spacing of approximately 160mm between the front edge of tape

Tape Dimension:

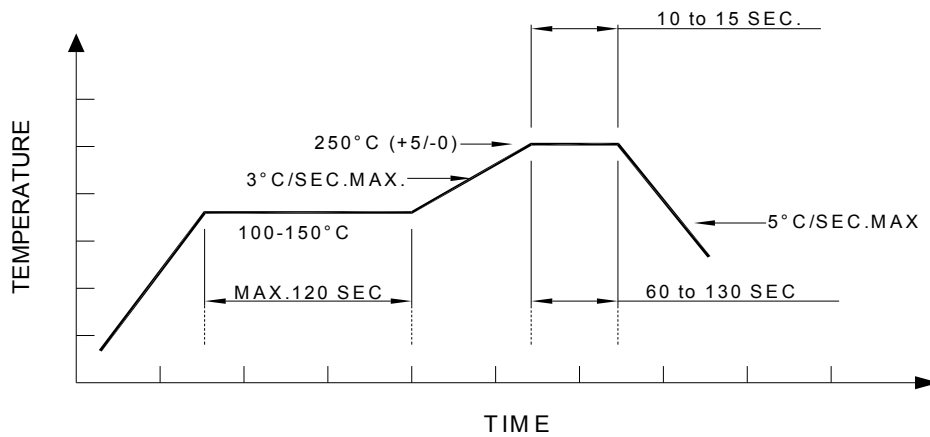
unit:mm



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.