

## 3528 Dome Package SMD LED

### VR 7228

#### Description

The constructive of this series of LED are different from the PCB type SMD LED. The lead-frame is of metal, reflector is made of thermoplastic and construct into this unique type of SMD LED. The wavelengths and luminous Intensities of this series are grouped under 30mA for uniformity. The dice used in this series is InGaN technology are low power consumption and obtaining high luminous intensity.



#### Applications

- Dashboards and switch
- Backlight keypads
- Industrial control systems signal indicator
- Automotive features
- Industrial panel



#### Electronic Optical Characteristics (at 30mA):

Part Number	Emitted Color	$\lambda$ (nm)		Lens Color	Iv(mcd)		View Angle (2 $\theta$ 1/2)	VF(V)	
		$\lambda$ d	$\lambda$ p		Min.	Typ.		Min.	Max.
VR 7228	Blue 	470	468	Milky	1120	1800	30	2.8	3.9

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

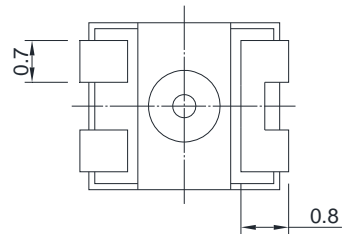
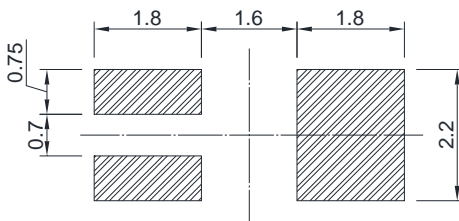
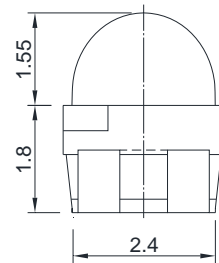
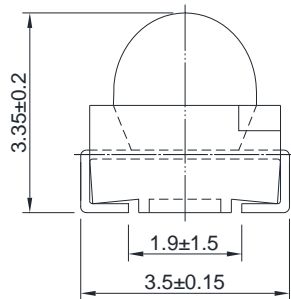
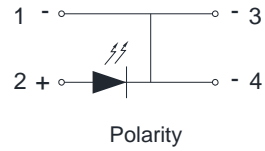
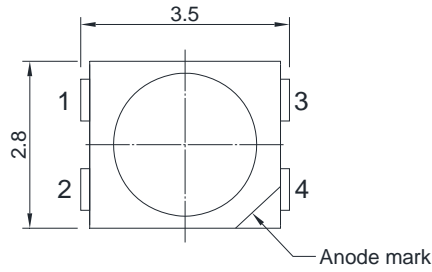
P <sub>D</sub> (mW)	I <sub>FP</sub> (mA)	I <sub>F</sub> (mA)	Iron Sol.(°C)	I <sub>R</sub> ( $\mu$ A)@V <sub>R</sub> =5V	Topr(°C)	Tstg(°C)
120	100*	30	350 $\pm$ 5 for 3 sec	50	-40~+85	-40+100

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

**Package Dimension:**

unit:mm

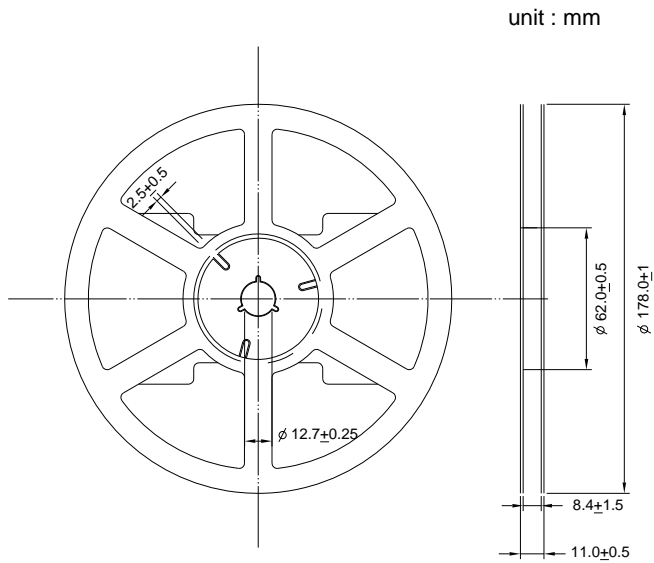


Recommended Soldering Pad

**Notes:**

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

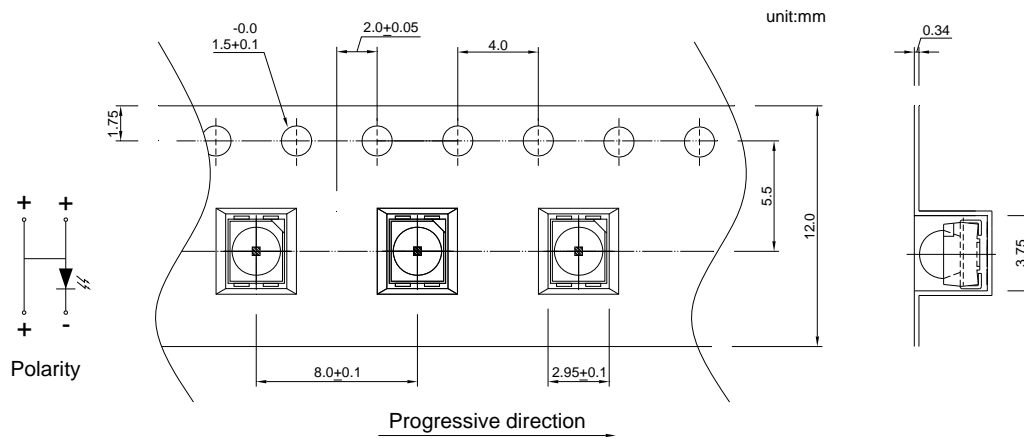
**Reel Dimension:**



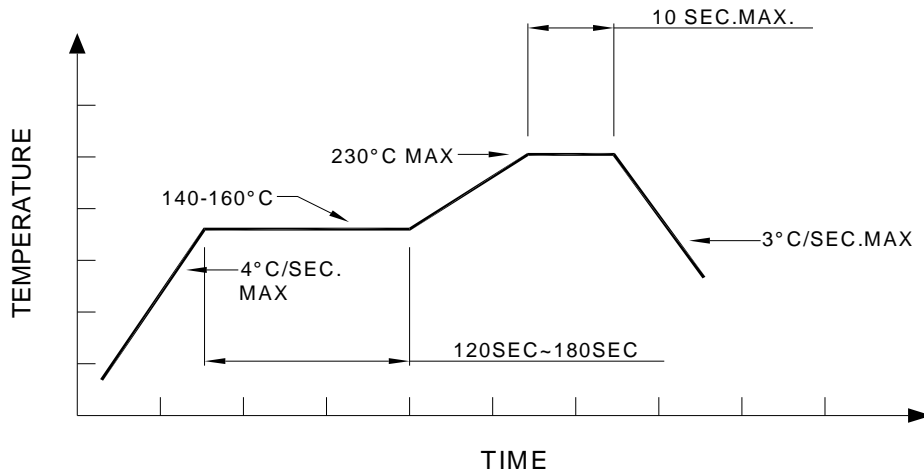
**Note:**

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

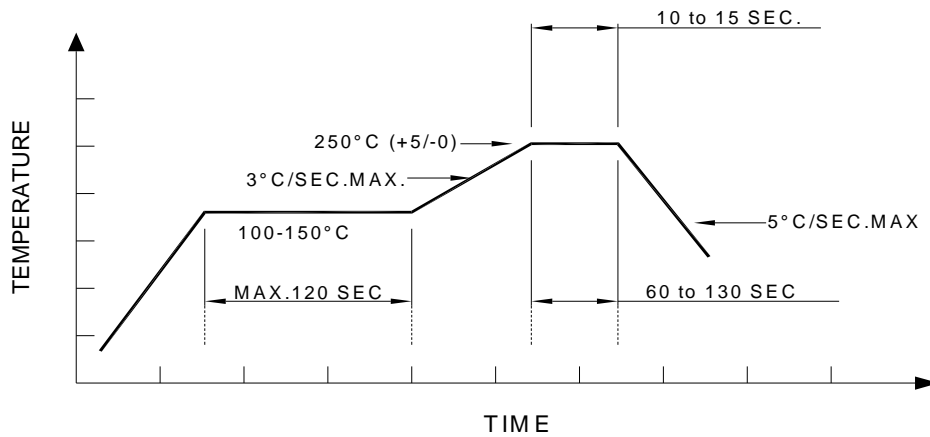
**Tape Dimension:**



**Recommended re-flow soldering profile:**



**Recommended Pb-free re-flow soldering profile:**



**Specification for bin grade @30mA**

Iv(mcd)			λ d(nm)		
Code	Min.	Max.	Code	Min.	Max.
AA	1120	1400	X	465	470
AB	1400	1800	Y	470	475
BA	1800	2400	--	--	--
BB	2400	2800	--	--	--