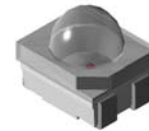


## 3528 Dome Package SMD LED

### VR 77E08

#### 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 50mA for uniformity. The dice used in this series is AlGaInP technology. The advantages of AlGaInP 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 50mA):

Part Number	Emitted Color	$\lambda$ (nm)		Lens Color	Iv(mcd)		View Angle	VF(V)	
		$\lambda_d$	$\lambda_p$		Min.	Typ.		Min.	Max.
VR 77E08	Red 	624	632	Clear	4500	9000	30	1.70	2.50

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

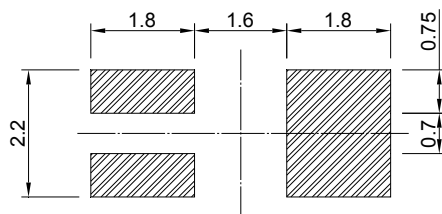
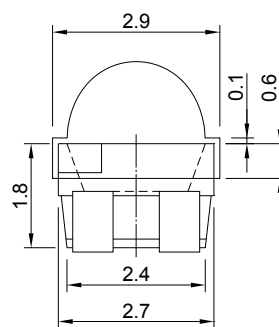
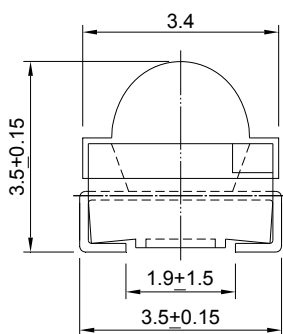
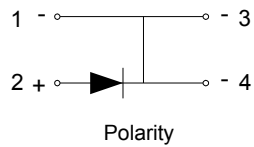
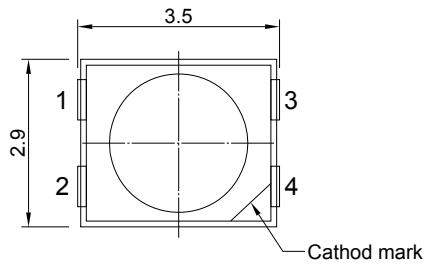
P <sub>D</sub> (mW)	I <sub>FP</sub> (mA)	I <sub>F</sub> (mA)	Iron Solder(°C)	I <sub>R</sub> (uA)@V <sub>R</sub> =5V	Topr(°C)	Tstg(°C)
220	100*	50	350 ± 5 for 3 sec.	10	-40~+85	-40~+100

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.

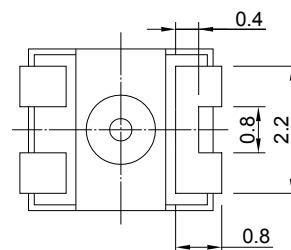
\* I<sub>FP</sub>: Peak Forward Current under 1/10 duty, 1KHz condition

**Package Dimension:**

unit:mm

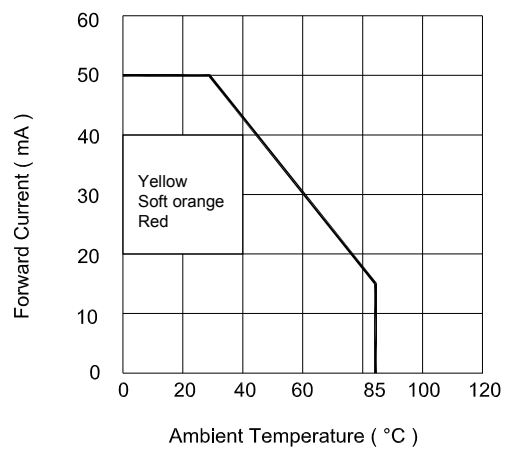
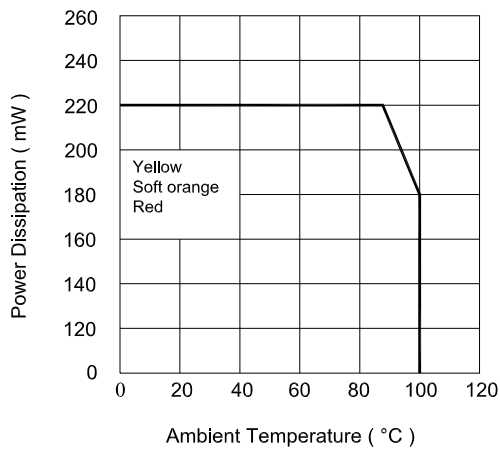
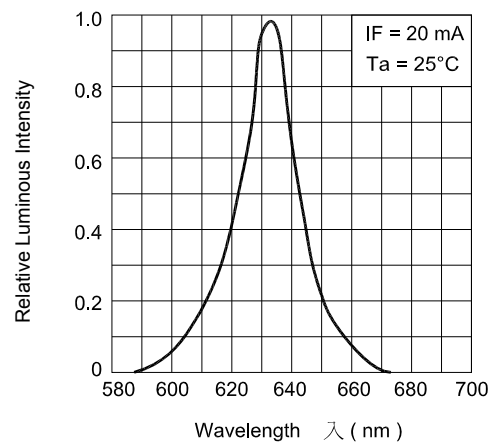
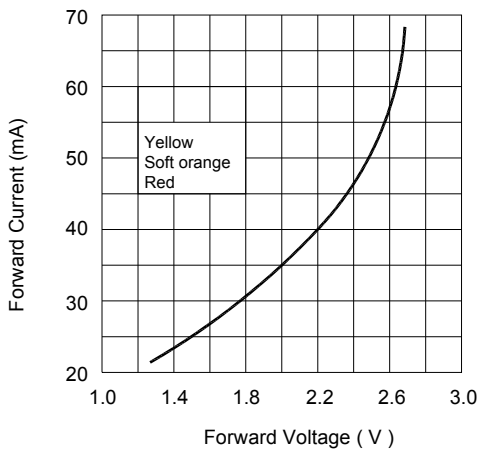
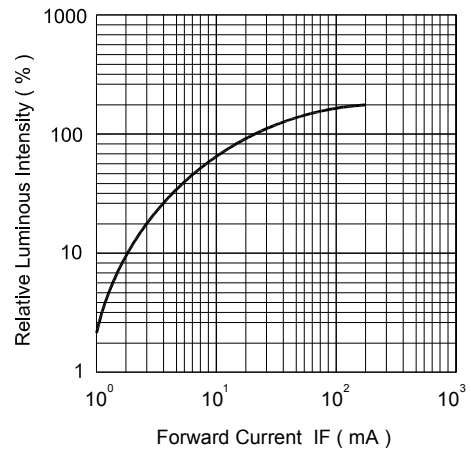
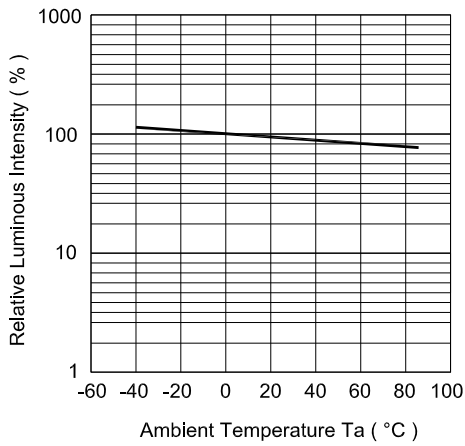


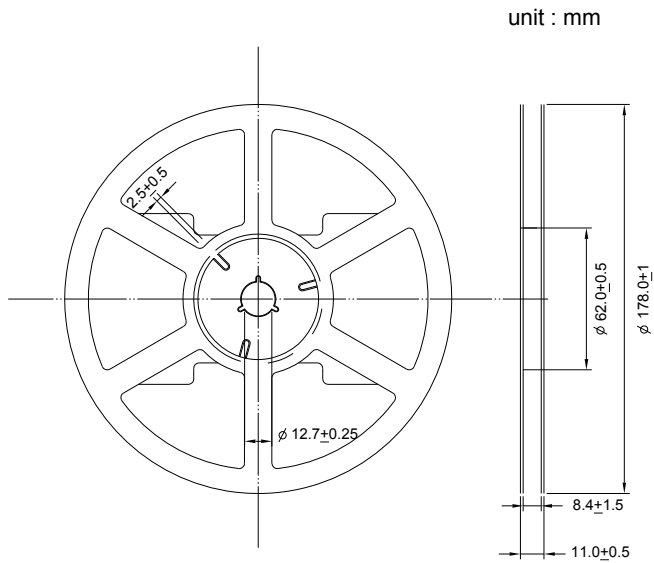
Recommended Soldering Pad


**Notes:**

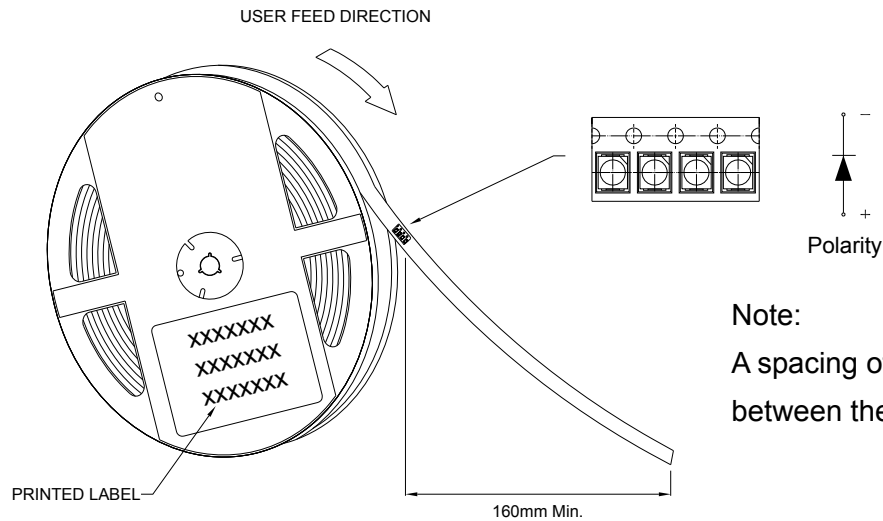
1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2\text{mm}$  unless otherwise specified.
3. Specifications are subject to change without notice.

### Optical Characteristics Curves

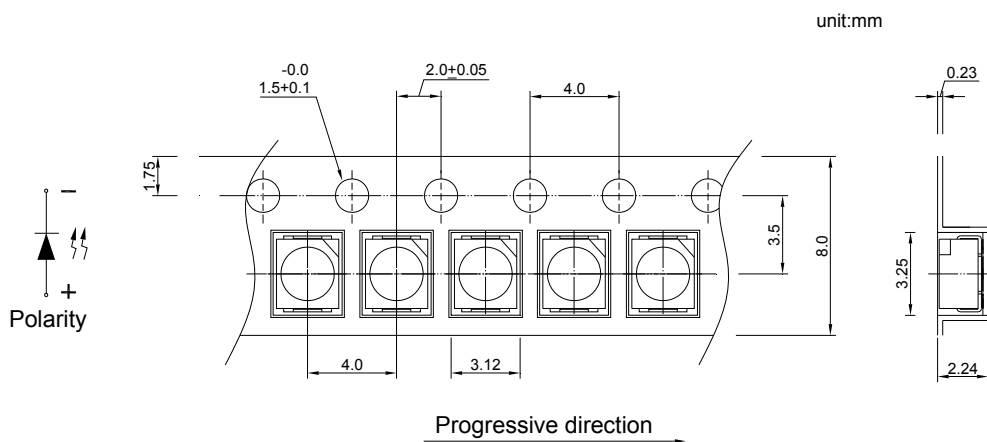


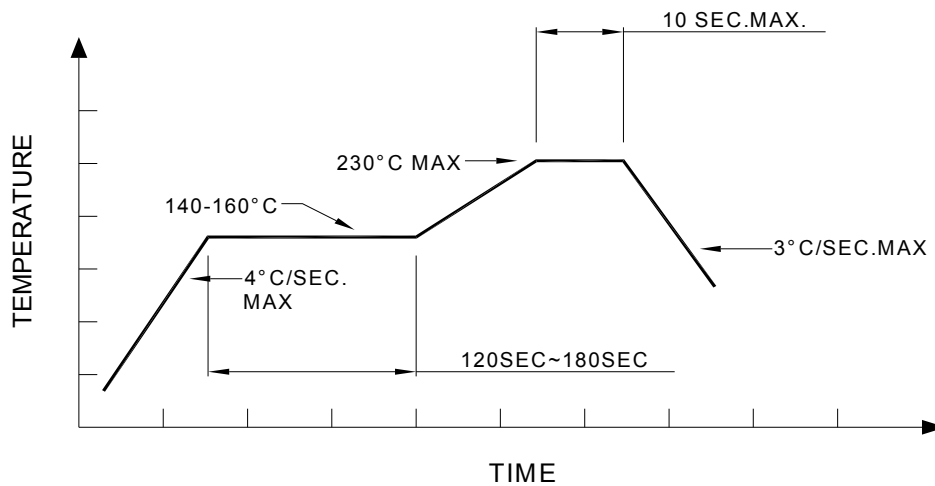
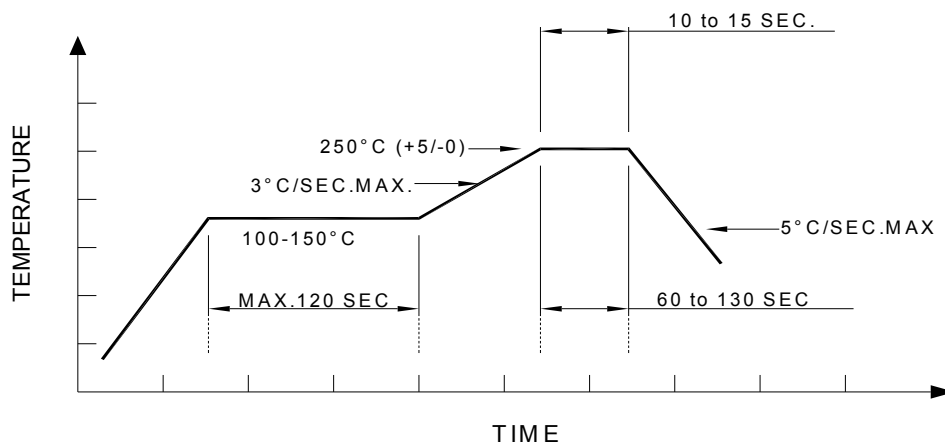
**Reel Dimension:**

**Note:**

Available in 8mm carrier tape on 178mm diameter reels. (500 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:**

**Specification for bin grade @50mA**

Iv(mcd)			VF(Volt)			λ (nm)		
Code	Min.	Max.	Code	Min.	Max.	Code	Min.	Max.
DA	4500	5600	C7-1	1.70	1.90	E4	617	622
DB	5600	7100	C7-2	1.90	2.10	E5	622	626
EA	7100	9000	C7-3	2.10	2.30	E6	626	630
EB	9000	11200	C7-4	2.30	2.50	E7	630	634
FA	11200	14000	--	--	--	--	--	--