

# Series: SMD Ceramic Type

Colour: red

Sloan Part No.: SMD-R01N-RS

## Electrical and Optical Characteristics (T<sub>A</sub> = 25°C)

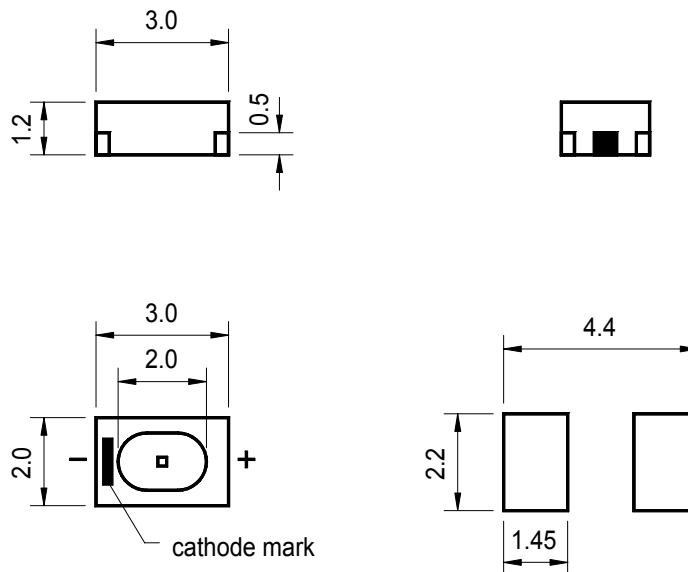
Chip			Lens	Absolute Maximum Ratings				Electro-Optical-Data's at 20mA					Viewing Angle 2 θ ½ (deg)
Emitted Colour	Chromaticity Coordinates	Dominant Wavelength λ <sub>d</sub> (nm)		Δλ (nm)	Pd (mW)	I <sub>f</sub> (mA)	Peak I <sub>f</sub> (mA)	Forward Voltage V <sub>F</sub> (V)		Luminous Intensity I <sub>v</sub> (note4) (mcd)			
			min.					max.	min.	typ.	max.		
red	x = 0.67 - 0.73 y = 0.27 - 0.33	610-635	water clear	-	105	40	*160	2.2	2.6	160	196	232	110°

\*Peak Forward Current (Pulse Width ≤ 10msec. and Duty Cycle ≤ 1/10)

## Absolute Maximum Ratings (T<sub>A</sub> = 25°C)

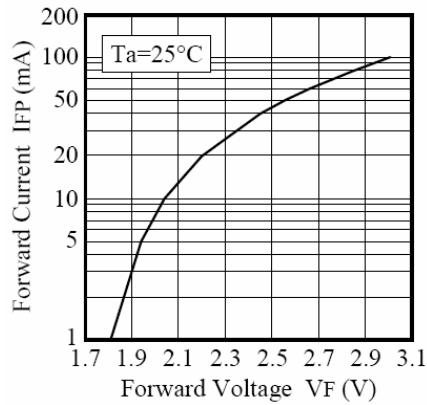
Reverse Voltage	5V	
Reverse Current (V <sub>R</sub> = 5V)	≤50μA	
Operating Temperature Range	- 30°C ~ +85°C	
Storage Temperature Range	- 40°C ~ +100°C	
Soldering Temperature	Reflow Soldering:	265°C for 10 seconds
	Hand Soldering:	350°C for 3 seconds

## Package Dimensions

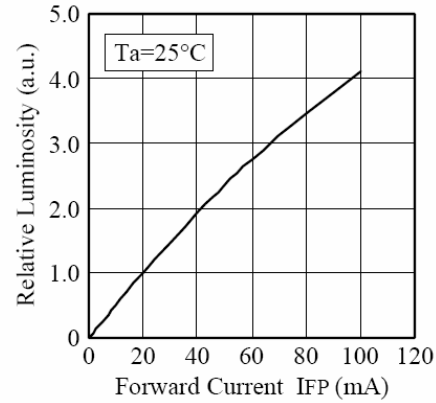


1. All dimensions are in millimetres.
2. Tolerance is ±0.25mm unless otherwise specified.
3. Specifications are subject to change without notice.
4. Tolerance of luminous intensity is ±10%

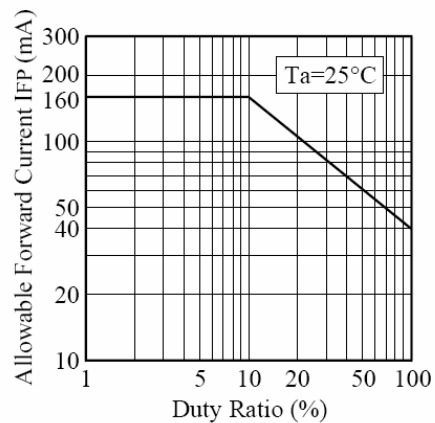
■ Forward Voltage vs. Forward Current



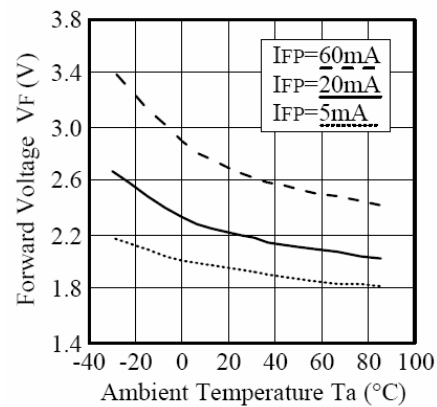
■ Forward Current vs. Relative Luminosity



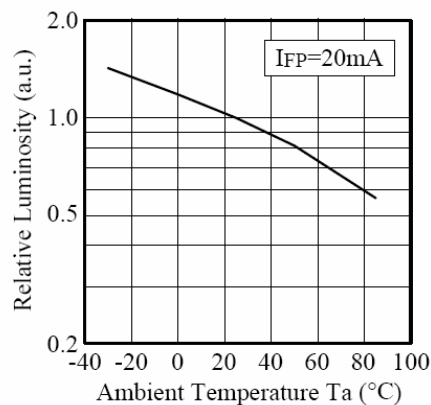
■ Duty Ratio vs. Allowable Forward Current



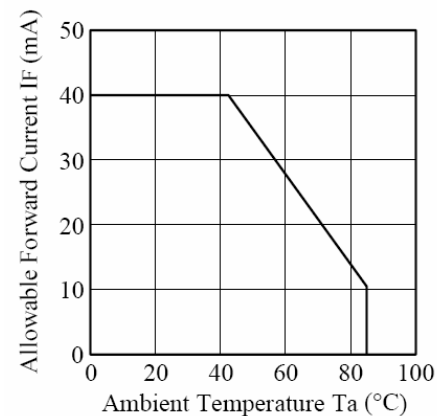
■ Ambient Temperature vs. Forward Voltage



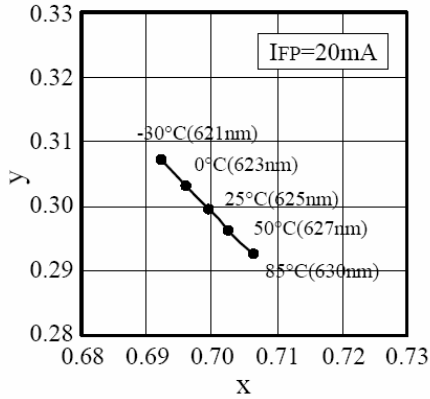
■ Ambient Temperature vs. Relative Luminosity



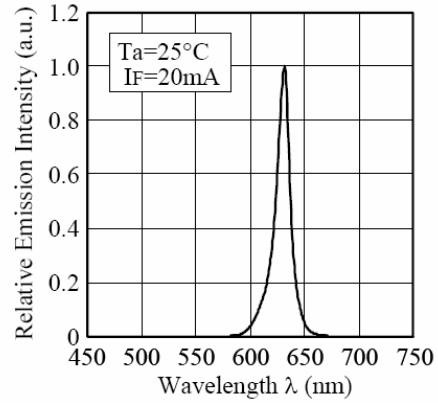
■ Ambient Temperature vs. Allowable Forward Current



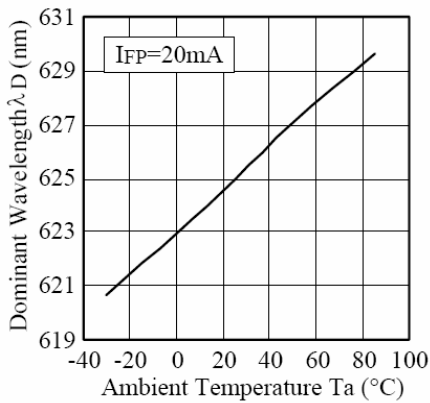
■ Ambient Temperature vs. Chromaticity Coordinate ( $\lambda_D$ )



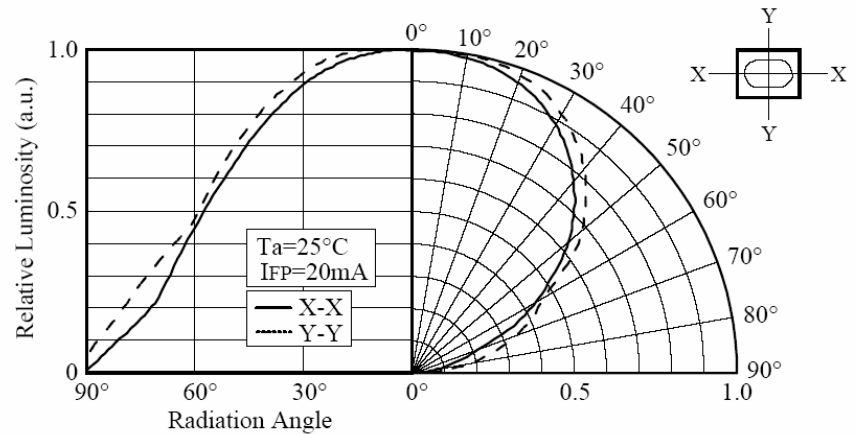
■ Spectrum



■ Ambient Temperature vs. Dominant Wavelength



■ Directivity



**Soldering:**

	Reflow Soldering		Hand Soldering	
	Lead Solder	Lead-free Solder	Temperature	350°C Max.
Pre-heat	120 ~ 150°C	180 ~ 200°C	Soldering time	3 sec. Max. (one time only)
Pre-heat time	120 sec. Max.	120 sec. Max.		
Peak temperature	240°C Max.	260°C Max.		
Soldering time	10 sec. Max.	10 sec. Max.		
Condition	refer to Temperature - profile ①.	refer to Temperature - profile ②. (N <sub>2</sub> reflow is recommended.)		

