3mm (T1) Package Discrete LED SUPER RED, Extended Profile



3SR<mark>X</mark>-201-<mark>X</mark>

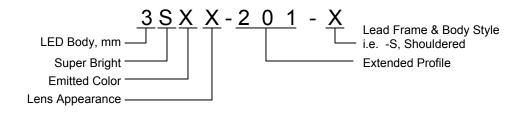
- Industry Standard 3mm (T1) Package
- RoHS Compliant
- Water Clear (C) and Diffused (D) Lenses
- Available in a Shouldered (S) Lead Frame Style
- Up to 60 mcd Luminous Intensity at 20 mA
- Ideal for Status Indication and Display



Bivar 3mm T1 Package Extended Profile LED may be used in higher ambient lighting applications and provides additional protrusion for those applications with thicker face plates. Bivar offers water clear LED lens for maximum light output and diffused LED lens for uniform light output. The Shouldered Lead frame LED is ideal for vertical spacer assemblies without lead bends and also has a built in strain relief feature which is ideal for right angle holder assemblies that require lead bends.

Peak. Wavelength Emitted Color Part Number Material Lens Appearance **Viewing Angle** λp(nm) TYP. 3SRC-201-S Water Clear 20° GaAlAs/GaAs RED 645nm 3SRD-201-S Red Diffused 35°

Part Number Designation





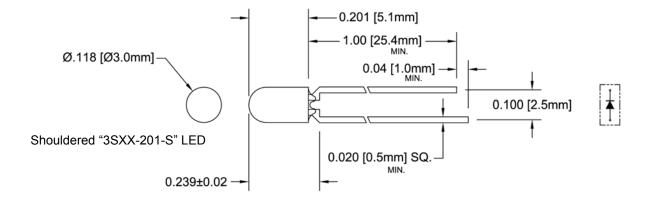
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Outline Dimensions



Recommended Mounting Hole Size = $\emptyset.032^{+.003}_{-.002}$

Outline Drawings Notes:

1. All dimensions are in inches [millimeters].

2. Standard tolerance: ±0.010" unless otherwise noted.

3. Tolerance of overall epoxy outline: ±0.020" unless otherwise noted.

4. Epoxy meniscus may extend to 0.060" max.



Absolute Maximum Ratings

 T_A = 25°C unless otherwise noted

Power Dissipation	70 mW
Forward Current (DC)	30 mA
Peak Forward Current ¹	150 mA
Reverse Voltage	5 V
Operating Temperature Range	-25 ~ +85°C
Storage Temperature Range	-30 ~ +100°C
Lead Soldering Temperature (3 mm from the base of the epoxy bulb) ²	260°C

Notes: 1. 10% Duty Cycle, Pulse Width \leq 0.1 msec. 2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics

 $T_A = 25^{\circ}C \& I_F = 20 \text{ mA}$ unless otherwise noted

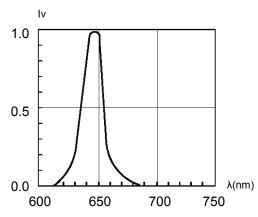
Part Number	Forward Voltage (V) ¹			Recommend Forward Current (mA)		Reverse Current (µA)	Dominant Wavelength (nm) ²		Luminous Intensity Iv (mcd)			Viewing Angle 2 O ½ (deg)			
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP	
3SRC-201-S	- /	/	1.7	2.4	,	20	,	100	/	/	/	/	60	/	20
3SRD-201-S			1.7	2.4	/	20	1	100	/	/	/	/	40	/	35

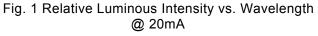
Notes: 1. Tolerance of forward voltage : ±0.05V. 2. Tolerance of dominant wavelength : ±1.0nm.



Typical Electrical / Optical Characteristics

 $T_A = 25^{\circ}C$ unless otherwise noted





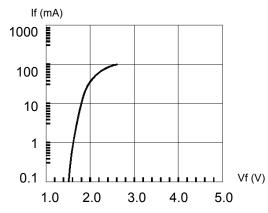


Fig. 3 Forward Current vs. Forward Voltage

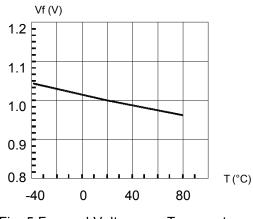


Fig. 5 Forward Voltage vs. Temperature

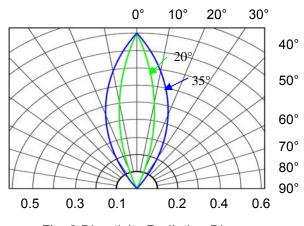


Fig. 2 Directivity Radiation Diagram

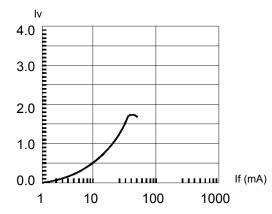
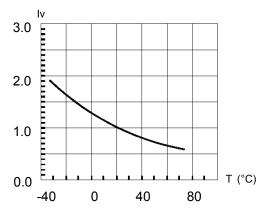
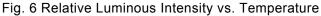


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

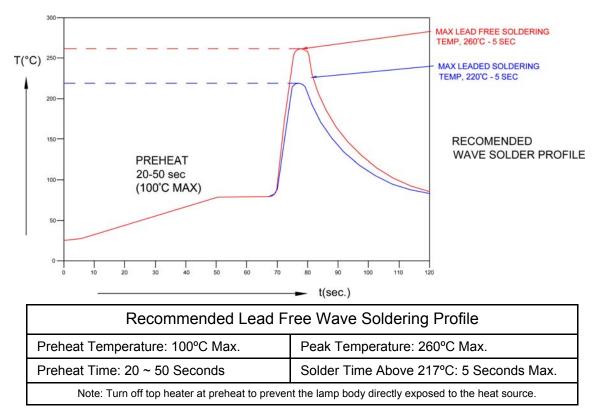




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Recommended Soldering Conditions



Packaging and Labeling Plan

