

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

## MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- *Terminals*: Plated axial leads, solderable per MIL-STD-750,method 2026
- *Polarity*: color band denotes cathode end
- *Mounting Position*: Any
- *Weight*: 0.014ounce, 0.39 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

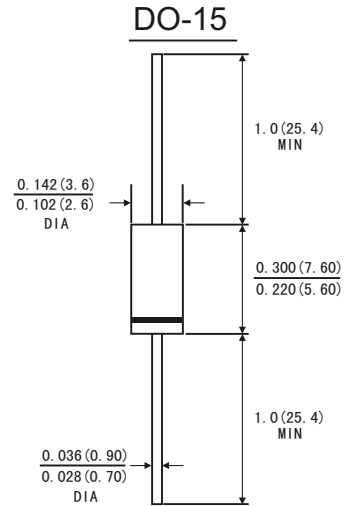
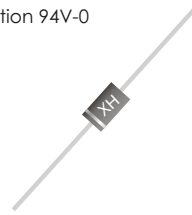
(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SR 220L	SR 230L	SR 240L	SR 250L	SR 260L	SR 280L	SR 2100L	SR 2150L	SR 2200L	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{(AV)}$	2.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50.0									Amps
Maximum instantaneous forward voltage at 2.0 A(Note 1)	$V_F$	0.45		0.50		0.70		0.80	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_a=25^\circ\text{C}$	0.2									mA
	$T_a=100^\circ\text{C}$	10									
Typical junction capacitance(Note 3)	$C_J$	170									PF
Typical thermal resistance(Note 2)	$R_{\theta JA}$	35.0									$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-65 to+150									$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to+150									$^\circ\text{C}$

Notes: 1.Pulse test: 300  $\mu$  s pulse width,1% duty cycle

2.Thermal resistance from junction to lead, and/or to ambient P.C.B. mounted with 0.375"(9.5mm) lead length with 1.5 X1.5"(38X38mm)copper pads

3.Measured at 1.0MHz and reverse voltage of 4.0 volts



Dimensions in inches and (millimeters)



FIG.1-FORWARD CURRENT DERATING CURVE

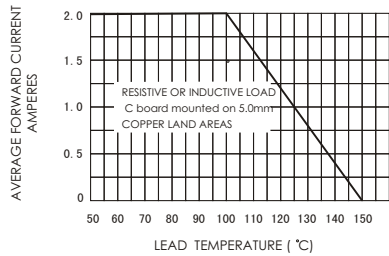


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

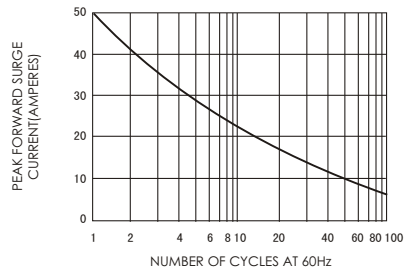


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

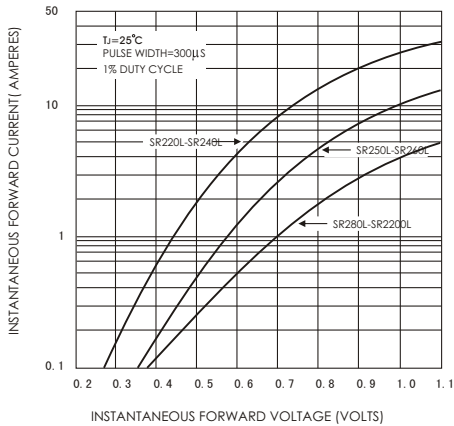


FIG.4-TYPICAL REVERSE CHARACTERISTICS

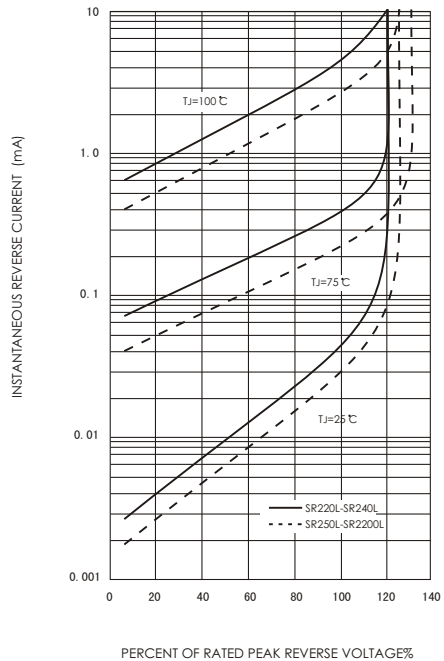


FIG.5-TYPICAL JUNCTION CAPACITANCE

