

SR320L-SR3200L

3.0 AMP. LOW VF Schottky Barrier Rectifiers

VOLTAGE RANGE:20-200V

CURRENT:3.0A

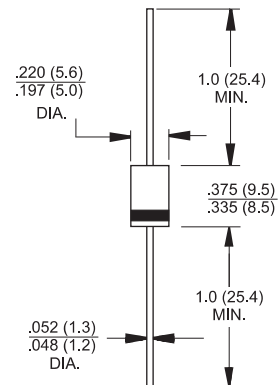
Features

- ◇ Plastic package has Underwriters Laboratory
Flammability Classification 94V-0 utilizing
Flame Retardant Epoxy Molding Compound.
- ◇ Guard ring for overvoltage protection
- ◇ High current capability, low forward voltage drop
- ◇ Low power loss, high efficiency
- ◇ High surge capability

Mechanical Data

- ◇ Case: Molded plastic DO-27/DO-201AD
- ◇ Terminals: Plated leads solderable per
MIL-STD-202, Method 208 guaranteed
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting Position: Any
- ◇ Making: Type Number
- ◇ Lead Free: For RoHS/Lead Free Version

DO-201AD/DO-27



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate by 20%.

Type Number	Symbol	SR3 20L	SR3 40L	SR3 50L	SR3 60L	SR3 80L	SR3 100L	SR3 150L	SR3 200L	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	50	60	80	100	150	200	V
Average Rectified Output Current (Note 1) @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	3.0								A
Peak forward surge current: 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80								A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	81.34								A ² S
Forward Voltage @ $I_F=3.0\text{A}$	V_{FM}	0.42	0.45	0.5		0.72		0.85		V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	0.2				0.1				Ma
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	10				5				Ma
Typical Junction Capacitance (Note 2)	C_J	500				350				pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	25								°C/W
Operating Temperature Range	T_J	-55 to +150								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

FIG. 1 - FORWARD CURRENT DERATING CURVE

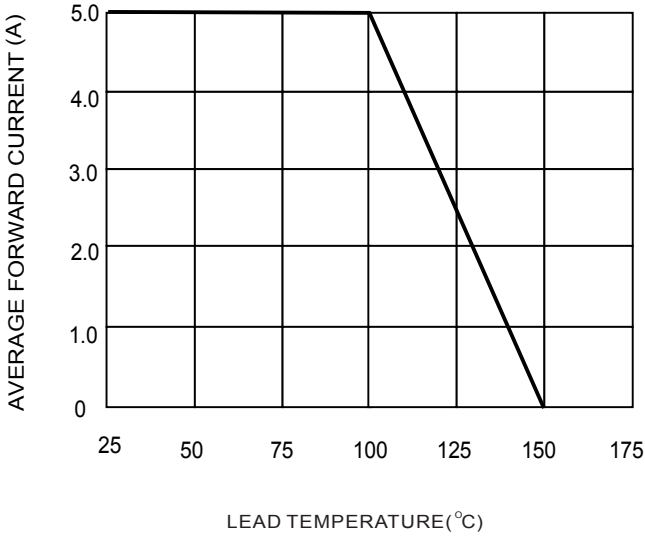


FIG.2-TYPICAL FORWARD CHARACTERISTICS

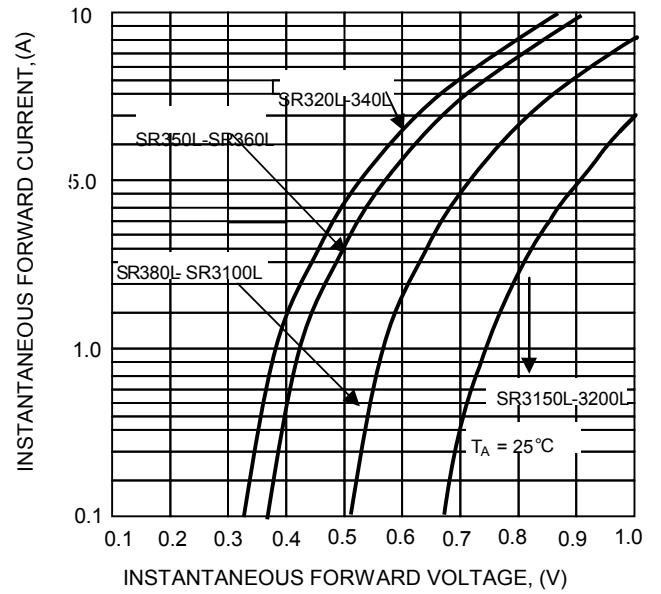


FIG. 3 MAXIMUM NON-REPETITIVE SURGE CURRENT

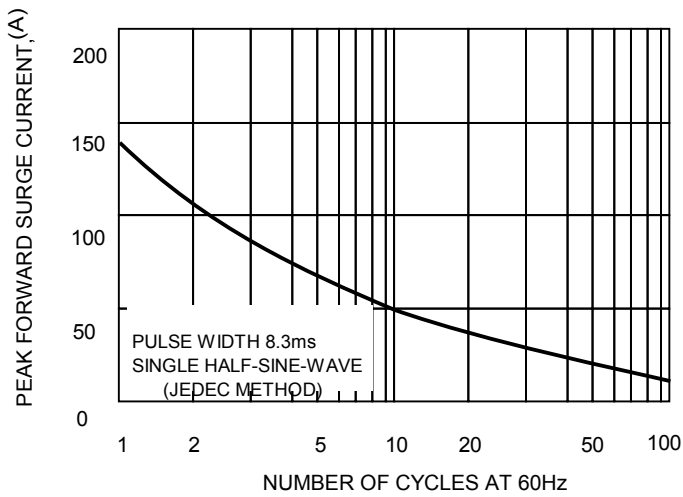


FIG.4 TYPICAL REVERSE CHARACTERISTIC

