



SR520L THRU SR5200L

LOW VF SCHOTTKY BARRIER RECTIFIERS

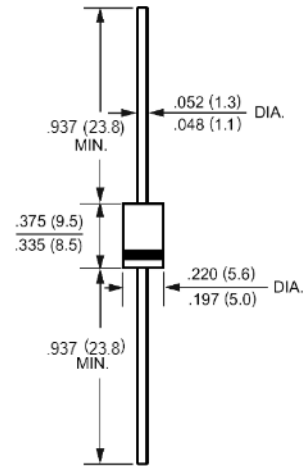
FEATURES

- High current capability
- High surge current capability
- Low forward voltage drop
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications

MECHANICAL DATA

Case: Molded plastic, DO-201AD
 Epoxy: UL 94V-O rate flame retardant
 Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
 Polarity: Color band denotes cathode end
 Mounting position: Any
 Weight: 0.04ounce, 1.1gram

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 current by 20%.

	Symbols	SR520L	SR540L	SR560L	SR580L	SR5100L	SR5150L	SR5200L	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length	$I_{(AV)}$	5.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amp
Maximum Forward Voltage at 5.0A DC and 25°C	V_F	0.40	0.45	0.55	0.75		0.85		Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5							mAmp
Typical Junction Capacitance (Note 1)	C_J	500			380				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	15			10				°C/W
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150				°C
Storage Temperature Range	T_{stg}	-55 to +150							°C

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted



RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

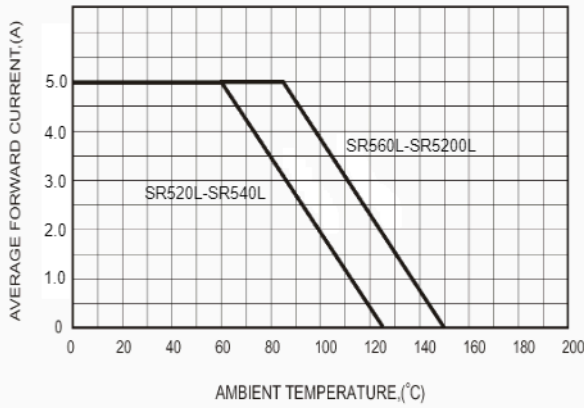


FIG.2-TYPICAL FORWARD CHARACTERISTICS

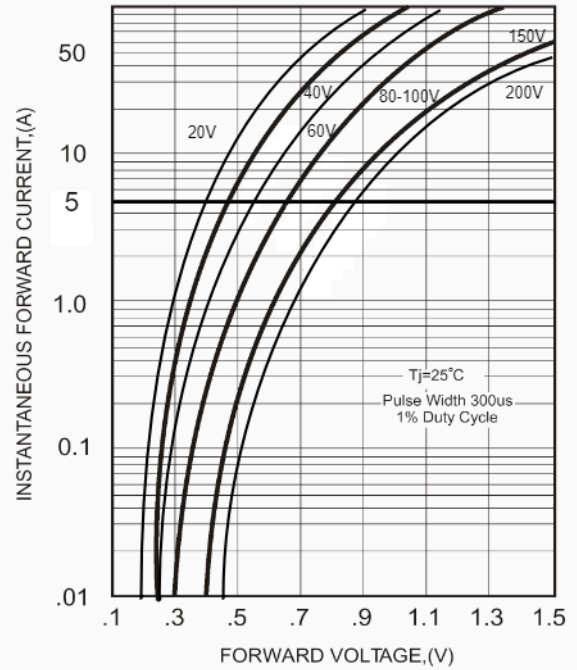


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

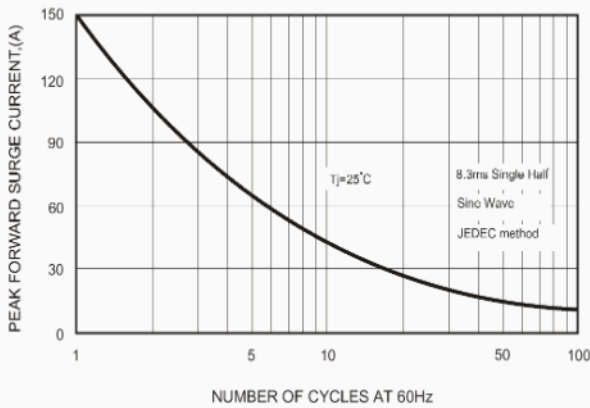


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

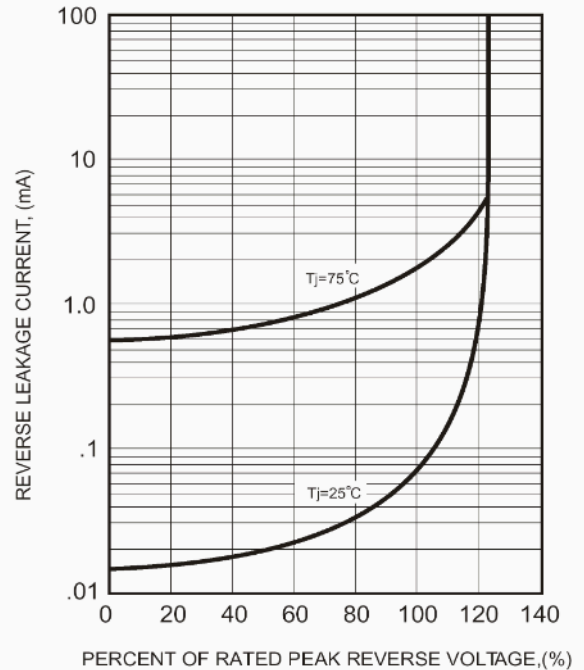


FIG.4-TYPICAL JUNCTION CAPACITANCE

