



SR5100

SCHOTTKY BARRIER RECTIFIERS

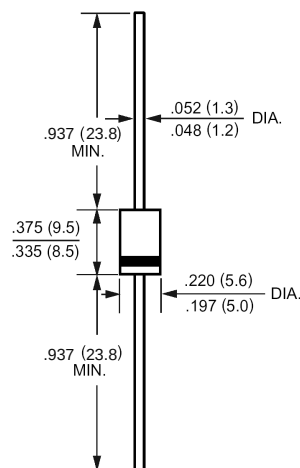
FEATURES

- 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 porlarlity 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	SR5100	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	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}	175	Amp
Maximum Forward Voltage at 5.0A DC and 25°C	V_F	0.85	Volts
Maximum Reverse Current at $T_A=25^{\circ}C$ at Rated DC Blocking Voltage $T_A=125^{\circ}C$	I_R	1 300	μA
Typical Junction Capacitance (Note 1)	C_J	45	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	15	$^{\circ}C/W$
Operating Junction Temperature Range	T_J	-55 to +150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 to +150	$^{\circ}C$

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



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1 - FORWARD CURRENT DERATING CURVE

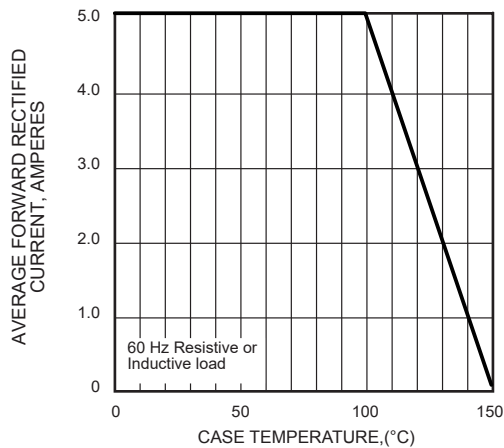


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

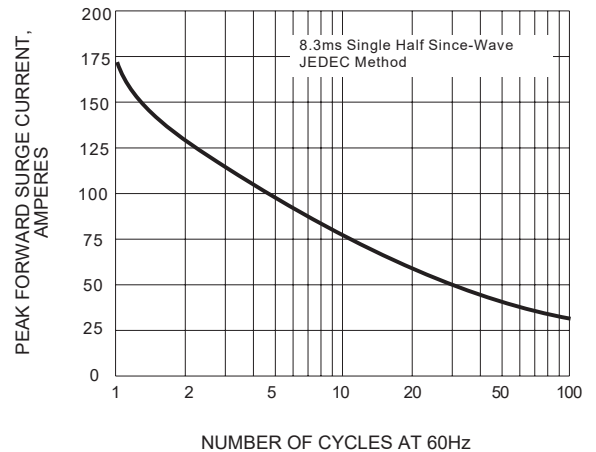


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

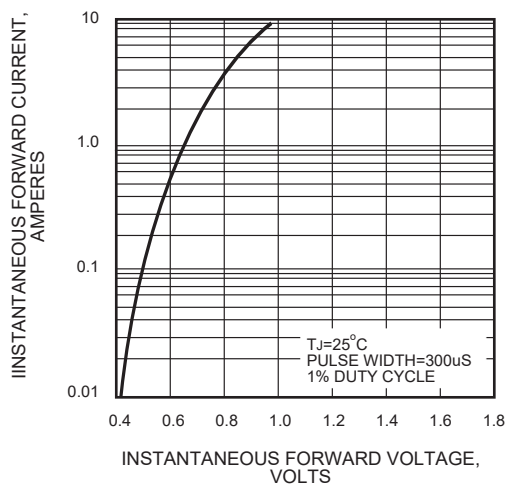


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

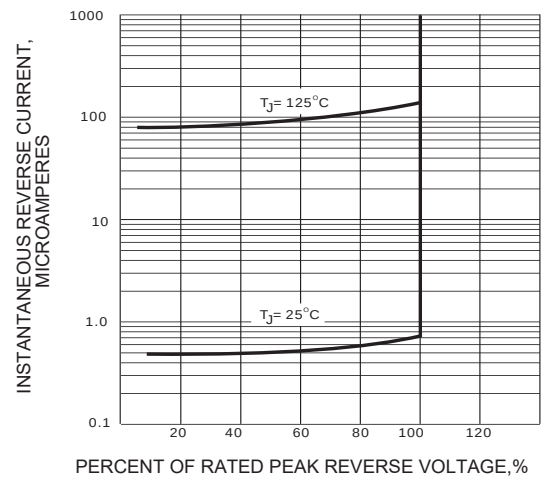


FIG.5 - TYPICAL JUNCTION CAPACITANCE

