



SR5100

SCHOTTKY BARRIER RECTIFIERS

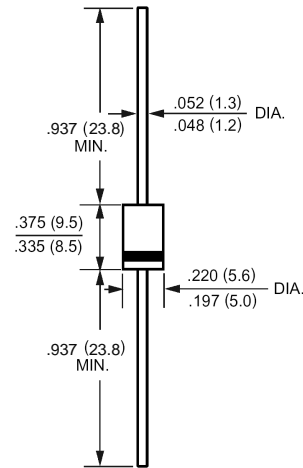
FEATURES

- 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 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	V_F	0.85	Volts
Maximum Reverse Current at $T_A=25$	I_R	1	uA
at Rated DC Blocking Voltage $T_A=125$		300	
Typical Junction Capacitance (Note 1)	C_J	45	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	15	/W
Operating Junction Temperature Range	T_J	-55 to +150	
Storage Temperature Range	T_{stg}	-55 to +150	

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





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

FIG.1 - FORWARD CURRENT DERATING CURVE

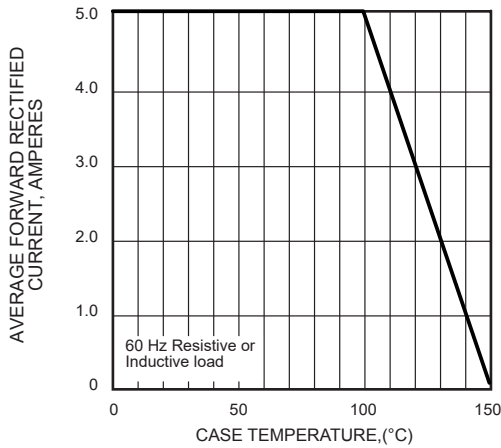


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

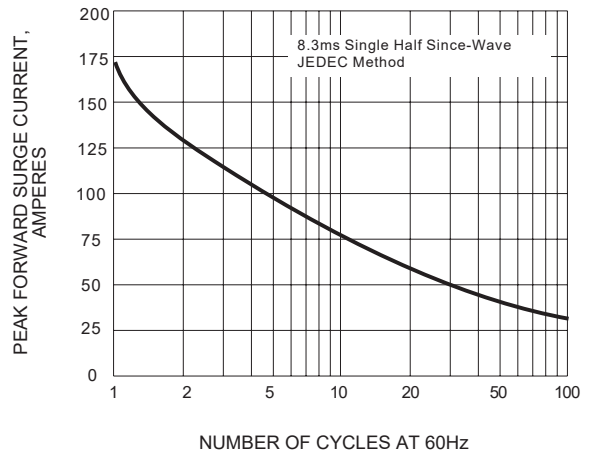


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

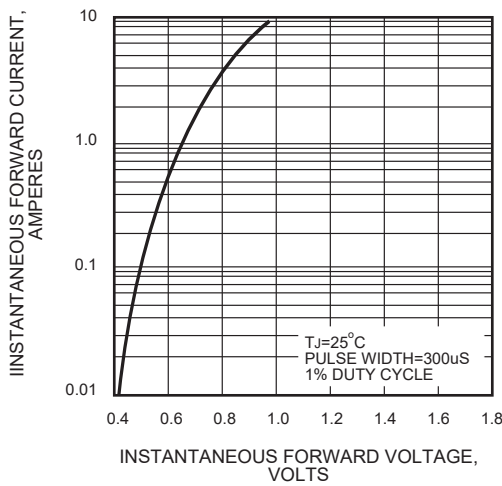


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

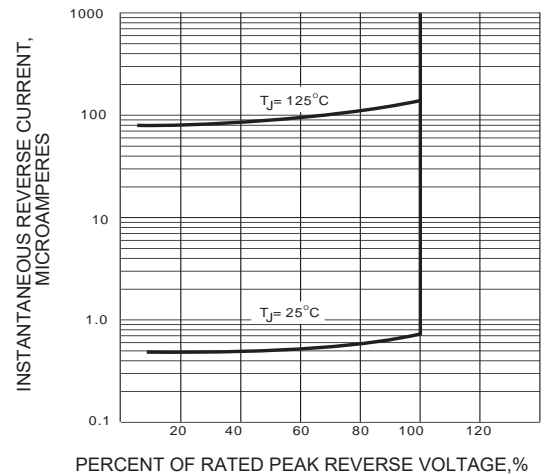


FIG.5 - TYPICAL JUNCTION CAPACITANCE

