SR5100G

SCHOTTKY BARRIER RECTIFIERS

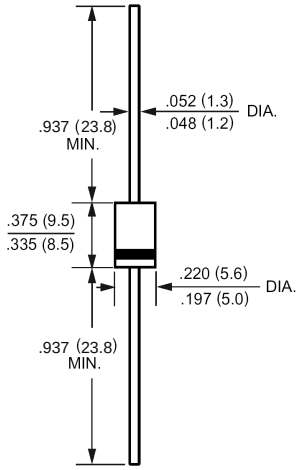
FEATURES

· 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, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

	Symbols	SR5100G	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	Tstg	-55 to +150	**℃**

NOTES:
1- Measured at 1 MH_Z 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 ℃ unless otherwise noted)

FIG.1 - FORWARD CURRENT DERATING CURVE

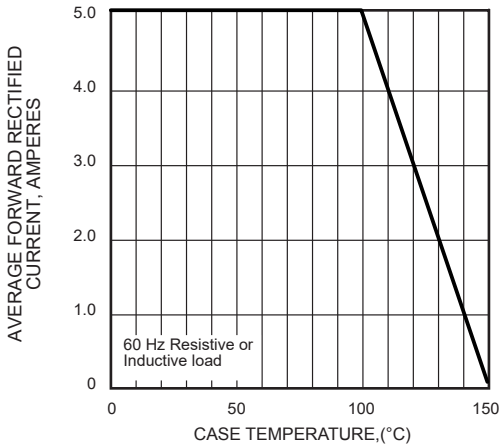


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

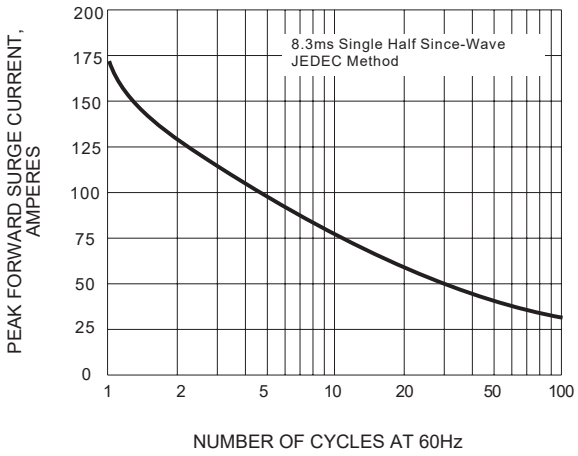


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

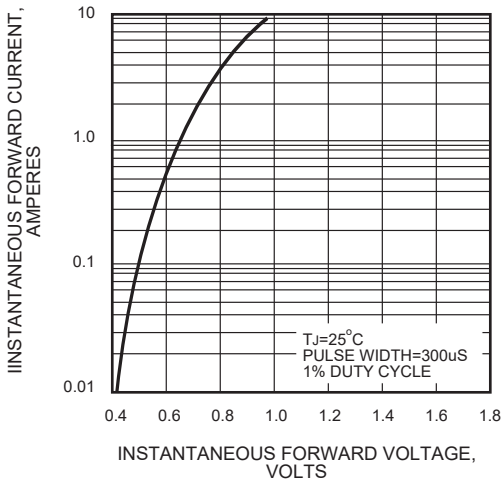


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

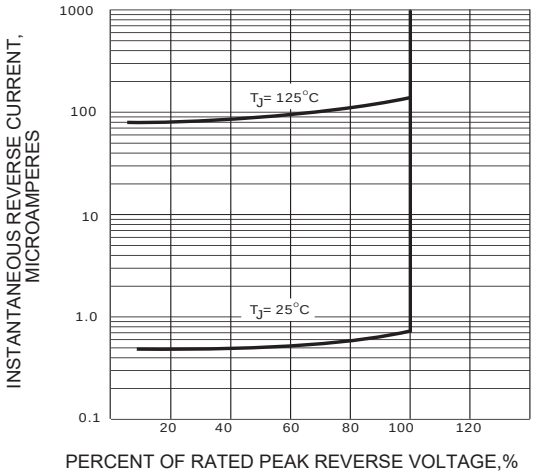


FIG.5 - TYPICAL JUNCTION CAPACITANCE

