SR10100L

LOW VF SCHOTTKY BARRIER RECTIFIERS

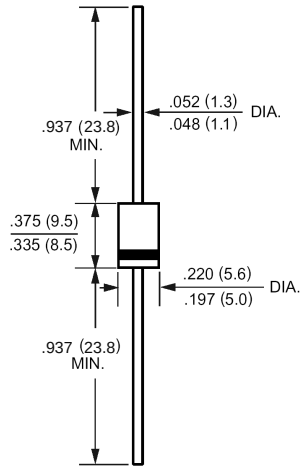
FEATURES

· High surge capability
· Low forward voltage, high current capability
· Hermetically sealed
· Superfast recovery times
· Exceeds environmental standards of MIL-S-19500/228
· Low leakage.

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

Rating at 25℃ ambient temperature unless otherwise specified
Single phase,half wave,60Hz,resistive or inductive load
For capacitive load derate current by 20%

Type Number	SYMBOL	SR10100L	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Average Rectified Output Current (Note 1) @T_L=110℃	$I_{F(AV)}$	10.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250	A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I_{FSM}	112.5	A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	93.375	A^2s
Forward Voltage @IF=10.0A	V_{FM}	0.7	V
Peak Reverse Current @T_A=25℃	I_R	0.1	mA
At Rated DC Blocking Voltage @T_A75 ℃		10	
Typical Junction Capacitance (Note 2)	C_J	250	pF
Typical Thermal Resistance Junction to Ambient(Note 1)	$R_{\theta JA}$	40	℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150	℃

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case
2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

RATINGS AND CHARACTERISTIC CURVES

Fig.1 - Forward Current Derating Curve

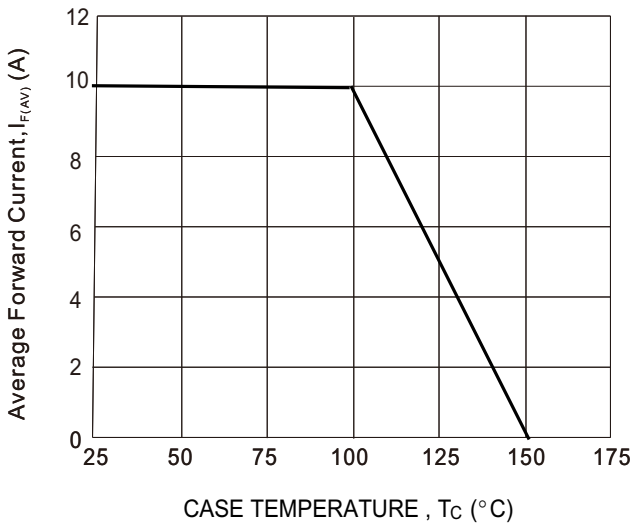


Fig. 2 Typical Forward Characteristics (per leg)

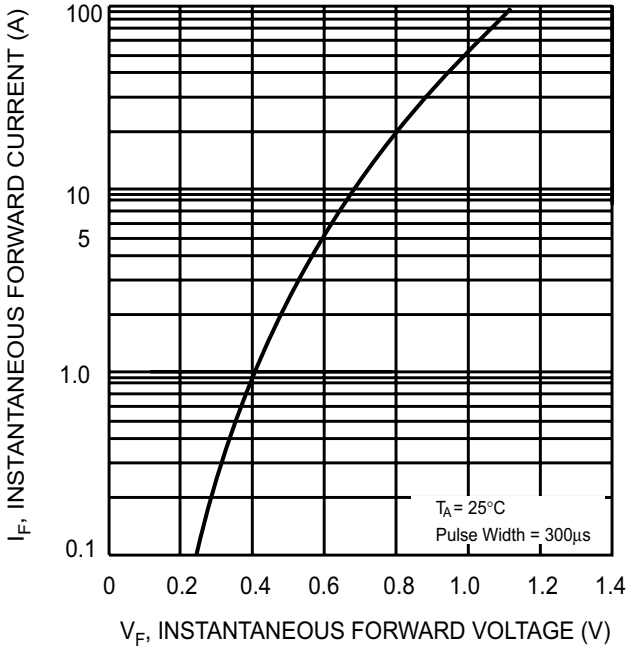


Fig. 3 Maximum Peak Forward Surge Current (per leg)

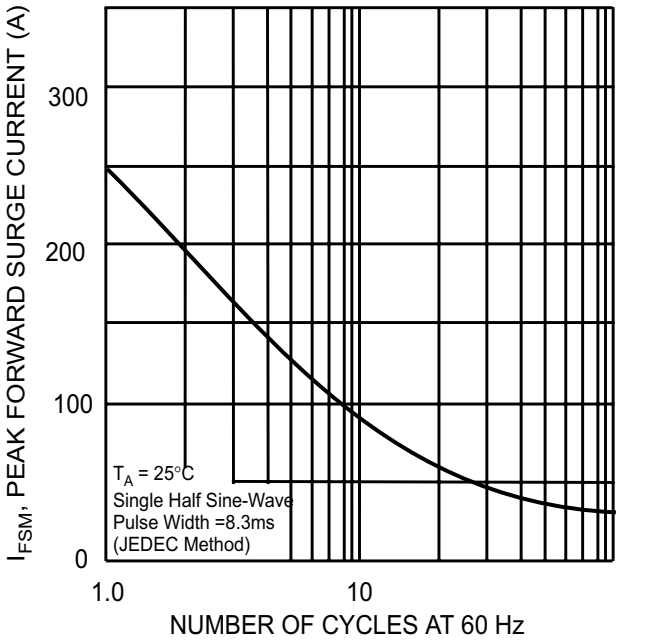


Fig4: Typical Reverse Characteristics

