



SCHOTTKY BARRIER RECTIFIERS

VOLTAGE - 45 Volts CURRENT -10 Amperes



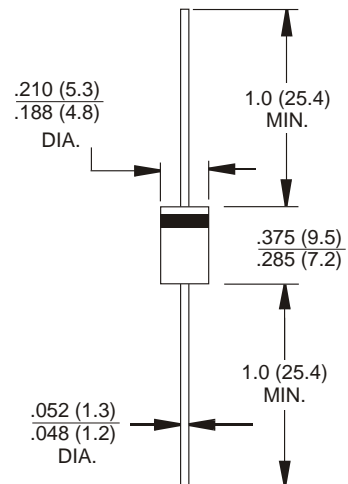
Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Fow Power Loss,High Efficiency
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: DO-201AD, molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- Polarity:Cathode Band
- Mounting Position:Any
- Marking:Type Number
- Lead Free:For RoHS/Lead Free Version

DO-201AD Unit:inch(mm)



Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified.

Single Phase, half wave 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	SR10V45L	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_{DC}		
RMS Rectified Voltage	V_{RMS}	32	V
Average Rectified Output Current (Note 1)	$I_{F(AV)}$	10	A
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load (JEDEC Method) (Note 2)	I_{FSM}	245	A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	249.104	A^2s
Forward Voltage Drop $T_A=25^\circ C$ @ $I_F=10A$	V_{FM}	0.45	V
Peak Reverse Current $T_A=25^\circ C$	I_R	0.3	mA
At Rated DC Blocking Voltage $T_A=100^\circ C$		15	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80	$^\circ C/W$
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	15	
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ C$

Note: 1. Valid provided that are kept at ambient temperature at a distance 9.5mm from the case.

2. FR-4 PCB, 2oz. Copper, minimum recommend pad layout 18.8mmx14.4mm, Anode pad dimensions 5.6mmx14.4mm.

DEVICE CHARACTERISTICS

SR10V45L

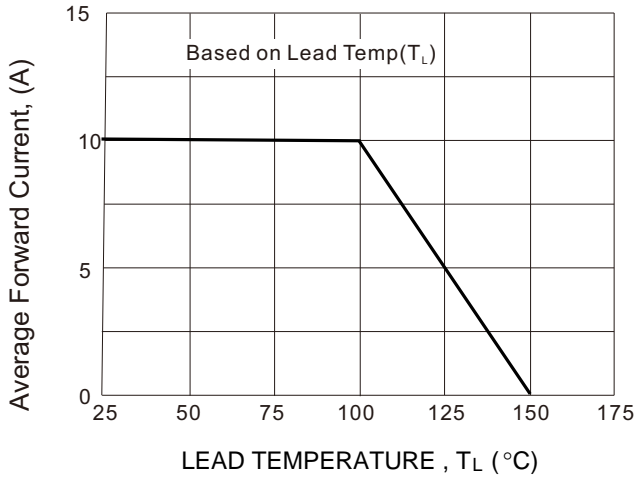


Fig.1 Forward Current Derating Curve

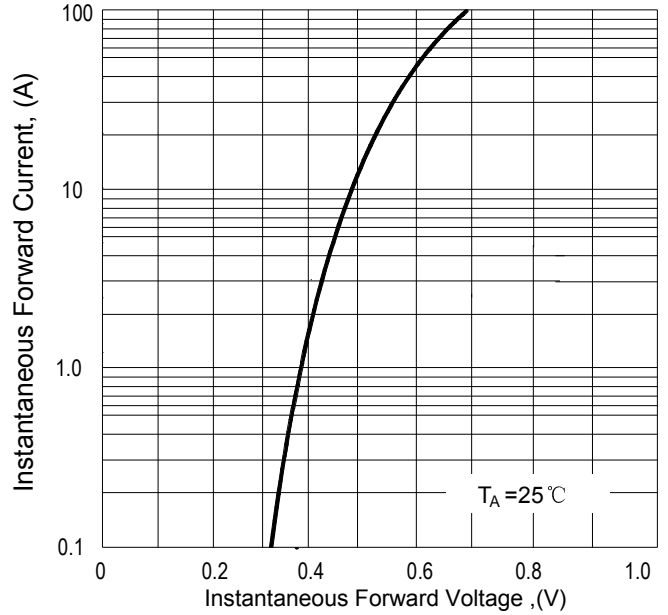


Fig.2 Typical Instantaneous Forward Characteristics

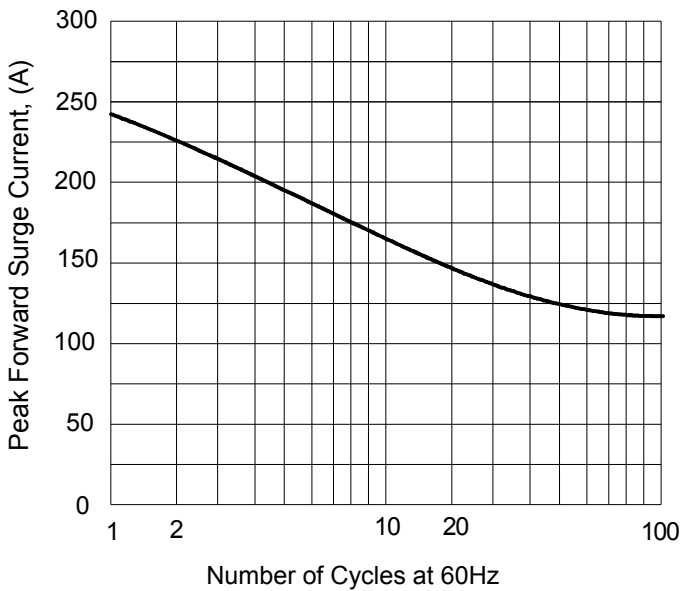


Fig.3 Surge Forward Current Capacity

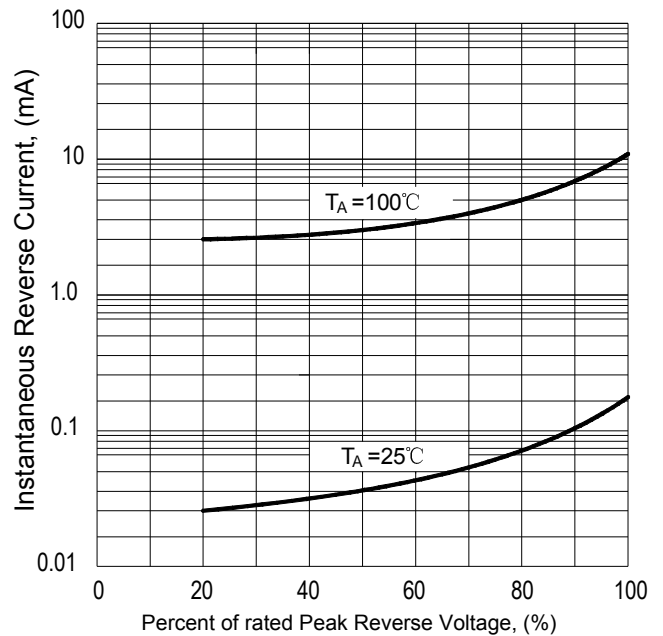


Fig.4 Typical Reverse Characteristics