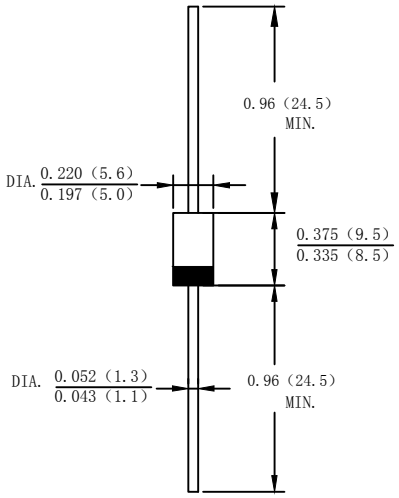
SR1045L THRU SR10100L

10.0 AMP. LOW VF Schottky Barrier Rectifiers

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- Guard ring for overvoltage protection
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- High surge capability

DO-201AD



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic D0-201AD
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version

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%

Parameter	Symbol	SR1045L	SR1050L	SR1060L	SR1080L	SR10100L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	V_{RRM} V_{RWM} V_{DC}	45	50	60	80	100	V
RMS Rectified Voltage	$V_{R(RMS)}$	32	35	42	56	70	V
Average Rectified Output Current (Note1)	IF(AV)	10					A
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	I_{FSM}	150					A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	93.375					A^2s
Forward Voltage Drop T_A =25 ℃ @IF=10A	V_{FM}	0.50		0.55	0.75		V
Peak Reverse Curent T_A =25℃ At Rated DC Blocking Voltage T_A =100℃	I_R	0.3 15					mA
Typical Thermal Resistance Junctionto Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 10					℃/W
Operating junction temperature range	T_J	-55 to +150					℃
storage temperature range	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

FIG. 1 - FORWARD CURRENT DERATING CURVE

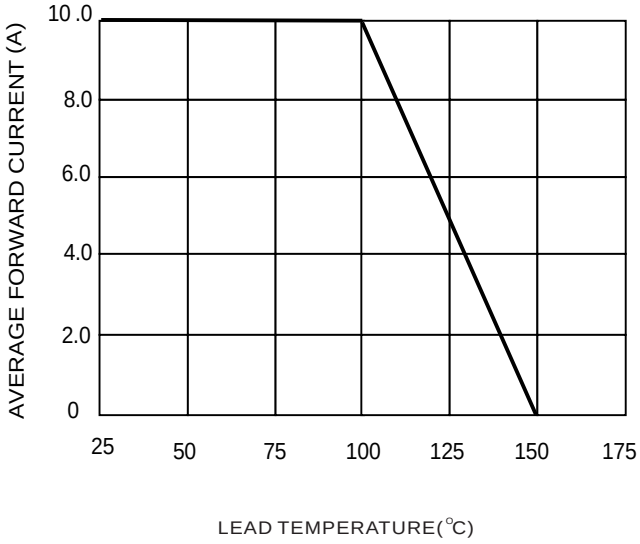


Fig2 : Instantaneous Forward Voltage

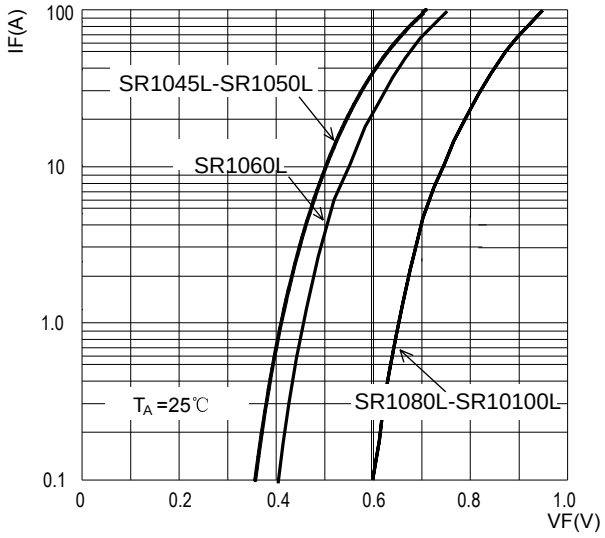


Fig3: Surge Forward Current Capadility

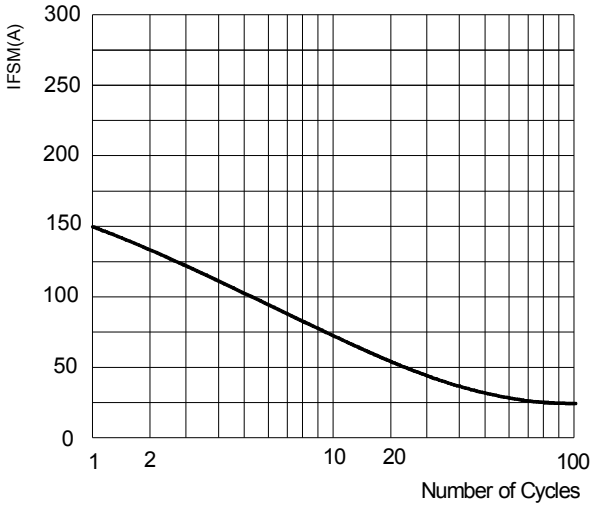
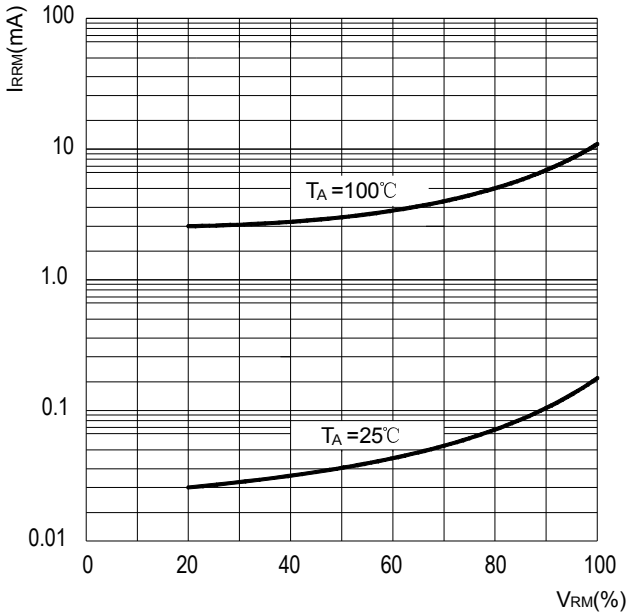


Fig4: Typical Reverse Characteristics



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