

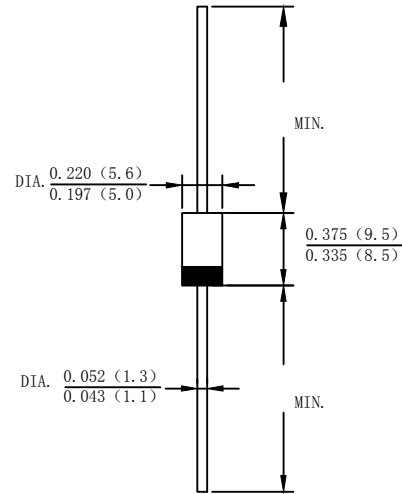
## Features

- 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

## Mechanical Data

- Case: Molded plastic DO-201AD/DO-27
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version

DO-201AD/DO-27



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C 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	$V_{RRM}$						V
Working Peak Reverse Voltage	$V_{RWM}$	45	50	60	80	100	V
DC blocking voltage	$V_{DC}$						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 Surge 8.3ms 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 <sup>2</sup> s
Forward Voltage Drop $T_A = 25^\circ C$ @IF=10A	$V_{FM}$	0.45	0.55	0.75			V
Peak Reverse Current $T_A = 25^\circ C$ At Rated DC Blocking Voltage $T_A = 100^\circ C$	$I_R$	0.3			15		mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80			10		°C/W
Operating junction temperature range	$T_J$	-55 to +150					°C
storage temperature range	$T_{STG}$	-55 to +150					°C

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

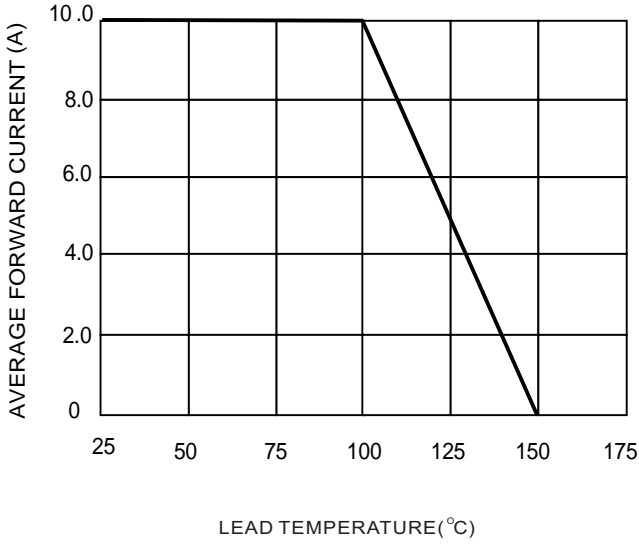


Fig2 : Instantaneous Forward Voltage

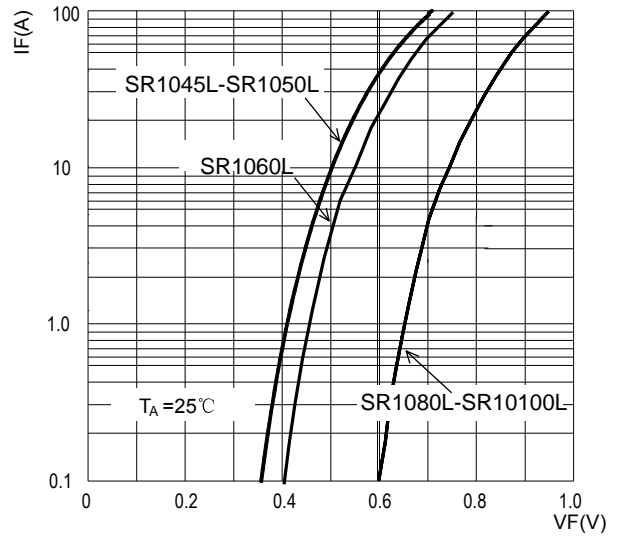


Fig3: Surge Forward Current Capacity

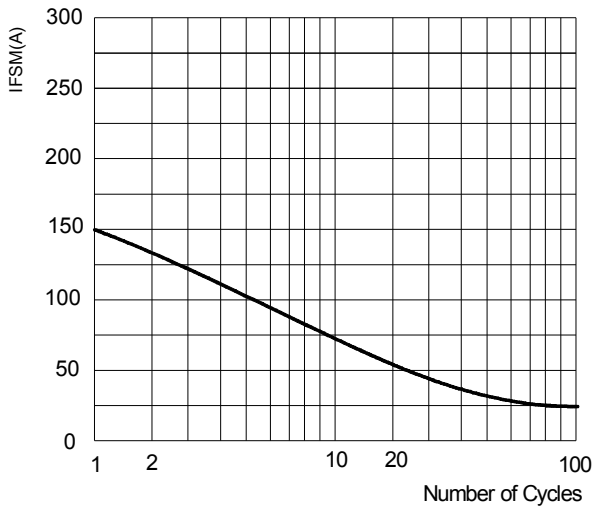


Fig4: Typical Reverse Characteristics

