

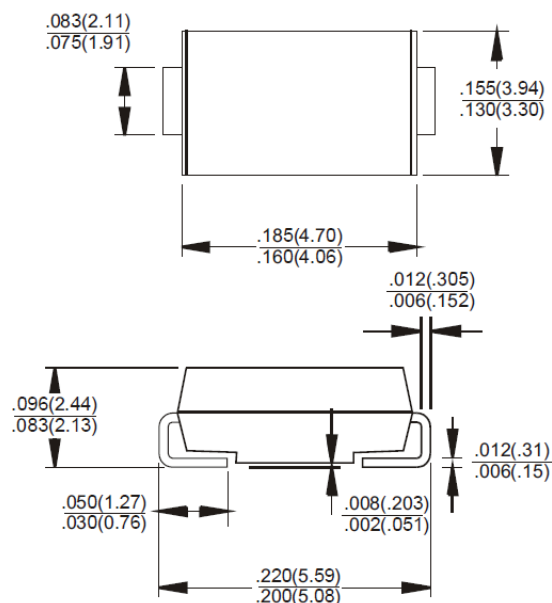
### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss, high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

### Mechanical Data

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated, solder able per MIL-STD-750, method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.003 ounce, 0.093 gram

#### SMB/DO-214AA



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Ratings 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	SR56L	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	60	V
Maximum RMS voltage	$V_{RMS}$	42	V
Maximum DC blocking voltage	$V_{DC}$	60	V
Maximum average forward rectified current	$I_F$	5.0	A
Peak forward surge current, 8.3ms single half sine- wave superimposed on rated load	$I_{FSM}$	100.0	A
Maximum Instantaneous Forward Voltage $I_F=5A @ 25^\circ C$	$V_F$	0.55	V
Maximum DC Reverse Current @ $T_c=25^\circ C$ at Rated DC Blocking Voltage @ $T_c=100^\circ C$	$I_R$	0.5 50	mA
Typical Junction Capacitance(NOTE1)	$C_j$	500	pF
Typical Thermal Resistance	$R_{\theta JC}$	50	°C/W
Operating Temperature Range	$T_J$	-55 to +125	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

#### NOTES:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

### RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

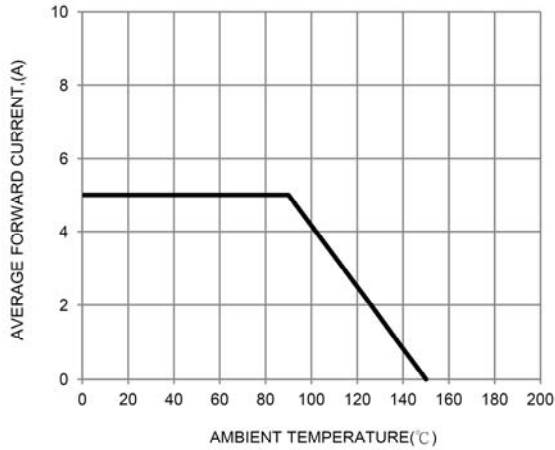


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

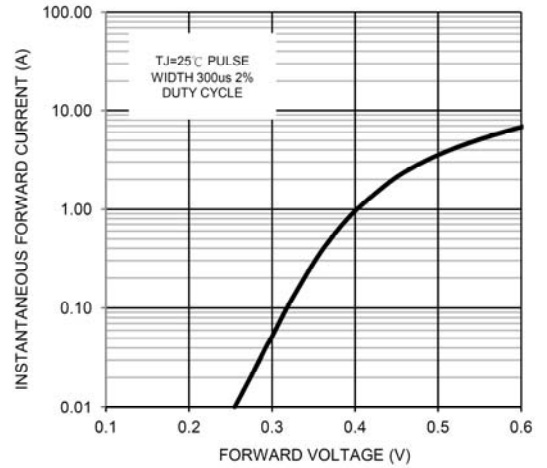


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

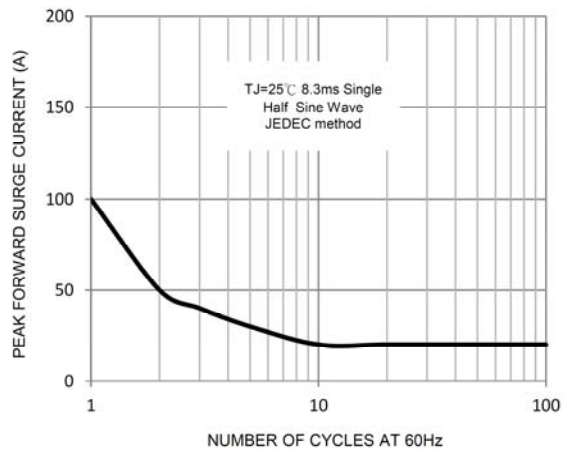


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

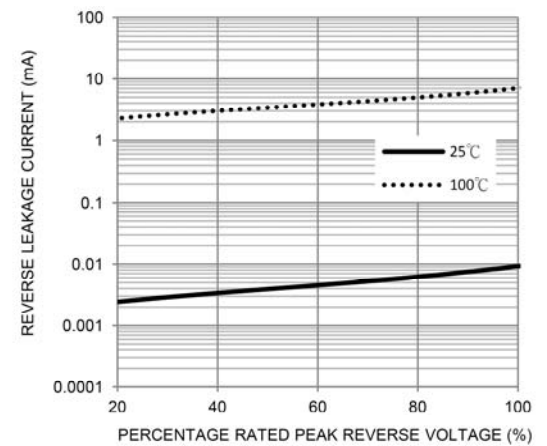


FIG. 5-TYPICAL JUNCTION CAPACITANCE

