

# SR520 THRU SR5100

## 5.0 AMPS. SCHOTTKY BARRIER RECTIFIERS

**Voltage Range**  
**20 to 100 Volts**  
**Current**  
**5.0 Amperes**

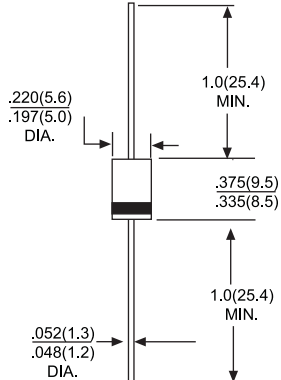
### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

### Mechanical Data

- Cases: DO-201AD molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 250°C/10 seconds/.375"(.95mm) lead lengths at 5 lbs.(2.3kg) tension
- Weight: 1.1 grams

### DO-201AD



## 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%

Type Number		SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	I <sub>F(AV)</sub>	5.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	150							A
Maximum Instantaneous Forward Voltage @3.0A	V <sub>F</sub>	0.45	0.55	0.6	0.7		0.85		V
Maximum DC Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 100°C	I <sub>R</sub>	0.5 50							mA mA
Typical Thermal Resistance(Note 1) R <sub>θJA</sub>	R <sub>θJA</sub>	15			10				°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	500			380				pF
Operating Temperature Range	T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES: 1. Thermal Resistance from Junction to Ambient Vertical P.C. Board Mounting, 0.375"(9.5mm) Lead Length.  
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

# RATING AND CHARACTERISTIC CURVES SR520 THRU SR5100

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

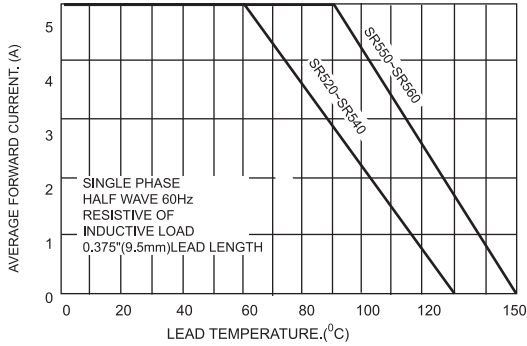


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

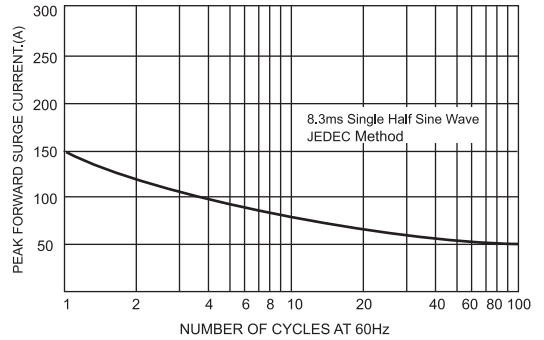


FIG.3-TYPICAL REVERSE CHARACTERISTICS

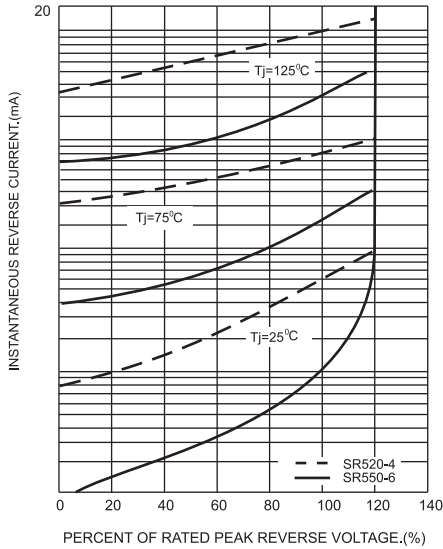


FIG.4-TYPICAL FORWARD CHARACTERISTICS

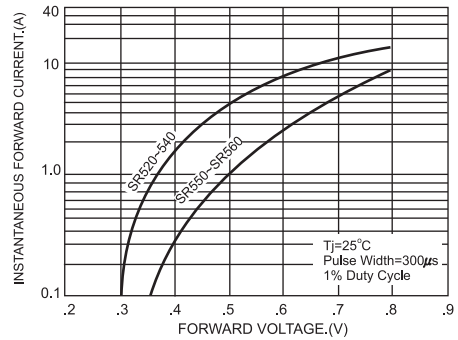


FIG.5-TYPICAL JUNCTION CAPACITANCE

