



# SR120 THRU SR160

## 1.0 AMP. SCHOTTKY BARRIER RECTIFIERS

**Voltage Range**  
20 to 60 Volts  
**Current**  
1.0 Amperes

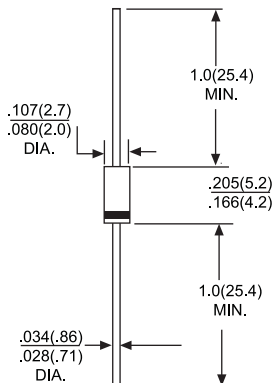
### Features

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

### Mechanical Data

- Cases: DO-41 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" (9.5mm) lead lengths at 5 lbs. (2.3kg) tension
- Weight: 0.33 gram

### DO-41



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%

Type Number		SR120	SR130	SR140	SR150	SR160	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	20	30	40	50	60	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	V
Maximum Average Forward Rectified Current See Fig.1	IF(AV)	1.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	40					A
Maximum Instantaneous Forward Voltage @1.0A	VF	0.55			0.70		V
Maximum DC Reverse Current @ at Rated DC Blocking Voltage @ TA = 25°C TA = 100°C	IR	0.5 10					mA mA
Typical Thermal Resistance (Note 1)	RθJA	50					°C/W
Typical Junction Capacitance (Note 2)	CJ	110			80		pF
Operating Temperature Range	TJ	-55 to +125					°C
Storage Temperature Range	TSTG	-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 SR120 THRU SR160



FIG.1- FORWARD CURRENT DERATING CURVE

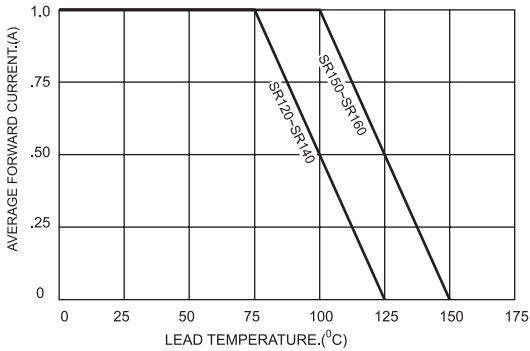


FIG.2-TYPICAL FORWARD CHARACTERISTICS

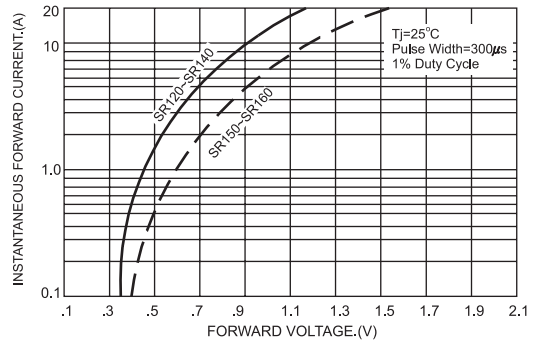


FIG.3-TYPICAL REVERSE CHARACTERISTICS

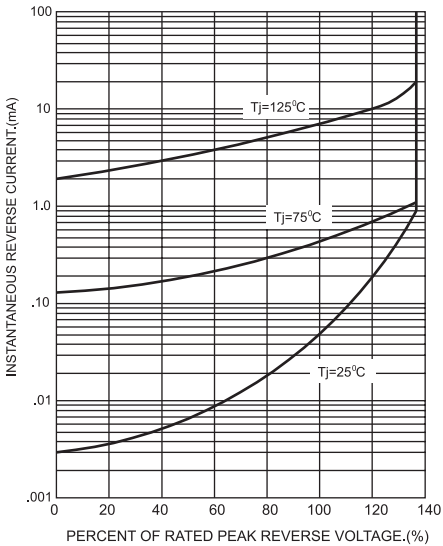


FIG.4-TYPICAL JUNCTION CAPACITANCE

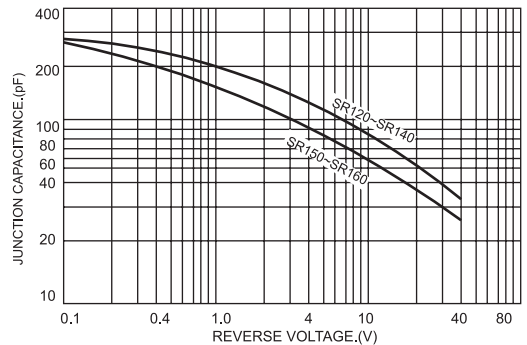


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

