

SR120 THRU SR1100

1.0 AMP. SCHOTTKY BARRIER RECTIFIERS

Voltage Range
20 to 100 Volts
Current
1.0 Amperes

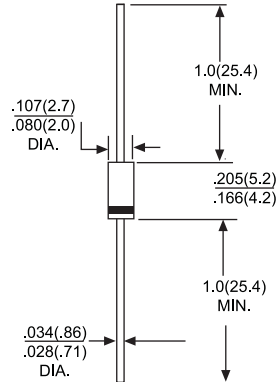
Features

- 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	SR180	SR1100	UNITS	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V	
Maximum Average Forward Rectified Current See Fig.1	I _{F(AV)}	1.0							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	40							A	
Maximum Instantaneous Forward Voltage @1.0A	V _F	0.45	0.55	0.6	0.7		0.85		V	
Maximun DC Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _R	0.5 10							mA mA	
Typical Thermal Resistance (Note 1)	R θ JA	50							°C/W	
Typical Junction Capacitance (Note 2)	C _J	110			80					pF
Operating Temperature Range	T _J	-55 to +125							°C	
Storage Temperature Range	T _{STG}	-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 SR1100

FIG.1- FORWARD CURRENT DERATING CURVE

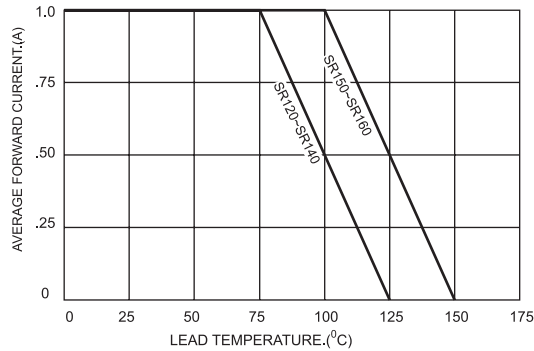


FIG.2-TYPICAL FORWARD CHARACTERISTICS

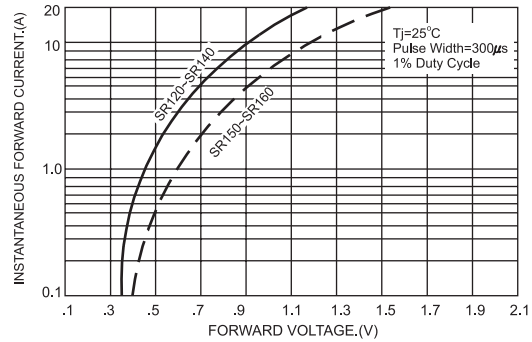


FIG.3-TYPICAL REVERSE CHARACTERISTICS

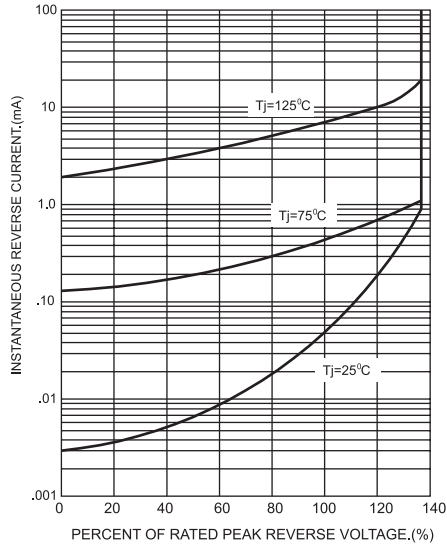


FIG.4-TYPICAL JUNCTION CAPACITANCE

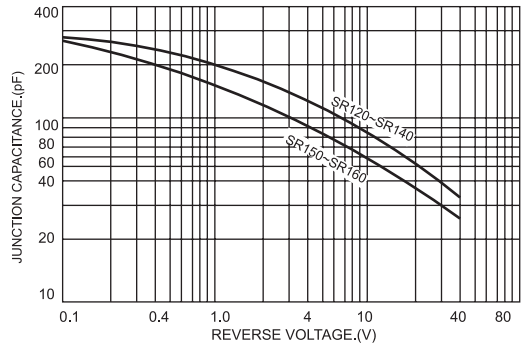


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

