

**SR120S THUR SR1100S**  
**1.0 AMP SCHOTTKY BARRIER RECTIFIERS**



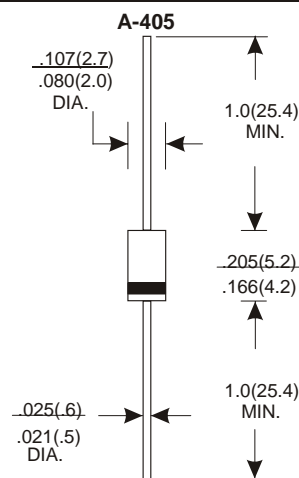
**FEATURES**

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.22 grams

**VOLTAGE RANGE**  
 20 to 100 Volts  
**CURRENT**  
 1.0 Ampere



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 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	SR120S	SR130S	SR140S	SR150S	SR160S	SR180S	SR1100S	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	0.55		0.70		0.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25 C			1.0			mA	
	Ta=100 C			10			mA	
Typical Junction Capacitance (Note1)	110							pF
Typical Thermal Resistance R <sub>θ</sub> JA (Note 2)	50							C/W
Operating Temperature Range T <sub>J</sub>	-65 — +125			-65 — +150				C
Storage Temperature Range T <sub>STG</sub>	-65 — +150							C

**NOTES:**

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SR120S THRU SR1100S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

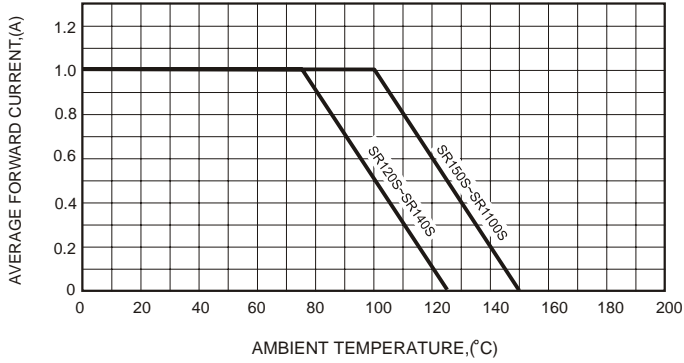


FIG.2-TYPICAL FORWARD CHARACTERISTICS

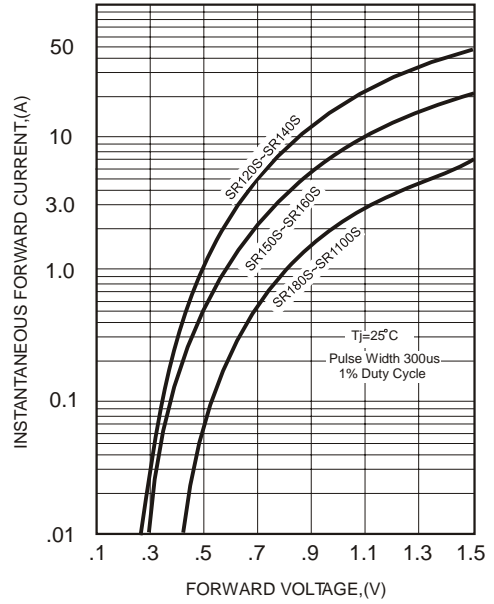


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

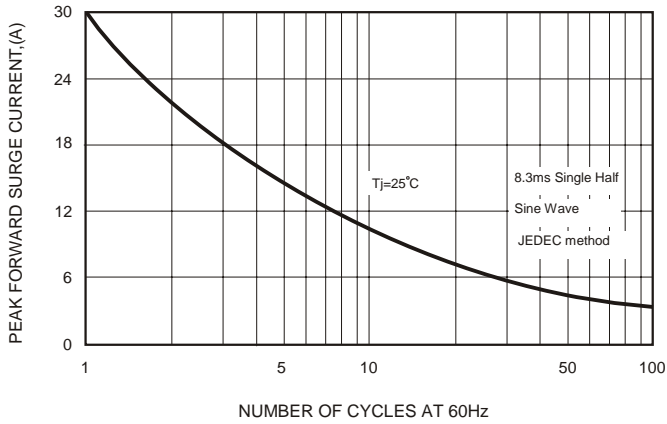


FIG.4-TYPICAL JUNCTION CAPACITANCE

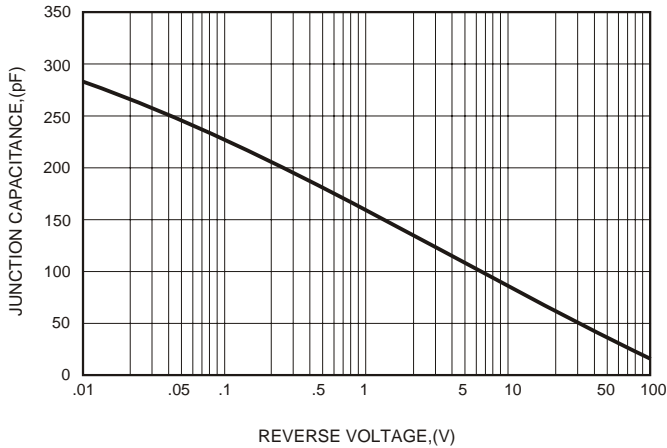


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

