



### 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 guranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.34 grams

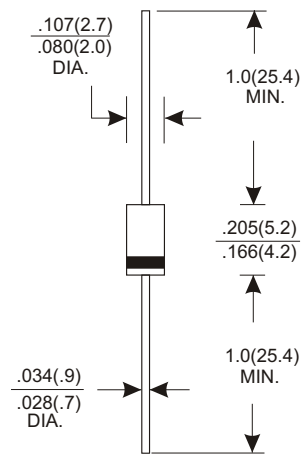
### VOLTAGE RANGE

20 to 100 Volts

### CURRENT

1.0 Ampere

DO-41



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unieess otherwies 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 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	1.0							A
See Fig. 1								
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 Ta=25°C	0.1				0.02			mA
at Rated DC Blocking Voltage Ta=100°C	5				2			mA
Typical Junction Capacitance (Note1)	110							pF
Typical Thermal Resistance R JA (Note 2)	50							°C/W
Operating Temperature Range Tj	-65 — +125			-65 — +150				°C
Storage Temperature Range Tstg	-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 (SR120 THRU SR1100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

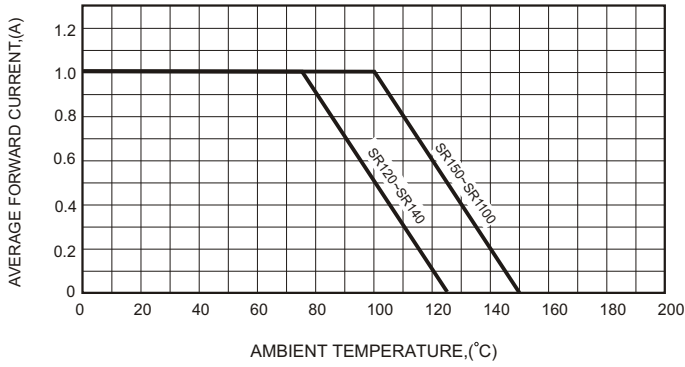


FIG.2-TYPICAL FORWARD CHARACTERISTICS

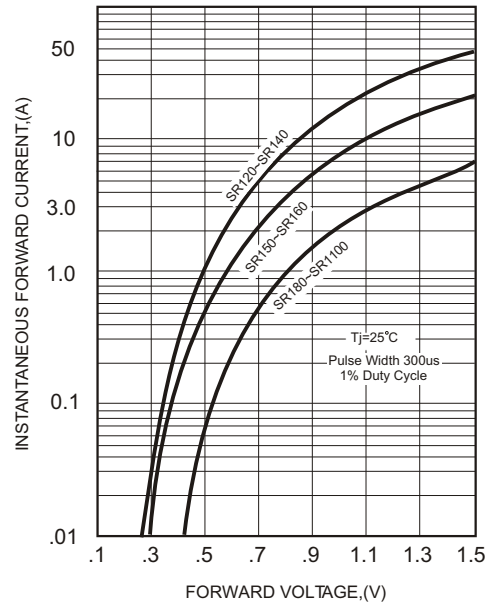


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

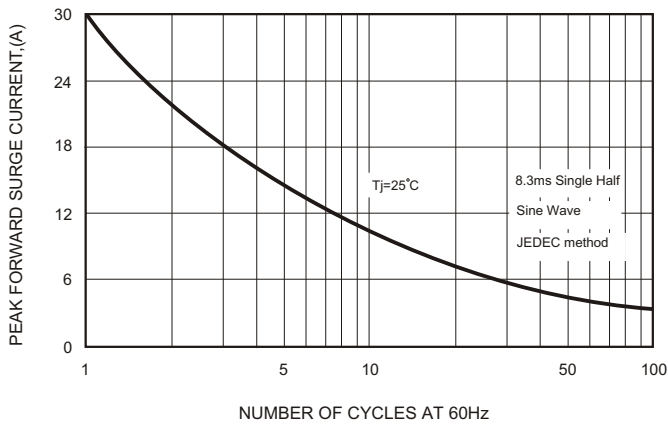


FIG.4-TYPICAL JUNCTION CAPACITANCE

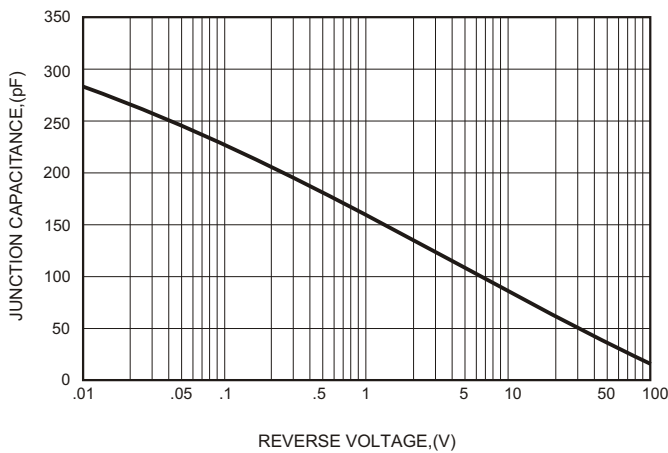


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

