

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free



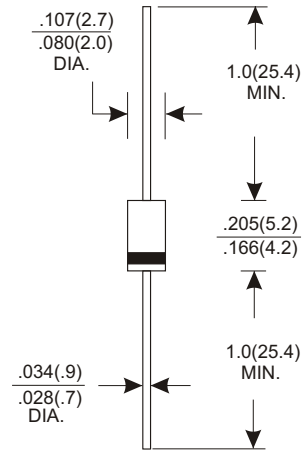
## FEATURES

- \* 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: 0.34 grams

DO-41



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	SR120	SR130	SR140	SR160	SR180	SR1100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	60	80	100	V
Working Peak Reverse Voltage	20	30	40	60	80	100	V
Maximum DC Blocking Voltage	20	30	40	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	0.45	0.50	0.65	0.83			V
Maximum DC Reverse Current Ta=25°C	0.3						mA
at Rated DC Blocking Voltage Ta=100°C	10						mA
Typical Junction Capacitance (Note 1)	110						pF
Typical Thermal Resistance RθJA (Note 2)	50						°CW
Operating Temperature Range Tj	-50 ~ +150						°C
Storage Temperature Range TsTG	-65 ~ +175						°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

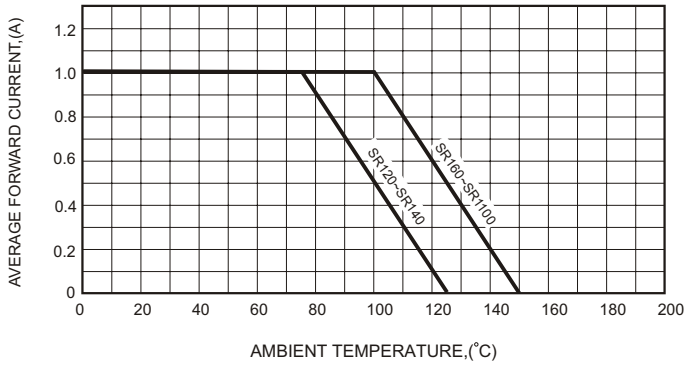


FIG.2-TYPICAL FORWARD CHARACTERISTICS

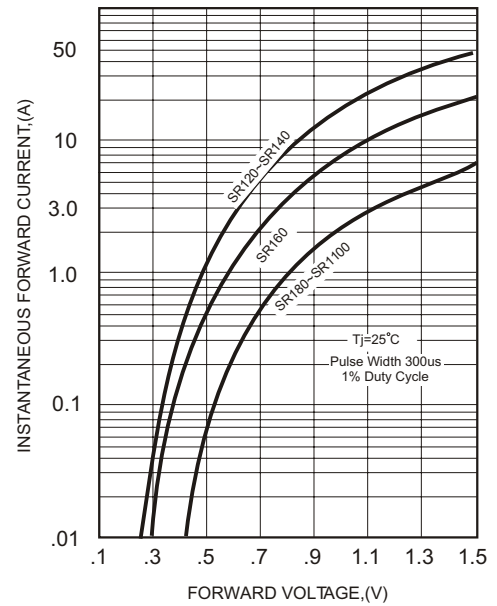


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

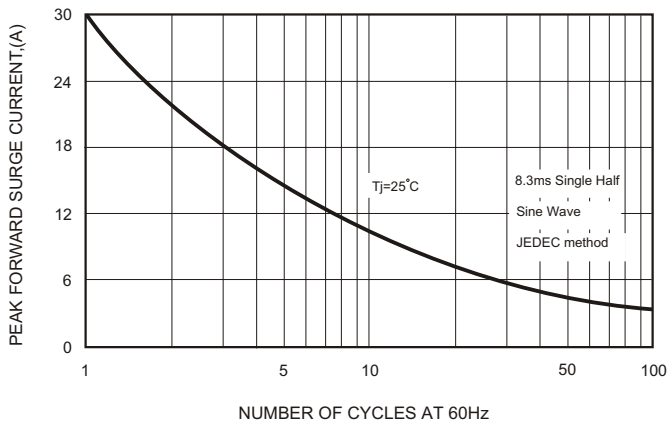


FIG.4-TYPICAL JUNCTION CAPACITANCE

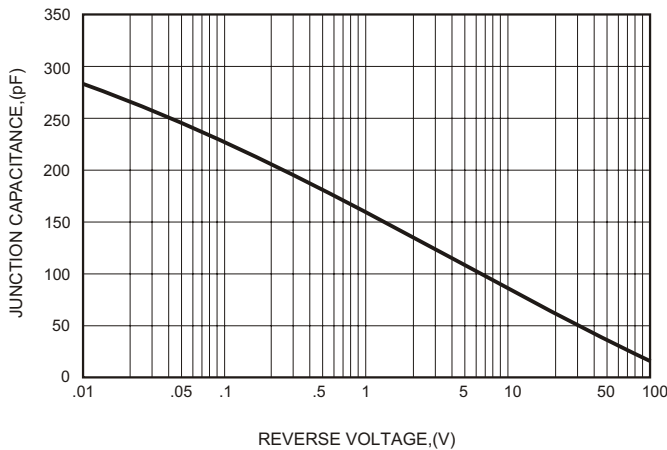


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

