

RoHS Compliant Product

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

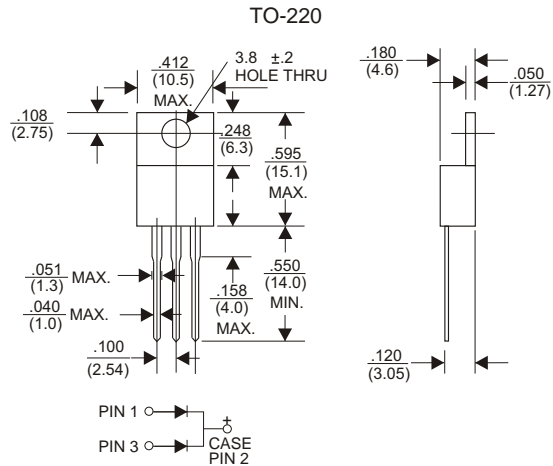


## FEATURES

- \* 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: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 2.24 grams



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	SR1620	SR1630	SR1640	SR1660	SR1680	SR16100	UNITS	
Maximum Recurrent Peak Reverse Voltage	20	30	40	60	80	100	V	
Maximum RMS Voltage	14	21	28	42	56	70	V	
Maximum DC Blocking Voltage	20	30	40	60	80	100	V	
Maximum Average Forward Rectified Current See Fig. 1	16						A	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	130			100			A	
Maximum Instantaneous Forward Voltage at 8.0A	0.57			0.68	0.82		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	10			100				mA
Typical Junction Capacitance (Note 1)	700			460	280		pF	
Typical Thermal Resistance R <sub>θJC</sub> (Note 2)	3.0						°C/W	
Operating Temperature Range T <sub>J</sub>	-50 ~ +125						°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 Case.

RATING AND CHARACTERISTIC CURVES (SR1620 THRU SR16100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

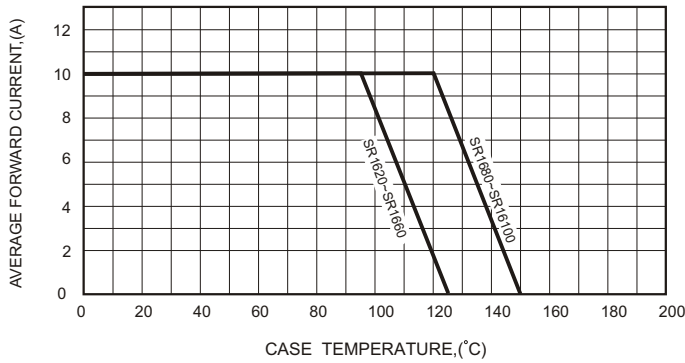


FIG.2-TYPICAL FORWARD CHARACTERISTICS

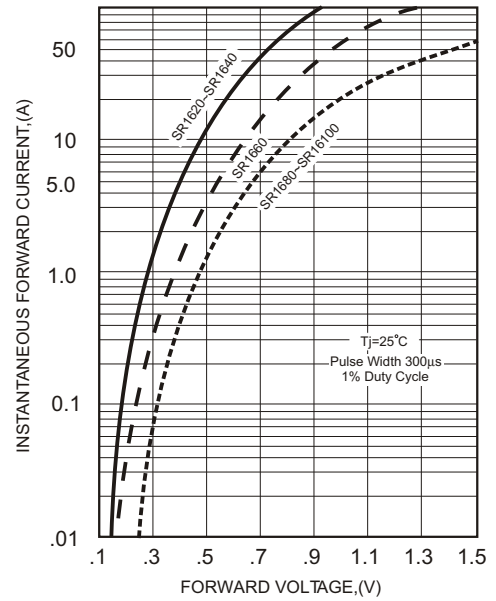


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

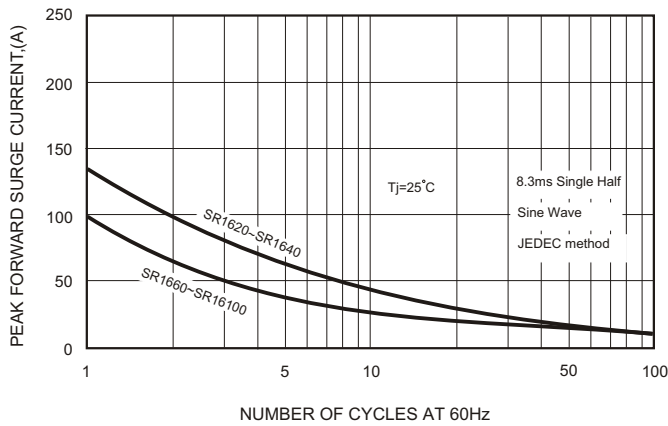


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

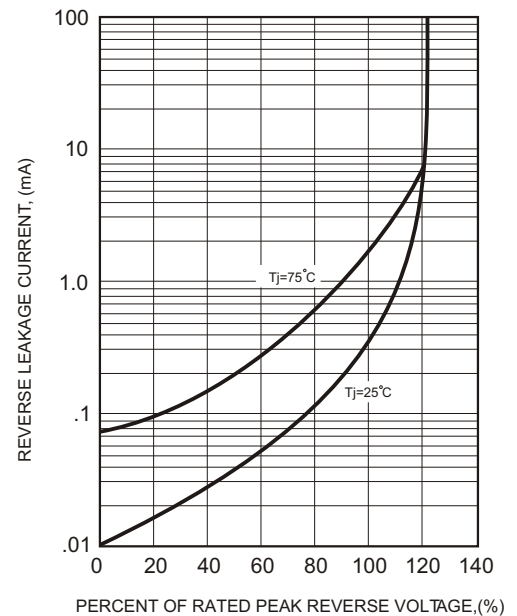


FIG.4-TYPICAL JUNCTION CAPACITANCE

