



FEATURES

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

MECHANICAL DATA

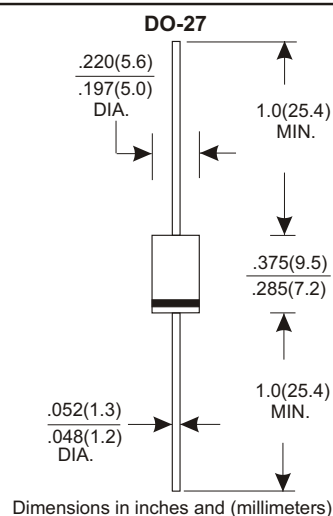
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

VOLTAGE RANGE

150 to 200 Volts

CURRENT

5.0 Amperes



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	SR5150	SR5200	UNITS
Maximum Recurrent Peak Reverse Voltage	150	200	V
Maximum RMS Voltage	105	140	V
Maximum DC Blocking Voltage	150	200	V
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	5.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150		A
Maximum Instantaneous Forward Voltage at 5.0A	0.92		V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	0.5		mA
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	10		mA
Typical Junction Capacitance (Note 1)	380		PF
Typical Thermal Resistance $R_{\theta JL}$ (Note 2)	12		$^\circ\text{C/W}$
Operating Temperature Range T_j	-65 — +150		$^\circ\text{C}$
Storage Temperature Range T_{stg}	-65 — +150		$^\circ\text{C}$

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead Vertical PC Board Mounting 0.375"(9.5mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SR5150 THRU SR5200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

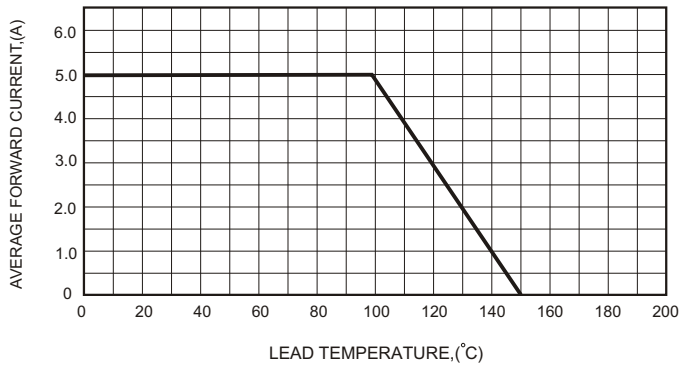


FIG.2-TYPICAL FORWARD CHARACTERISTICS

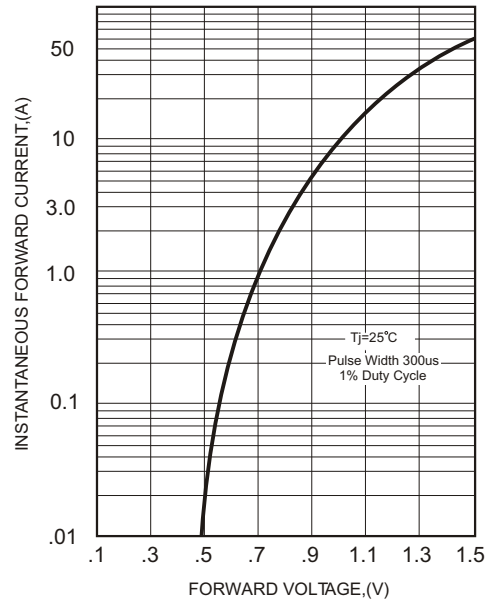


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

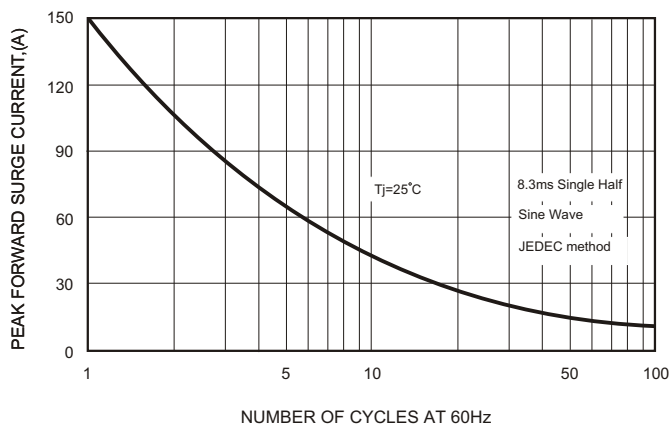


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

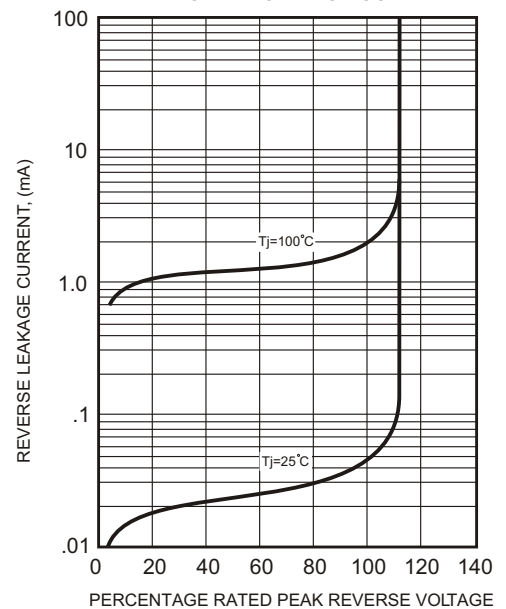


FIG.4-TYPICAL JUNCTION CAPACITANCE

