

RoHS Compliant Product

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

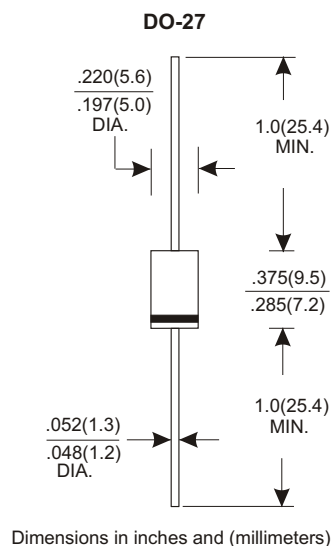


FEATURES

- * 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: 1.10 grams(Approximately)



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	SR8150E	UNITS
Maximum Recurrent Peak Reverse Voltage	150	V
Working Peak Reverse Voltage	150	V
Maximum DC Blocking Voltage	150	V
Maximum Average Forward Rectified Current		
See Fig. 1	8	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	180	A
Maximum Instantaneous Forward Voltage ($I_F = 8$ Amps, $T_F = 25^\circ\text{C}$)	0.87	V
Maximum Instantaneous Forward Voltage ($I_F = 8$ Amps, $T_F = 125^\circ\text{C}$)	0.72	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$	0.02	mA
at Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	10	mA
Typical Junction Capacitance (Note 1)	350	pF
Typical Thermal Resistance $R_{\theta JC}$ (Note 2)	2.0	$^\circ\text{C/W}$
Operating Temperature Range T_J	-50 ~ +150	$^\circ\text{C}$
Storage Temperature Range T_{STG}	-65 ~ +175	$^\circ\text{C}$

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (SR8150E)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

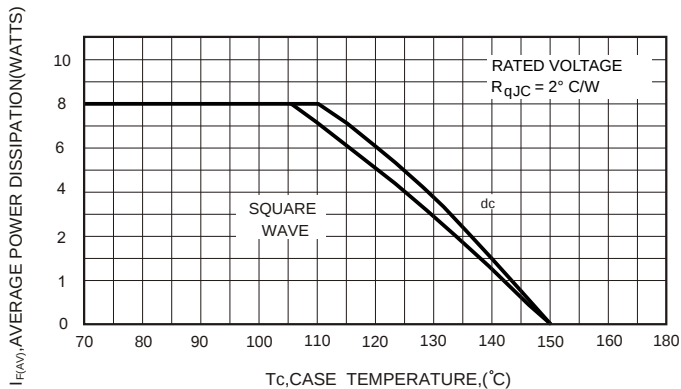


FIG.2- TYPICAL FORWARD VOLTAGE (PER LEG)

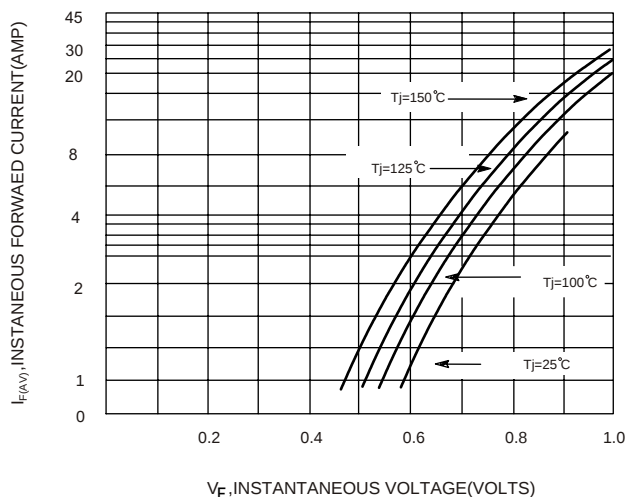


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

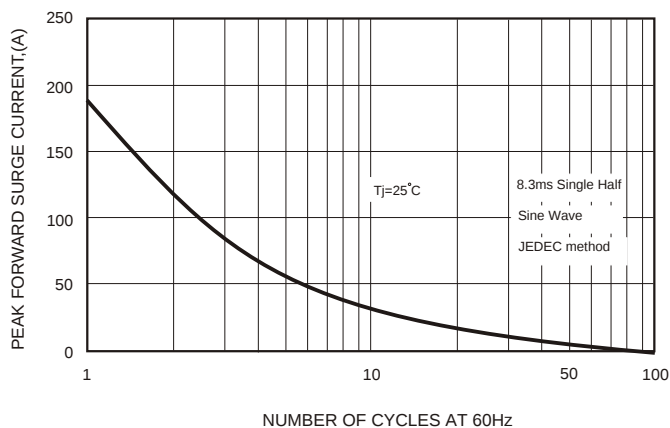


FIG.5-TYPICAL REVERSE CURRENT (PER LEG)

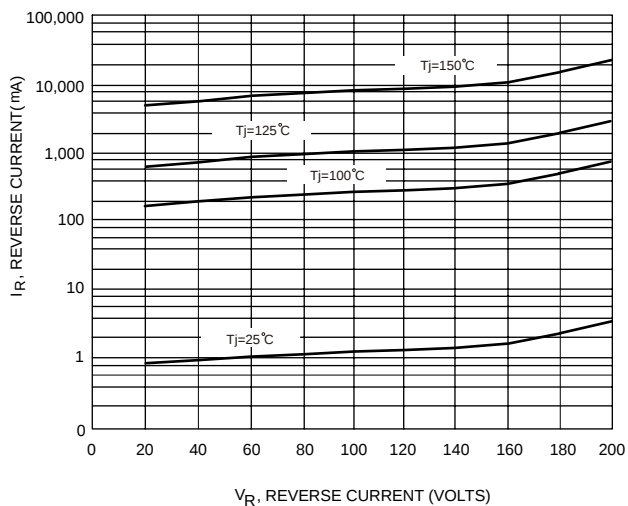


FIG.4-TYPICAL JUNCTION CAPACITANCE

