

RoHS Compliant Product

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

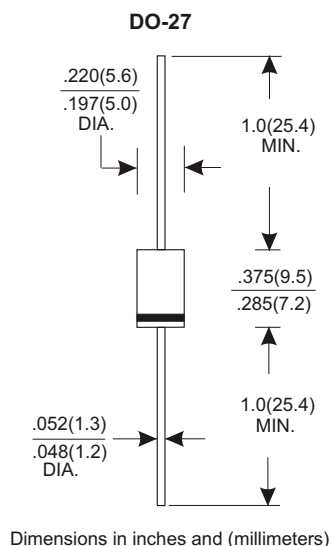


FEATURES

- * 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



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	SR820E	SR830E	SR835E	SR840E	SR845E	SR860E	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	35	40	45	60	V
Maximum RMS Voltage	14	21	24	28	31	42	V
Maximum DC Blocking Voltage	20	30	35	40	45	60	V
Maximum Average Forward Rectified Current	8.0						A
See Fig. 1							
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	180						A
Maximum Instantaneous Forward Voltage at 8.0A	0.55					0.70	V
Maximum DC Reverse Current Ta=25°C	1.0						mA
at Rated DC Blocking Voltage Ta=100°C	50						mA
Typical Junction Capacitance (Note1)	700					460	pF
Typical Thermal Resistance RθJA (Note 2)	25						°C/W
Operating Temperature Range Tj	-50 ~ +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

RATING AND CHARACTERISTIC CURVES (SR820E THRU SR860E)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

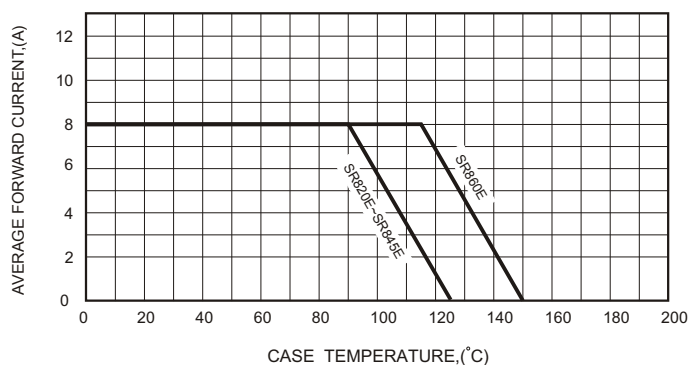


FIG.2-TYPICAL FORWARD CHARACTERISTICS

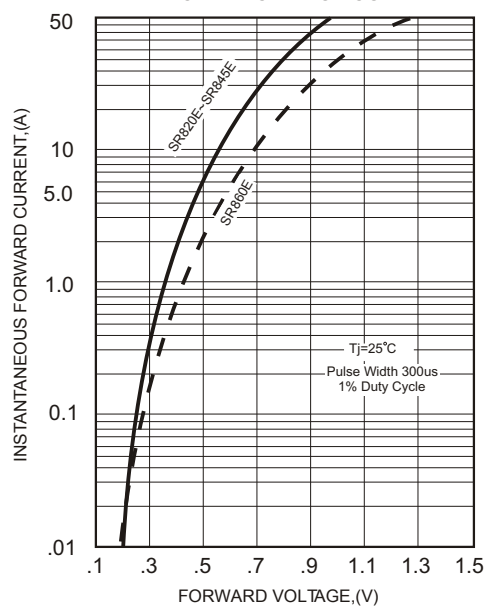


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

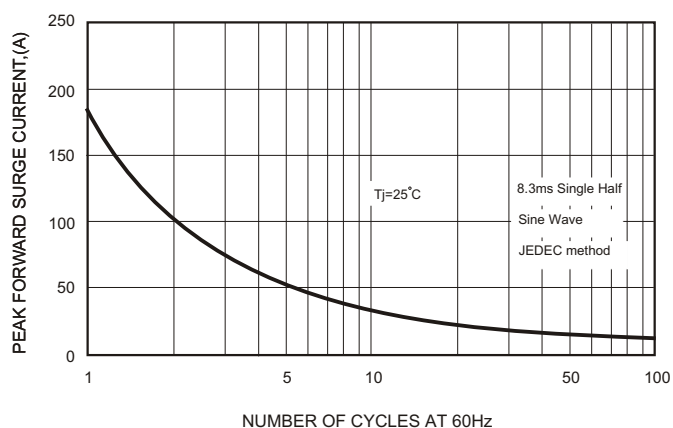


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

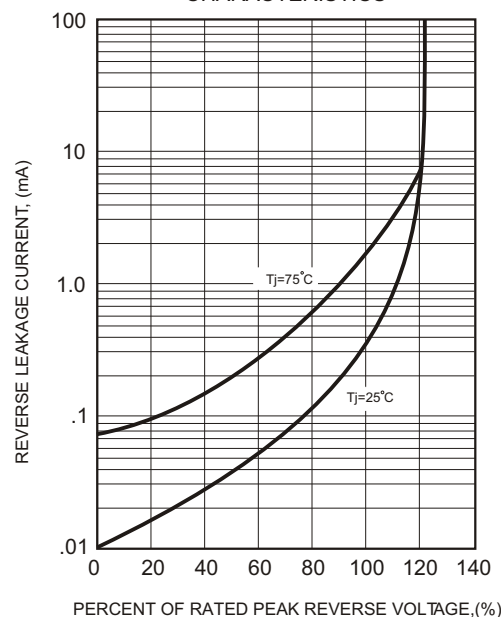


FIG.4-TYPICAL JUNCTION CAPACITANCE

