

SR820 THRU SR8100

8.0 AMPS. SCHOTTKY BARRIER RECTIFIERS

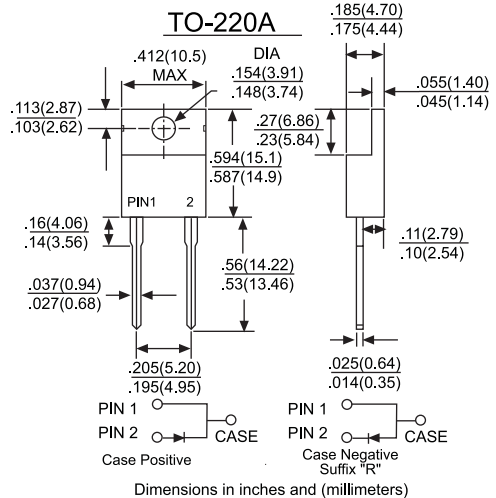
Voltage Range
20 to 100 Volts
Current
8.0 Amperes

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Cases: TO-220A molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:
250°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs. (2.3kg) tension
- Weight: 2.24 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 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		SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	I _{F(AV)}	8.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	175							A
Maximum Instantaneous Forward Voltage @8.0A	V _F	0.45	0.55	0.6	0.7		0.85		V
Maximum DC Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _R				0.5	50			mA mA
Typical Thermal Resistance(Note 1)	R _{θJA}	15			10				°C/W
Typical Junction Capacitance (Note 2)	C _J	500			380				pF
Operating Temperature Range	T _J	-55 to+125							°C
Storage Temperature Range	T _{STG}	-55 to+150							°C

NOTES: 1. Thermal Resistance from Junction to Ambient Vertical P.C. Board Mounting, 0.375"(9.5mm) Lead Length.
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

RATING AND CHARACTERISTIC CURVES SR820 THRU SR8100

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

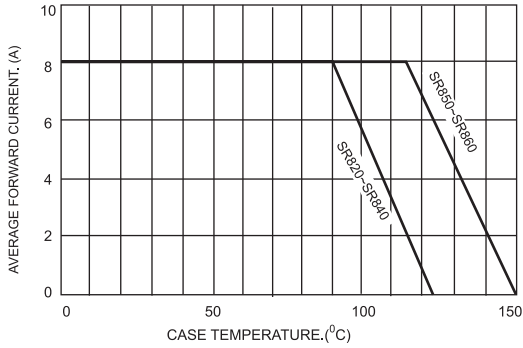


FIG.2-TYPICAL FORWARD CHARACTERISTICS

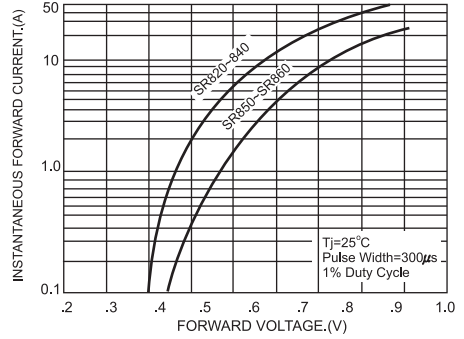


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

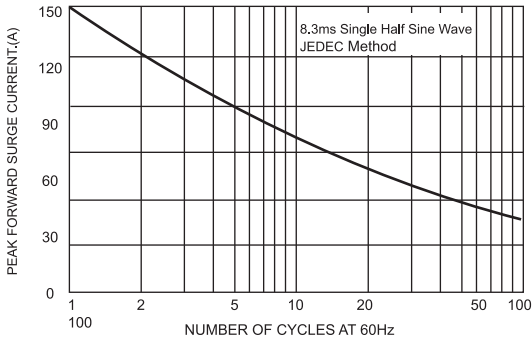


FIG.5-TYPICAL REVERSE CHARACTERISTICS

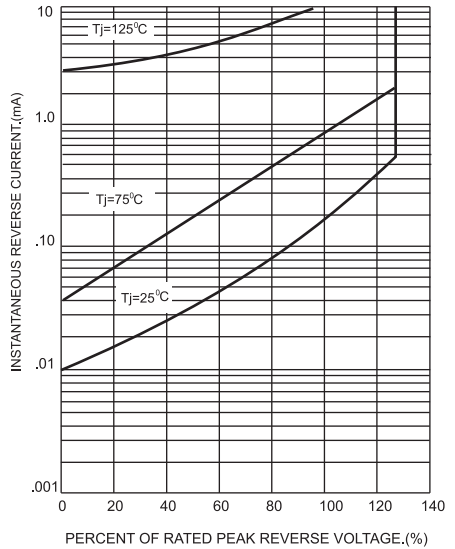


FIG.4-TYPICAL JUNCTION CAPACITANCE

