Downloaded from alldatasheet.com

SR820 THRU SR8100

8.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

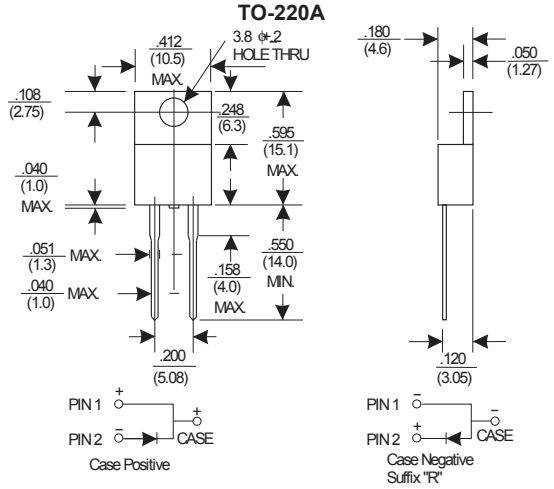
* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Epitaxial construction

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Lead solderable per MIL-STD-202, method 208 guranteed
* Polarity: As Marked
* Mounting position: Any
* Weight: 2.24 grams
* Both normal and Pb free product are available:
* Normal:80~95%Sn,5~20%Pb
* Pb free:99 Sn above can meet Rohs enviroment substance directive request

VOLTAGE RANGE
20 to 100 Volts
CURRENT
8.0 Amperes

TO-220A



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 C° ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SR820	SR830	SR840	SR850	SR860	SR880	SR8100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	49	56	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	8.0							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 8.0A	0.65					0.75		V
Maximum DC Reverse Current Ta=25 C °	0.5							mA
at Rated DC Blocking Voltage Ta=100 C °	50							mA
Typical Junction Capacitance (Note1)	700					460		pF
Typical Thermal Resistance R θJC (Note 2)	3.0							°C/W
Operating Temperature Range T J	-65—+125				-65—+150			°C
Storage Temperature Range T STG	-65 —+150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Case.

Downloaded from alldatasheet.com

RATING AND CHARACTERISTIC CURVES (SR820 THRU SR100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

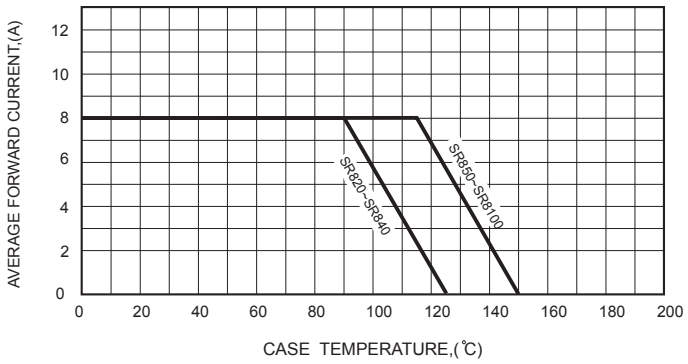


FIG.2-TYPICAL FORWARD CHARACTERISTICS

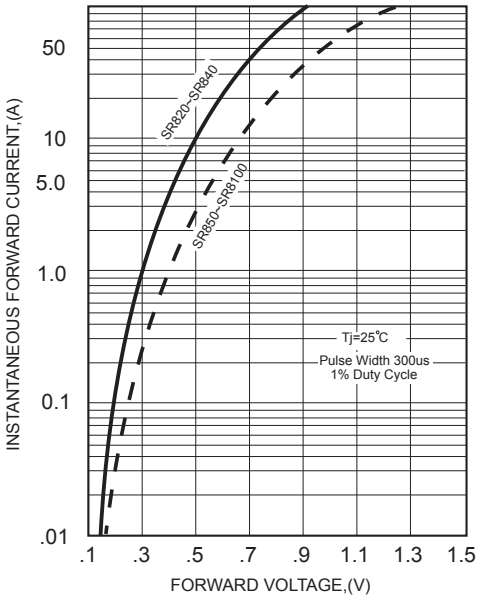


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

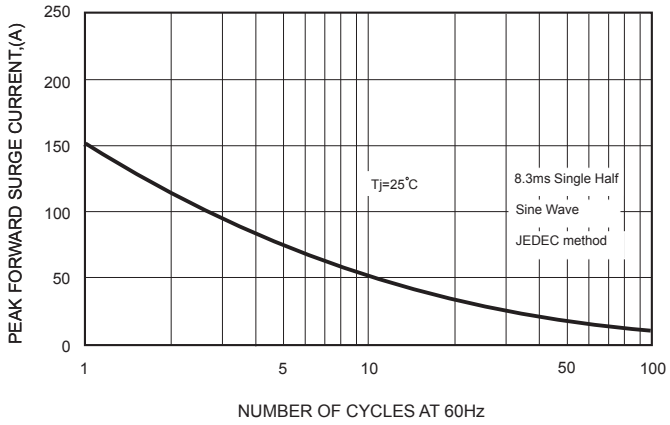


FIG.4-TYPICAL JUNCTION CAPACITANCE

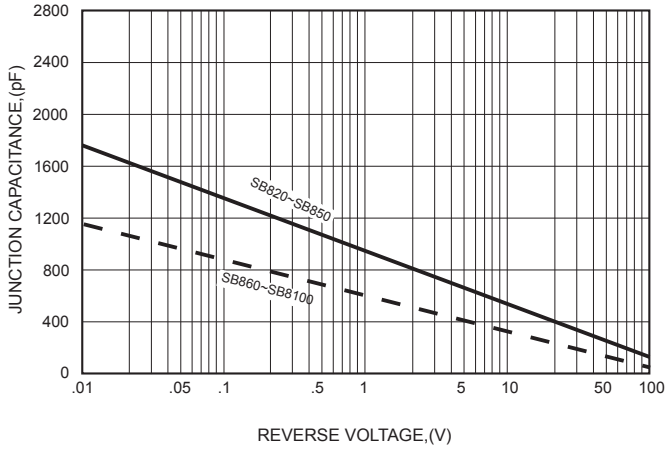


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

