SRA820 THRU SRA8200

8.0 AMPS. Schottky Barrier Rectifiers

Voltage Range
20 to 200 Volts
Current
8.0 Amperes

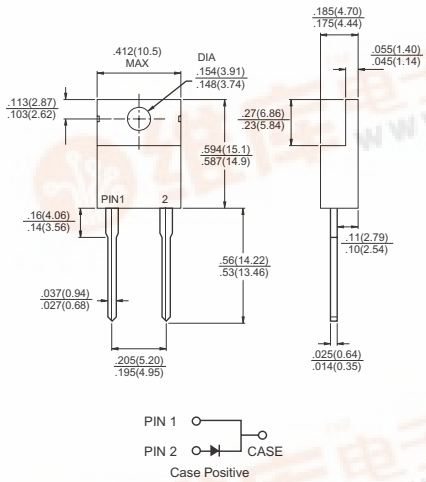
Features

- ✧ 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
- ✧ Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.25",(6.35mm) from case
- ✧ Weight: 2.24 grams

TO-220A



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	SRA 820	SRA 830	SRA 840	SRA 850	SRA 860	SRA 890	SRA 8100	SRA 8200	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	200	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	8.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150								A
Maximum Instantaneous Forward Voltage @8.0A	V_F	0.55			0.70		0.92		1.05	V
Maximum D.C. Reverse Current @ Tc=25℃ at Rated DC Blocking Voltage @ Tc=100℃	I_R	0.5 50							0.009 10	mA mA
Typical Thermal Resistance (Note 1)	$R\theta_{JC}$	4.0								℃/W
Typical Junction Capacitance (Note 2)	Cj	400			300				250	pF
Operating Junction Temperature Range	T_J	-65 to +125			-65 to +150					℃
Storage Temperature Range	TSTG	-65 to +150								℃

Notes: 1. Thermal Resistance from Junction to Case Per Leg with Heat sink (2"x3"x0.25") Al-plate.
2. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SRA820 THRU SRA8200)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

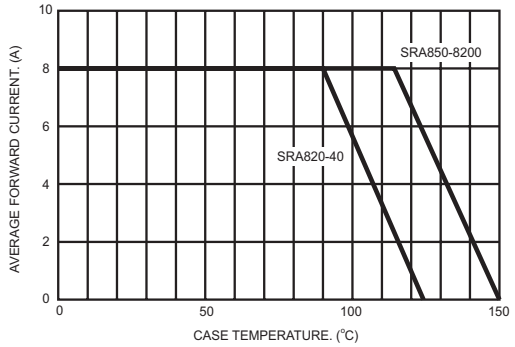


FIG.2- TYPICAL REVERSE CHARACTERISTICS

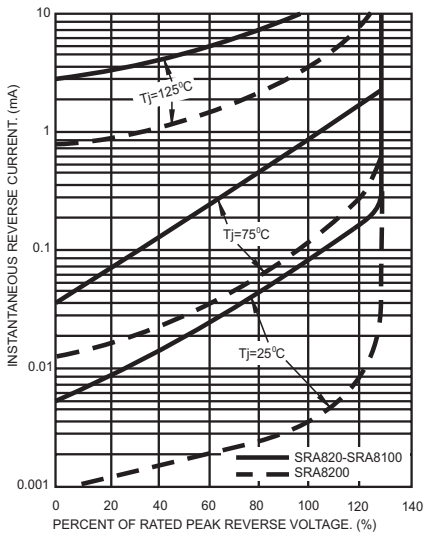


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

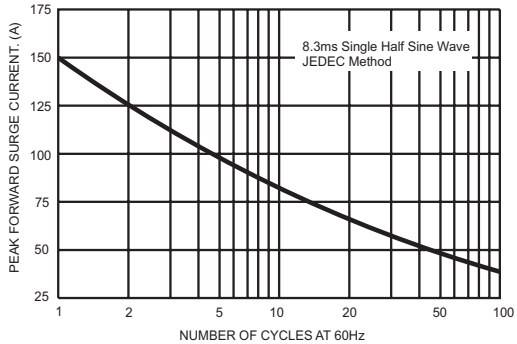


FIG.4- TYPICAL JUNCTION CAPACITANCE

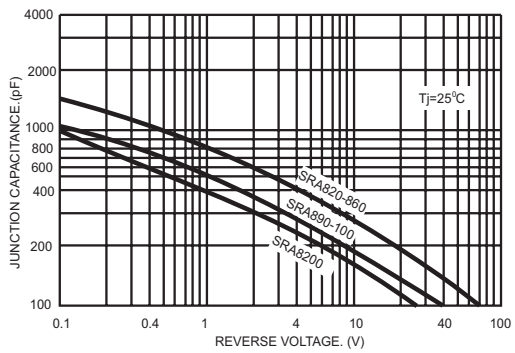


FIG.5- TYPICAL FORWARD CHARACTERISTICS