



# SRAS890 THRU SRAS8100

## 8.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
90 to 100 Volts  
Current  
8.0 Amperes

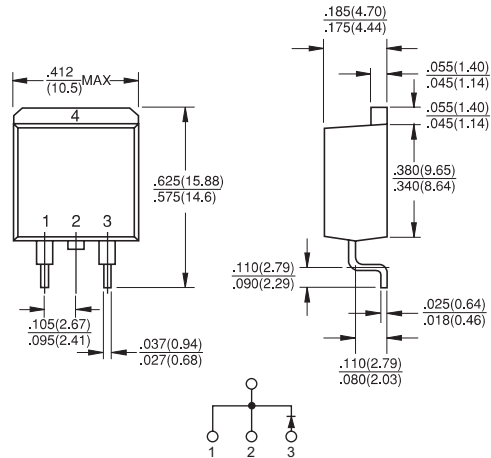
### Features

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

### Mechanical Data

- ✧ Cases: D2PAK 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

### D<sup>2</sup>PAK



### Maximum Ratings and Electrical Characteristics

Rating at 25°C 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	SRAS890	SRAS8100	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	90	100	V
Maximum RMS Voltage	$V_{RMS}$	63	70	V
Maximum DC Blocking Voltage	$V_{DC}$	90	100	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	$V_F$	0.95		V
Maximum D.C. Reverse Current @ $T_c=25^\circ\text{C}$ at Rated DC Blocking Voltage	$I_R$	0.1		mA
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	3.0		$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (Note 2)	$C_j$	165		pF
Operating Junction Temperature Range	$T_J$	-65 to +150		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +150		$^\circ\text{C}$

Notes: 1. Thermal Resistance from Junction to Case Per Leg

2. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (SRAS890 THRU SRAS8100)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

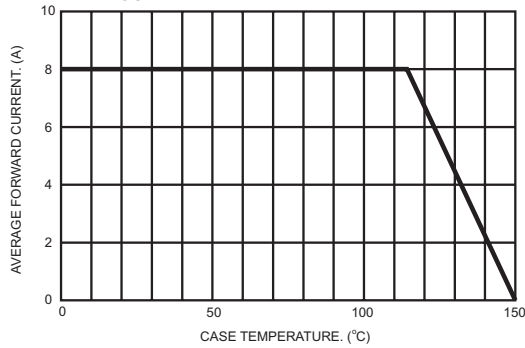


FIG.2- TYPICAL REVERSE CHARACTERISTICS

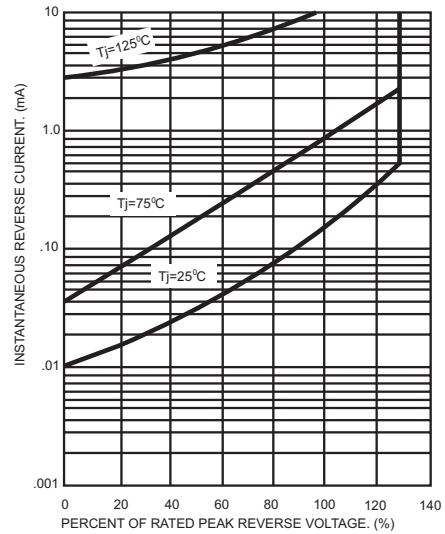


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

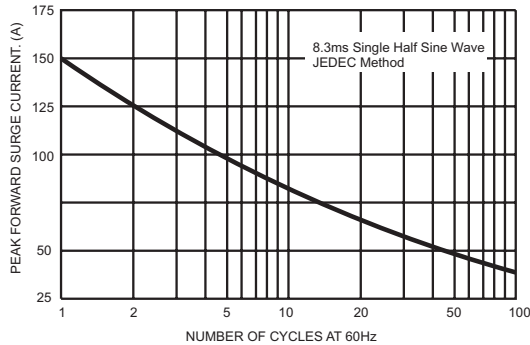


FIG.5- TYPICAL FORWARD CHARACTERISTICS

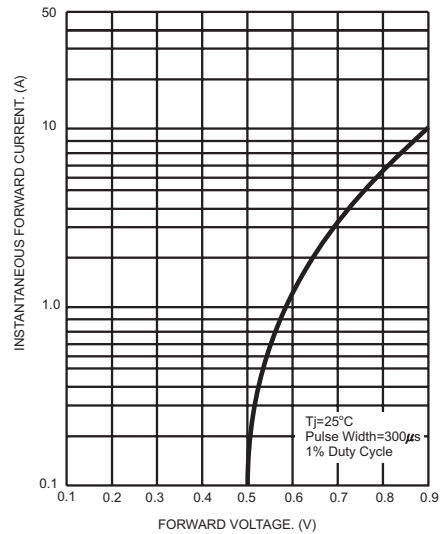


FIG.4- TYPICAL JUNCTION CAPACITANCE

