



# SRAS2035 THRU SRAS2045

## 20.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
35 to 45 Volts  
Current  
20.0 Amperes

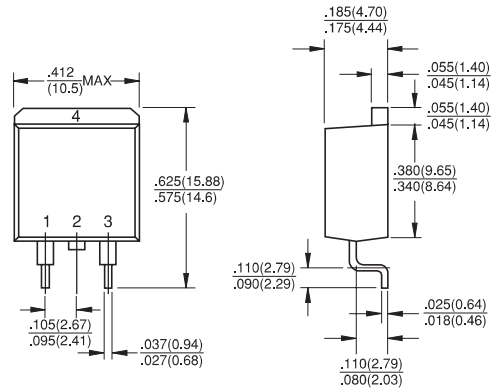
### Features

- ✧ For surface mounted application
- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

### Mechanical Data

- ✧ Cases: D<sup>2</sup>PAK molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Lead solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10 seconds at terminals
- ✧ Weight: 1.70 grams

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



**Dimensions in inches and (millimeters)**

### 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	SRAS2035	SRAS2040	SRAS2045	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	35	40	45	V
Maximum RMS Voltage	$V_{RMS}$	25	28	32	V
Maximum DC Blocking Voltage	$V_{DC}$	35	40	45	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	20.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	350			A
Maximum Instantaneous Forward Voltage @ 20.0A @ 40.0A	$V_F$		0.57 0.73		V
Maximum D.C. Reverse Current @ $T_j=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_j=125^\circ\text{C}$	$I_R$		2.7 105		mA mA
Typical Thermal Resistance (Note 1)	$R\theta_{JC}$		1.5		$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (Note 2)	pF		900		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 5.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (SRAS2035 THRU SRAS2045)

FIG.1- FORWARD CURRENT DERATING CURVE

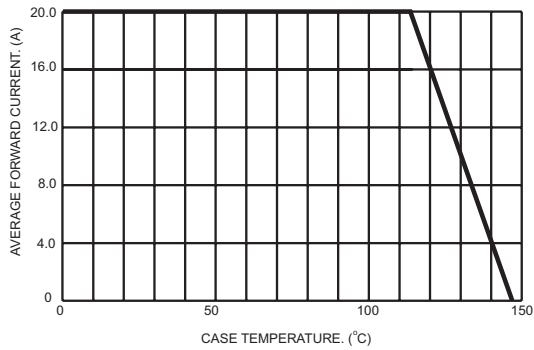


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

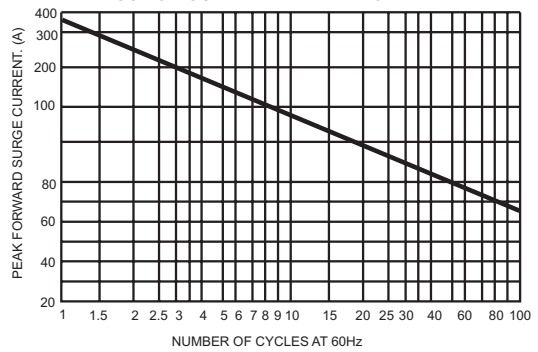


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

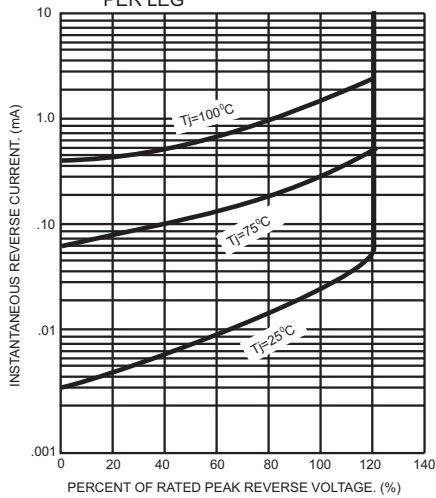


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

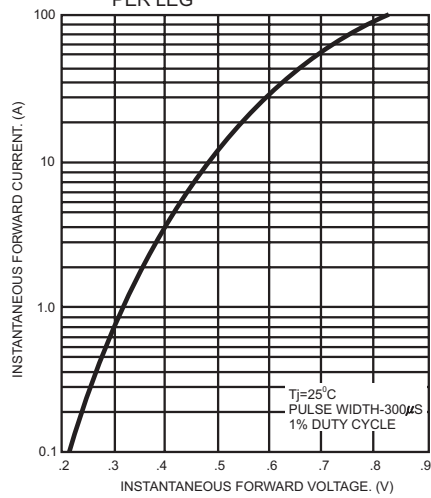


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

