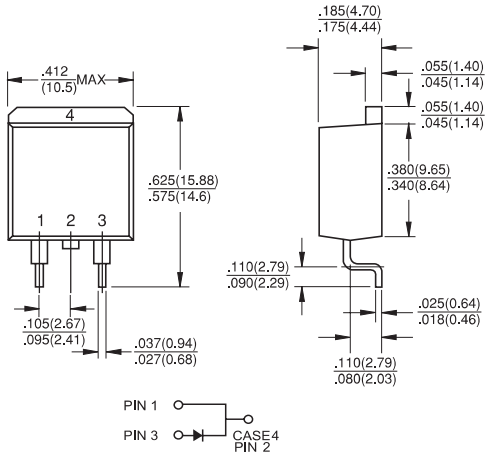
SRAS2035 THRU SRAS2045

20.0 AMPS. Schottky Barrier Rectifiers

Voltage Range
35 to 45 Volts
Current
20.0 Amperes

D²PAK



Dimensions in inches and (millimeters)

Features

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

Mechanical Data

- ✧ Cases: D²PAK 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

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	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 @ Tj=25℃ at Rated DC Blocking Voltage @ Tj=125℃	I_R	2.7 105			mA mA
Typical Thermal Resistance (Note 1)	$R\theta_{JC}$	1.5			℃/W
Typical Junction Capacitance (Note 2)	pF	900			pF
Operating Junction Temperature Range	T_J	-65 to +150			℃
Storage Temperature Range	T_{STG}	-65 to +150			℃

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

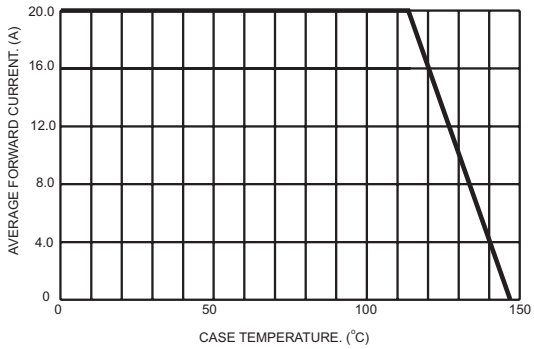


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

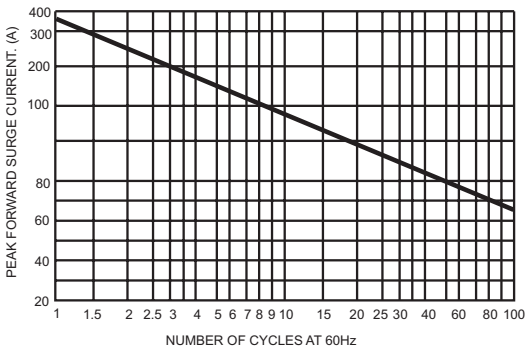


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

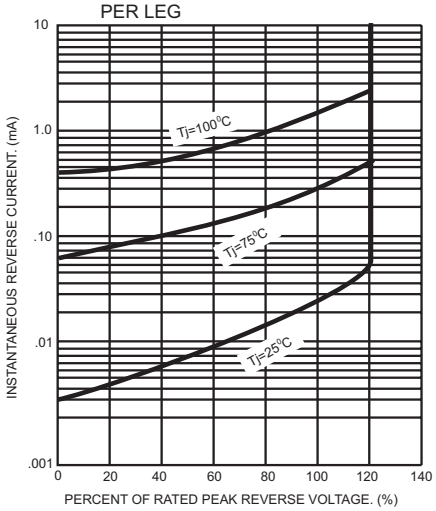


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

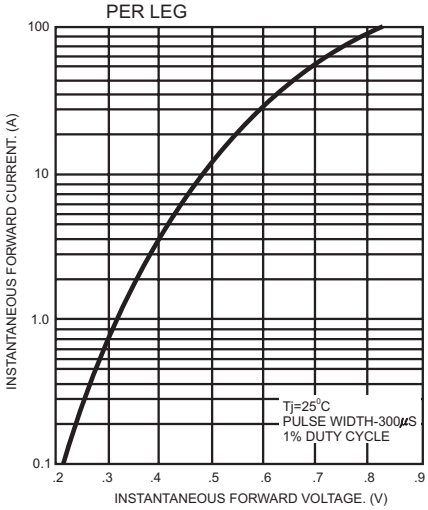


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG