



# SRS1020 THRU SRS1060

## 10.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 60 Volts  
Current  
10.0 Amperes

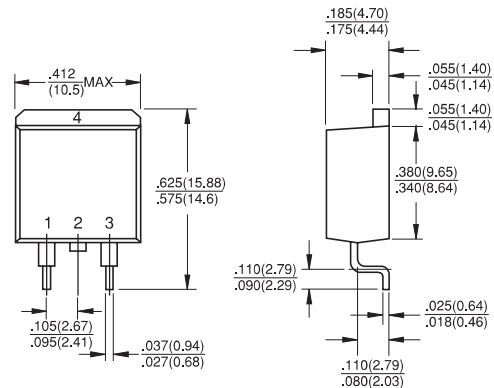
### Features

- ✧ 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-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 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	SRS 1020	SRS 1030	SRS 1040	SRS 1050	SRS 1060	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	10.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	175					A
Maximum Instantaneous Forward Voltage @5.0A	$V_F$	0.55			0.70		V
Maximum D.C. Reverse Current at Rated DC Blocking Voltage @ Tc=25°C	$I_R$	0.5					mA
@ Tc=100°C		50					
Typical Thermal Resistance (Note 1)	$R_{\theta jc}$	2.0					°C/W
Typical Junction Capacitance (Note 2)	$C_j$	400					pF
Operating Junction Temperature Range	$T_J$	-65 to +125			-65 to +150		°C
Storage Temperature Range	$T_{STG}$	-65 to +150					°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 (SRS1020 THRU SRS1060)

FIG.1- FORWARD CURRENT DERATING CURVE

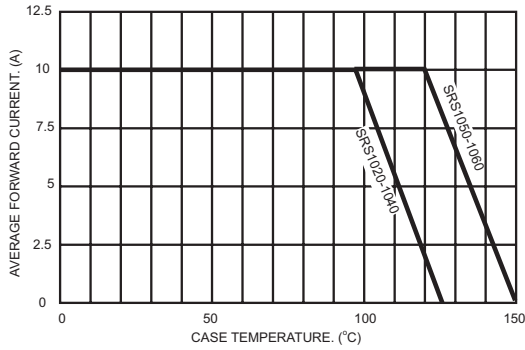


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

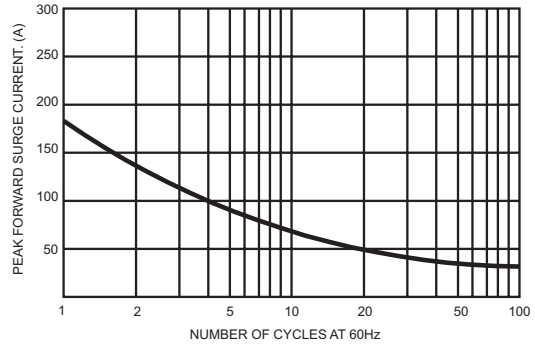


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

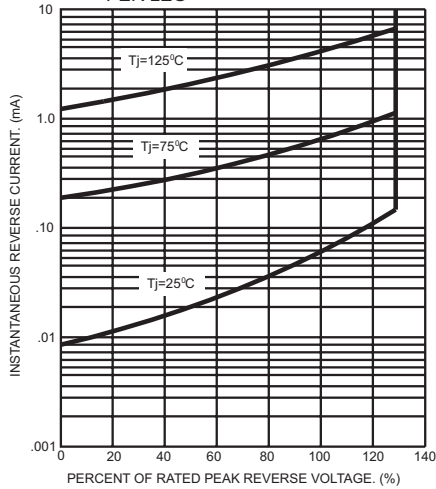


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

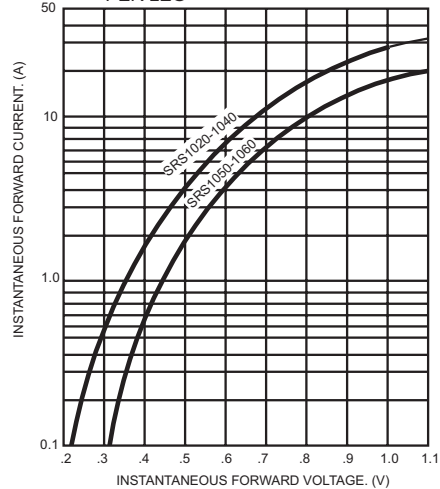


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

