



# SRAD820 THRU SRAD860

## 8.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 60 Volts  
Current  
8.0 Amperes

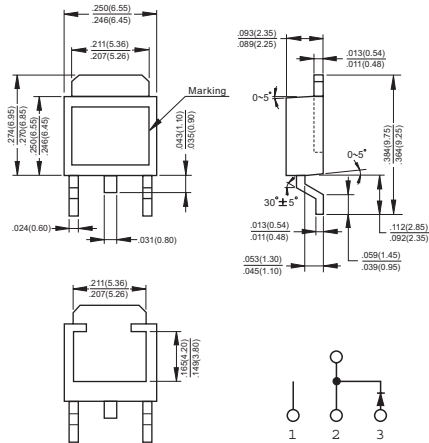
### Features

- ✧ Low forward voltage
- ✧ 125°C operating junction temperature
- ✧ Epoxy meets UL94, VO at 1/8"
- ✧ Guaranteed reverse avalanche
- ✧ Compact size
- ✧ Lead formed for surface mount

### Mechanical Data

- ✧ Cases: Epoxy, molded
- ✧ Weight: 0.4 gram (approximately)
- ✧ Finish: All external surfaces corrosion resistant and terminal leads are readily solderable
- ✧ Lead and mounting surface temperature for soldering purposes: 260°C max. for 10 seconds
- ✧ Shipped 75 units per plastic tube
- ✧ Marking: SRAD820, SRAD830, SRAD840, SRAD850, SRAD860

### D'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	SRAD 820	SRAD 830	SRAD 840	SRAD 850	SRAD 860	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current at T <sub>C</sub> = 88°C	I <sub>(AV)</sub>	8.0					A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60 HZ)	I <sub>FSM</sub>	75					A
Maximum Instantaneous Forward Voltage at @8.0A	V <sub>F</sub>	0.55			0.7		V
Maximum D.C. Reverse Current @ T <sub>C</sub> =25°C at Rated DC Blocking Voltage(Note 1) @ T <sub>C</sub> =100°C	I <sub>R</sub>	1.4 35					mA mA
Maximum Thermal Resistance Per Leg (Note 2)	R <sub>θJC</sub> R <sub>θJA</sub>	6 80					°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-65 to +125					°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150					°C

Notes: 1. Pulse Test: Pulse Width = 300us, 2.0% Duty Cycle.

2. Thermal Resistance from Junction to Case and Thermal Resistance from Junction to Ambient.

## RATINGS AND CHARACTERISTIC CURVES (SRAD820 THRU SRAD860 )

FIG.1- FORWARD CURRENT DERATING CURVE

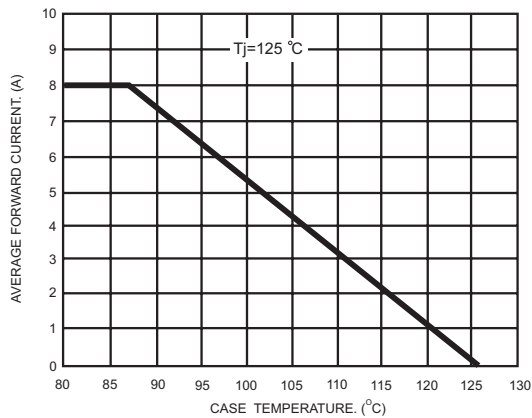


FIG.2-TYPICAL FORWARD CHARACTERISTICS PER LEG

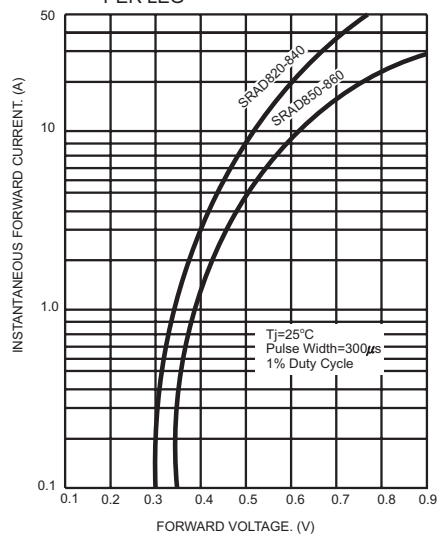


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

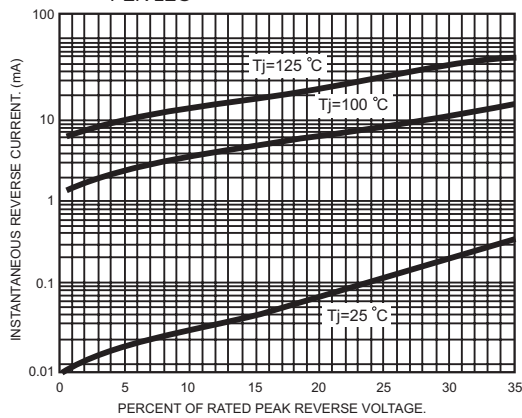


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

