SRAD820 THRU SRAD860

8.0 AMPS. Schottky Barrier Rectifiers

Voltage Range
20 to 60 Volts
Current
8.0 Amperes

Features

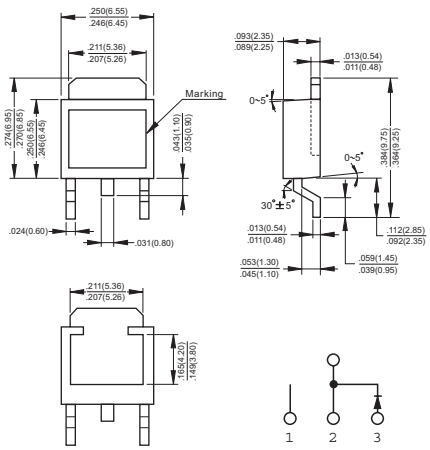
- ✧ Low forward voltage
- ✧ 125°C operating junction temperature
- ✧ Epoxy meets UL94, VO at 1/8”
- ✧ Guaranteed reverse avalanche
- ✧ Compact size
- ✧ Lead formed for surface mount

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℃ 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_{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 at T_C= 88℃	$I_{(AV)}$	8.0					A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60 HZ)	I_{FSM}	75					A
Maximum Instantaneous Forward Voltage at @8.0A	V_F	0.55			0.7		V
Maximum D.C. Reverse Current @ Tc=25℃ at Rated DC Blocking Voltage(Note 1) @ Tc=100℃	I_R	1.4 35					mA mA
Maximum Thermal Resistance Per Leg (Note 2)	$R\theta_{JC}$ $R\theta_{JA}$	6 80					℃/W
Operating Junction Temperature Range	T_J	-65 to +125					℃
Storage Temperature Range	T_{STG}	-65 to +150					℃

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

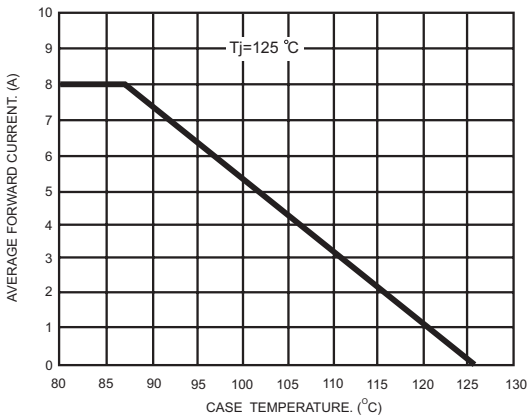


FIG.2-TYPICAL FORWARD CHARACTERISTICS PER LEG

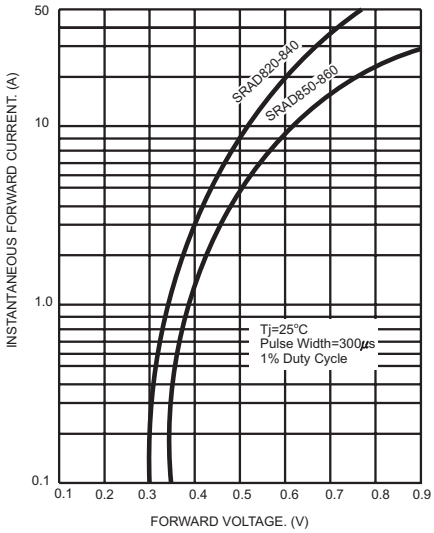


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

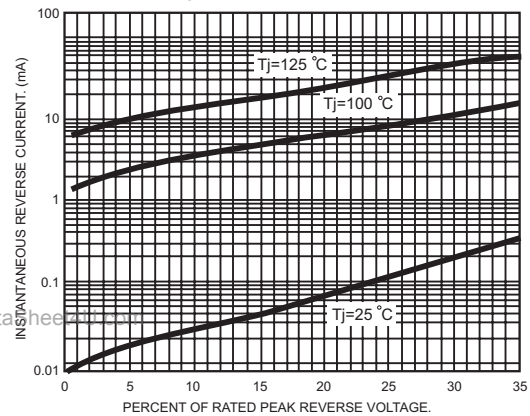


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG