



SRD820 THRU SRD860

8.0 AMPS. Schottky Barrier Rectifiers



Voltage Range
20 to 60 Volts
Current
8.0 Amperes

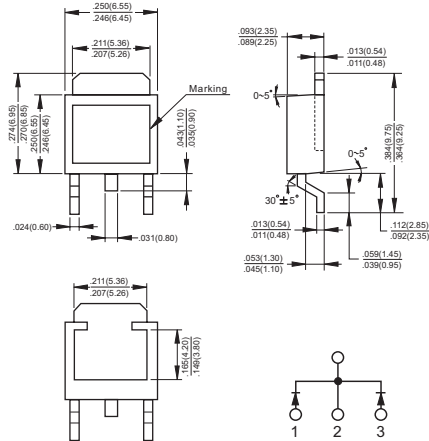
Features

- ✧ 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: SRD820, SRD830, SRD840, SRD850, SRD860

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	SRD 820	SRD 830	SRD 840	SRD 850	SRD 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°C	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 @ 4.0A	V _F	0.55			0.7		V
Maximum D.C. Reverse Current @ T _C =25°C at Rated DC Blocking Voltage(Note 1) @ T _C =100°C	I _R	1.4 35					mA mA
Maximum Thermal Resistance Per Leg (Note 2)	Rθ _{JC} Rθ _{JA}	6 80					°C/W
Operating Junction Temperature Range	T _J	-65 to +125					°C
Storage Temperature Range	T _{STG}	-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 (SRD820 THRU SRD860)

FIG.1- FORWARD CURRENT DERATING CURVE

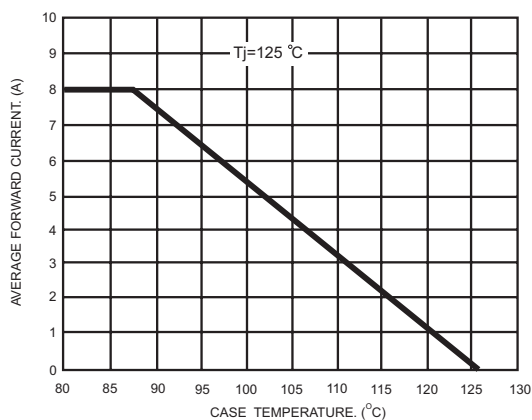


FIG.2-TYPICAL FORWARD CHARACTERISTICS PER LEG

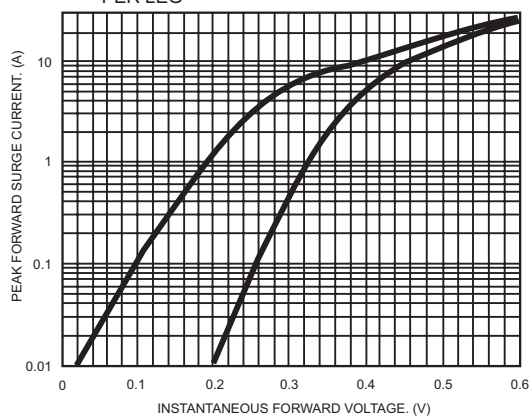


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

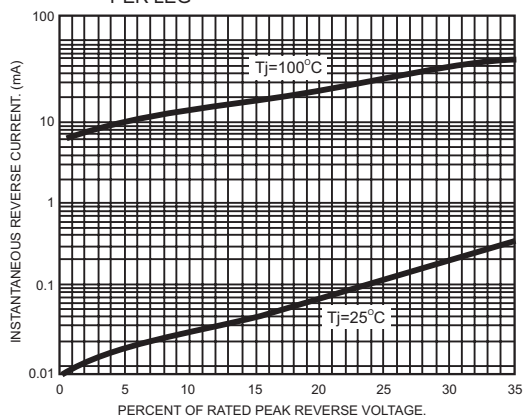


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

