



SRD620 THRU SRD660

6.0 AMPS. Schottky Barrier Rectifiers



Voltage Range
20 to 60 Volts
Current
6.0 Amperes

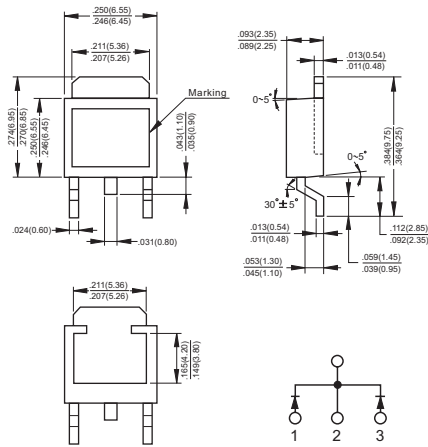
Features

- ✧ Extremely fast switching
- ✧ Extremely low forward drop
- ✧ Guaranteed reverse avalanche

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: SRD620, SRD630, SRD640, SRD650, SRD660

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 620	SRD 630	SRD 640	SRD 650	SRD 660	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 $T_C = 100^\circ\text{C}$	$I_{(AV)}$	6.0					A
Nonrepetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 HZ)	I_{FSM}	75					A
Peak Repetitive Reverse Surge Current (Note 1)	I_{RRM}	1.0					A
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	0.55			0.7		V
Maximum D.C. Reverse Current @ $T_C = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_C = 125^\circ\text{C}$	I_R	0.3 15					mA mA
Maximum Thermal Resistance Per Leg (Note 2)	$R_{\theta JC}$ $R_{\theta JA}$	6 80					$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-65 to +125					$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150					$^\circ\text{C}$

Notes: 1. 2.0us Pulse Width, f=1.0KHz.

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

RATINGS AND CHARACTERISTIC CURVES (SRD620 THRU SRD660)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

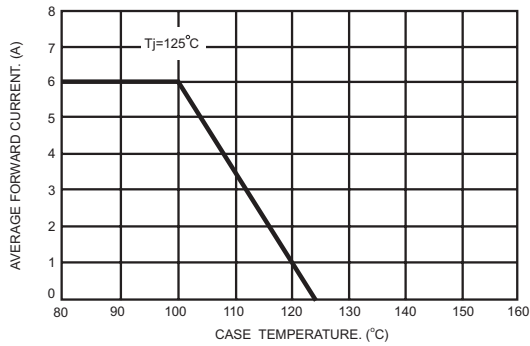


FIG.2- TYPICAL JUNCTION CAPACITANCE PER LEG

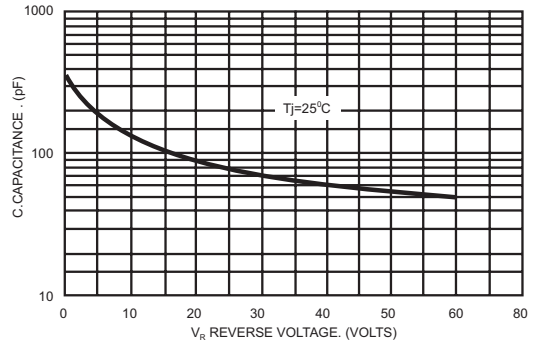


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

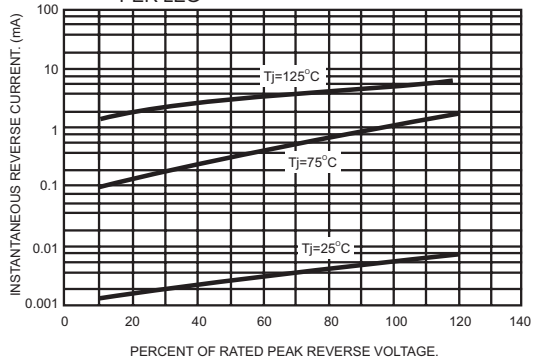


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

