



SRD1020 THRU SRD10100

10.0 AMPS. Schottky Barrier Rectifiers



Voltage Range
20 to 100 Volts
Current
10.0 Amperes

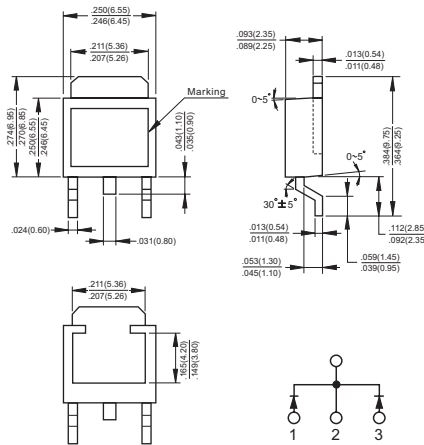
Features

- Highly stable oxide passivated junction
- Guarding for stress protection
- Matched dual die construction – May be Paralleled for high current output
- High dv/dt capability
- Short heat sink tap manufactured – not sheared
- Very low forward voltage drop
- Epoxy meets UL94, VO at 1/8"

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: SRD1020, SRD1030, SRD1040, SRD1050, SRD1060

D'PAK



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 1020	SRD 1030	SRD 1040	SRD 1050	SRD 1060	SRD 10100	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	100	V
Maximum Average Forward Rectified Current at T _C =115°C	I _(AV)	10						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 @5.0A	V _F	0.55			0.7		0.90	V
Maximum D.C. Reverse Current @ T _C =25°C at Rated DC Blocking Voltage(Note 1) @ T _C =100°C	I _R	2.0 30					1.0 30	mA mA
Maximum Thermal Resistance Per Leg (Note 2)	Rθ _{JC} Rθ _{JA}	3 75						°C/W
Operating Junction Temperature Range	T _J	-55 to +125						°C
Storage Temperature Range	T _{STG}	-55 to +150						°C

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

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

RATINGS AND CHARACTERISTIC CURVES (SRD1020 THRU SRD10100)

FIG.1- FORWARD CURRENT DERATING CURVE

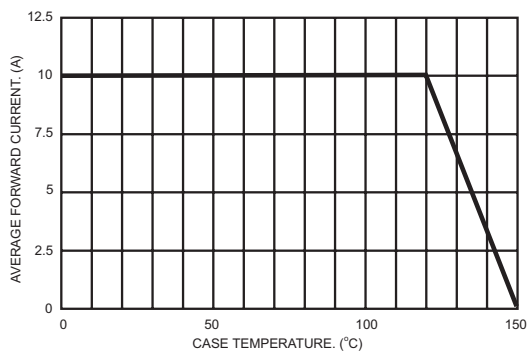


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

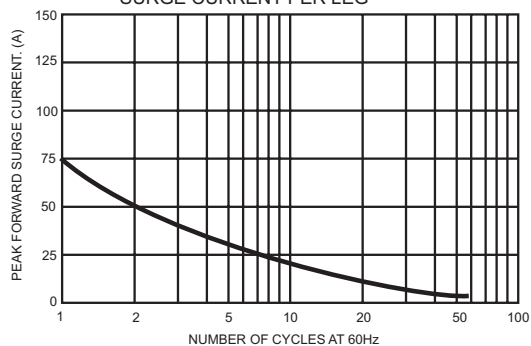


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

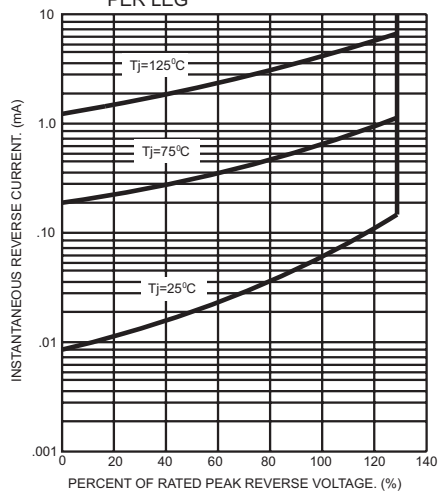


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

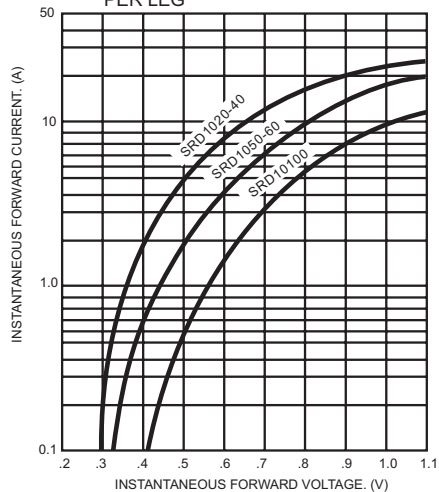


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

