3.0 Amp Schottky Barrier Rectifiers

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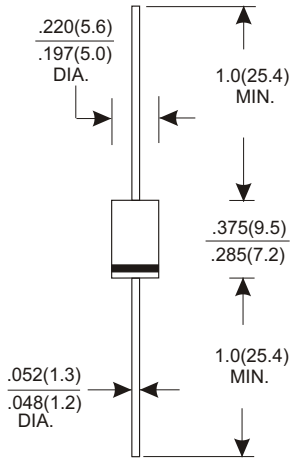
SR320 Thru SR3100

Voltage: 20 - 100 Volts
Current: 3.0 Amps

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

DO-201AD



Dimensions in inches and (millimeters)

Mechanical data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- Polarity: Color band denotes cathode end
- Weight: 1.10 grams

Maximum Ratings and Electrical Characterics

Rating 25 C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80							A
Maximum Instantaneous Forward Voltage at 3.0A	0.55			0.70		0.85		V
Maximum DC Reverse Current Ta=25°C	3.0							mA
at Rated DC Blocking Voltage Ta=100°C	30							mA
Typical Junction Capacitance (Note1)	250							pF
	20							°C/W
Operating Temperature Range T_J	-65 —+125			-65 —+150				°C
Storage Temperature Range T_{STG}	-65 — +150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

Rating and Characteristic Curves (SR320 Thru SR3100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

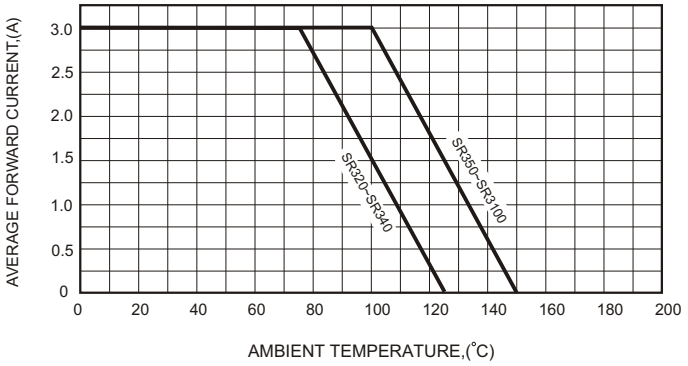


FIG.2-TYPICAL FORWARD CHARACTERISTICS

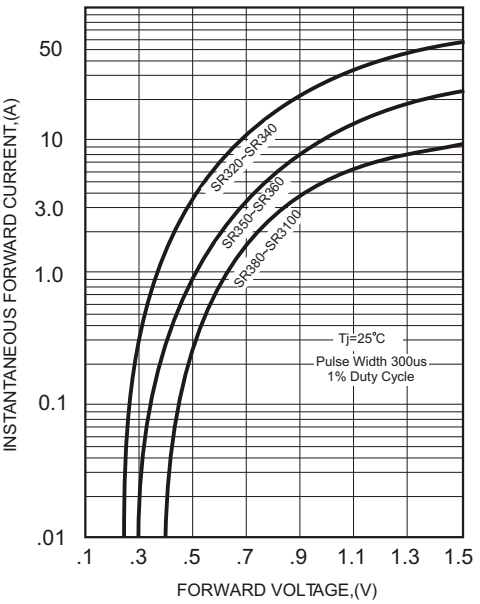


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

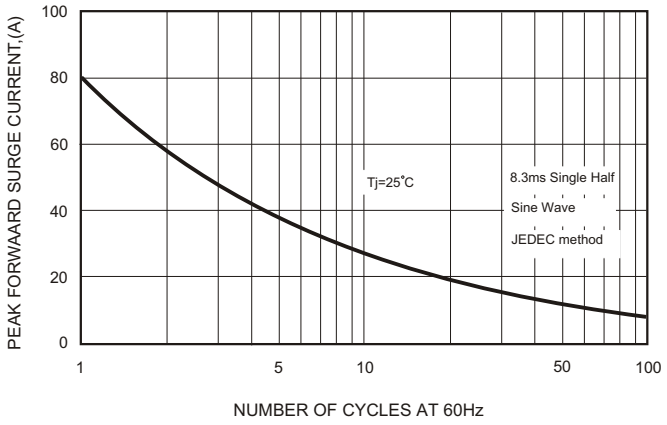


FIG.4-TYPICAL JUNCTION CAPACITANCE

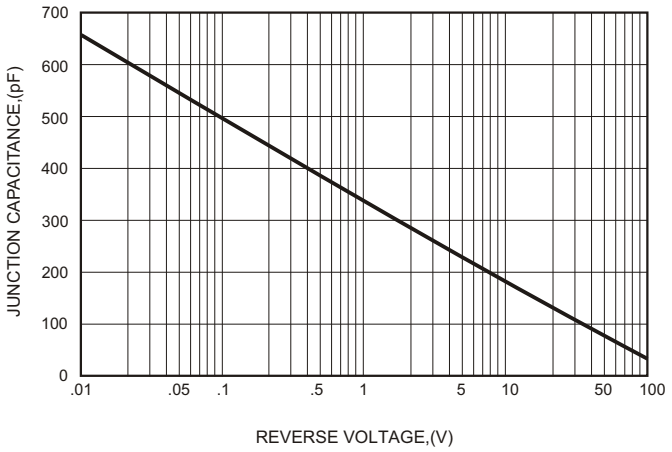


FIG.5 - TYPICAL REVERSE CHARACTERISTICS