SR320 THRU SR3100

3.0 AMP SCHOTTKY BARRIER RECTIFIERS

FEATURES

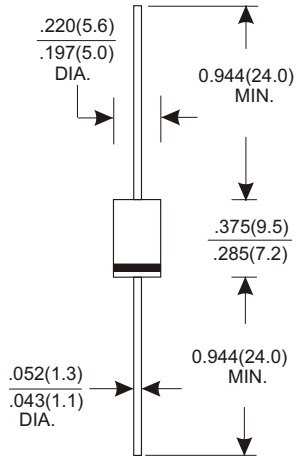
* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Epitaxial construction

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
* Mounting position: Any
* Weight: 1.10 grams

VOLTAGE RANGE
20 to 100 Volts
CURRENT
3.0 Amperes

DO-27



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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	0.5							mA
at Rated DC Blocking Voltage Ta=100˚C	30							mA
Typical Junction Capacitance (Note1)	300			250				pF
Typical Thermal Resistance R JA (Note 2)	20			10				˚C/W
Operating Temperature Range TJ	-65 — +150							˚C
Storage Temperature Range TSTG	-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.

REVISE A: LEAD WIRE LENGTH TO 24.0mm AND DIAMETER FROM 1.2mm TO 1.1mm **EFFECTED : 2007/6/1**
B: MAXIMUM DC REVERSE CURRENT FROM 3.0mA TO 0.5mA **EFFECTED : 2009/6/18**

RATING AND CHARACTERISTIC CURVES (SR320 THRU SR3100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

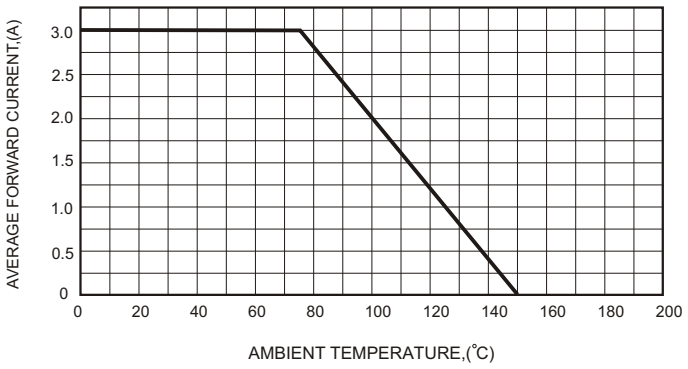


FIG.2-TYPICAL FORWARD CHARACTERISTICS

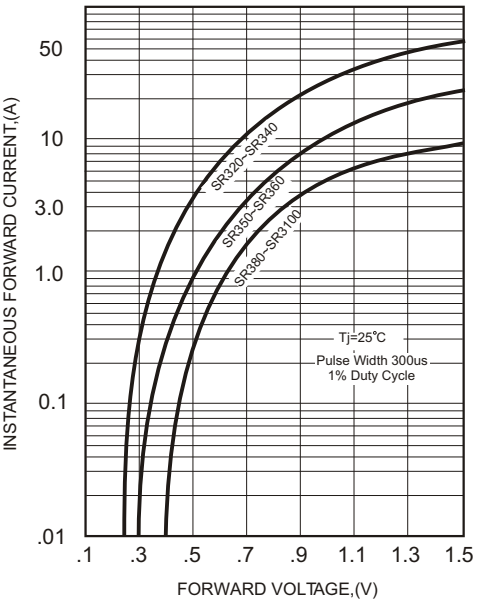


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

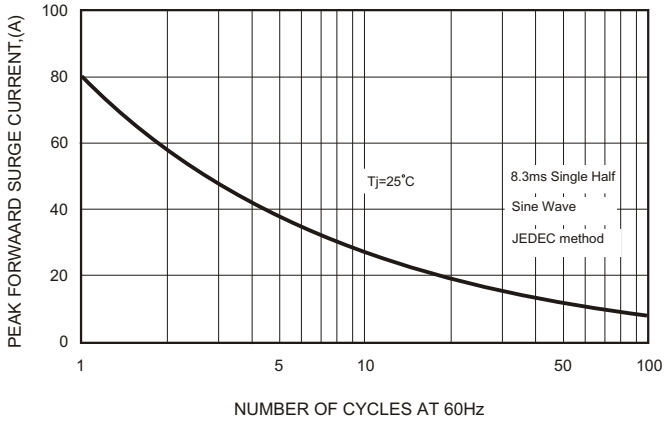


FIG.4-TYPICAL JUNCTION CAPACITANCE

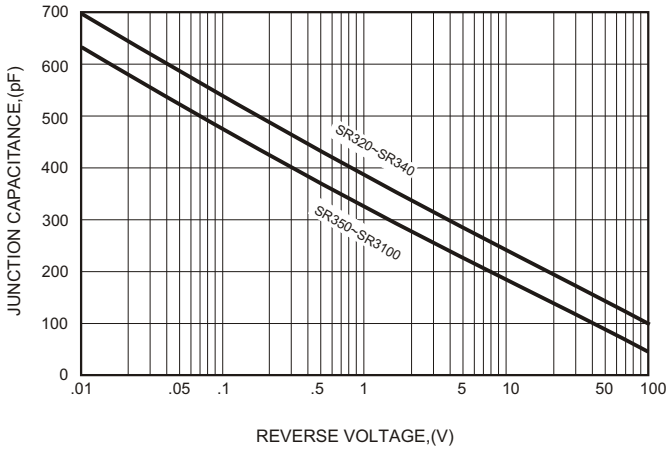


FIG.5 - TYPICAL REVERSE CHARACTERISTICS