

# 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

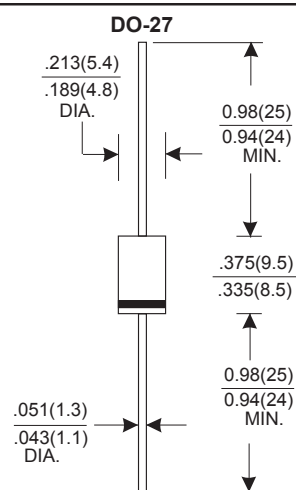
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.10 grams

### VOLTAGE RANGE

20 to 100 Volts

### CURRENT

3.0 Amperes



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise 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				3.0				mA	
at Rated DC Blocking Voltage				30				mA	
Typical Junction Capacitance (Note1)								250	pF
Typical Thermal Resistance RθJA (Note 2)								20	°C/W
Operating Temperature Range T <sub>J</sub>	-65 — +125			-65 — +150				°C	
Storage Temperature Range T <sub>STG</sub>	-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

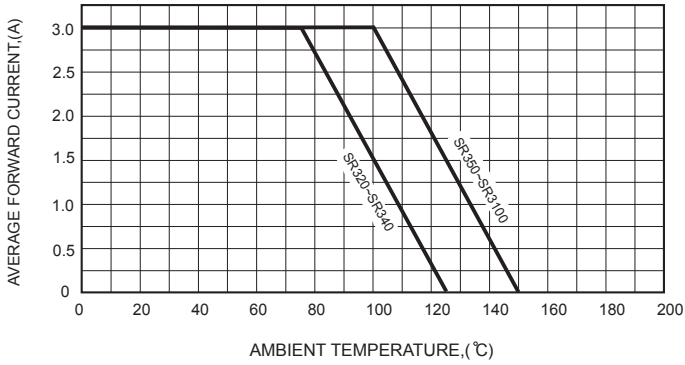


FIG.2-TYPICAL FORWARD CHARACTERISTICS

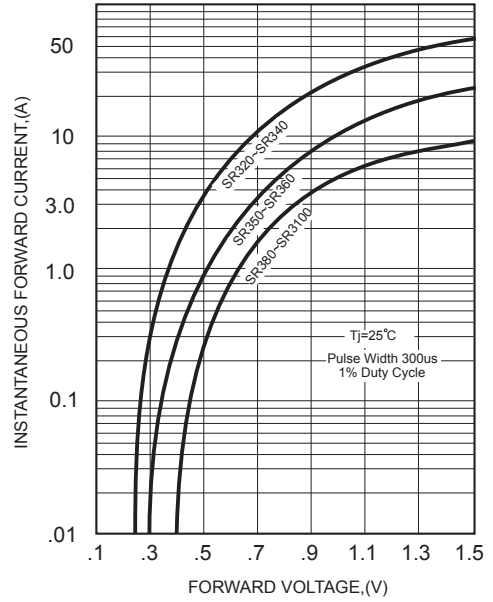


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

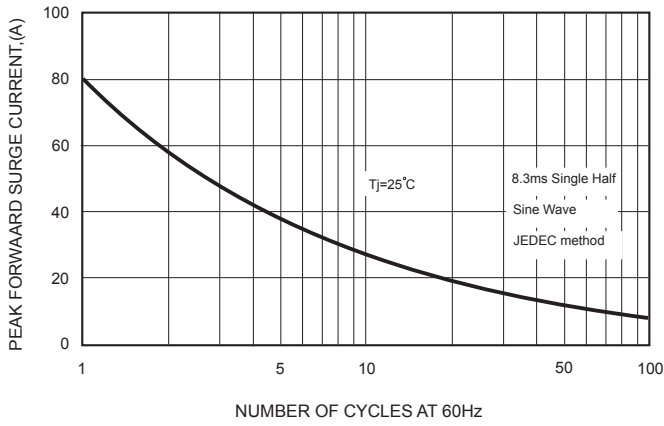


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

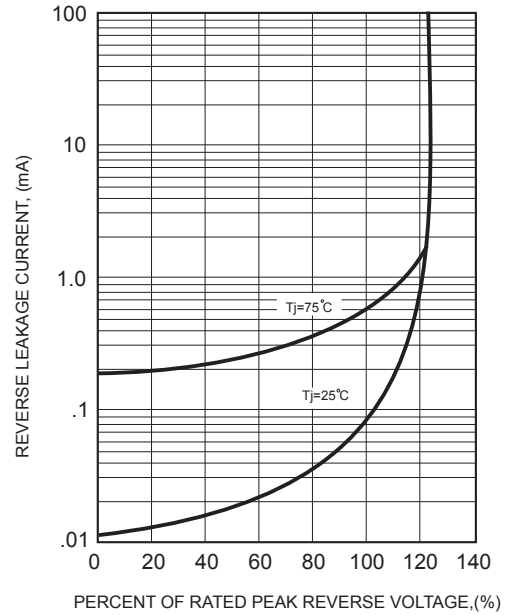


FIG.4-TYPICAL JUNCTION CAPACITANCE

