

# SR520 THRU SR5100

5.0 AMP SCHOTTKY BARRIER RECTIFIERS



## FEATURES

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

## MECHANICAL DATA

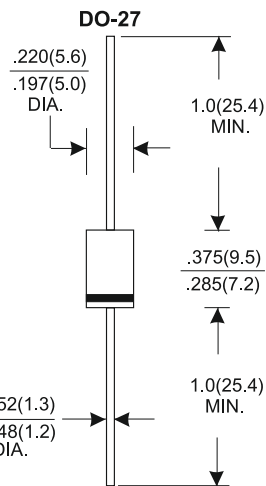
- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 1.10 grams

## VOLTAGE RANGE

20 to 100 Volts

## CURRENT

5.0 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	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	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								A
See Fig. 1	5.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage at 5.0A	0.55		0.70		0.85			V
Maximum DC Reverse Current Ta=25°C	5.0							mA
at Rated DC Blocking Voltage Ta=100°C	50							mA
Typical Junction Capacitance (Note1)	380							pF
Typical Thermal Resistance RθJA (Note 2)	10							°C/W
Operating Temperature Range Tj	-65 — +125			-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.

# RATING AND CHARACTERISTIC CURVES (SR520 THRU SR5100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

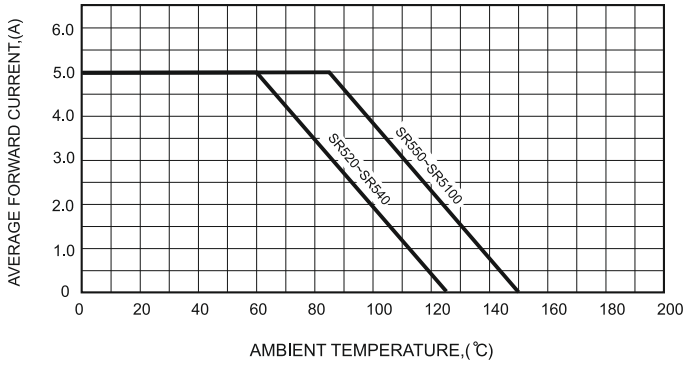


FIG.2-TYPICAL FORWARD CHARACTERISTICS

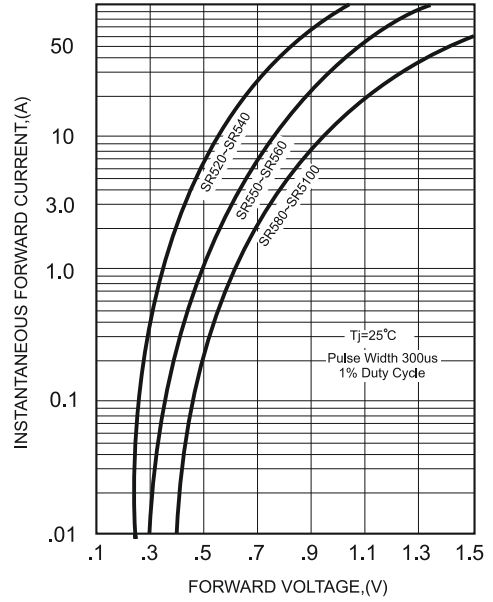


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

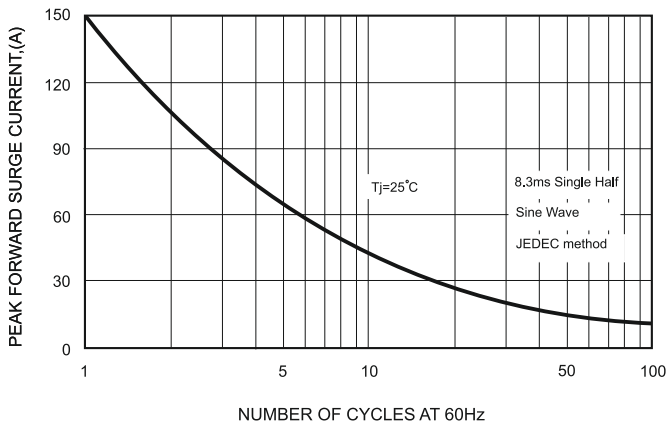


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

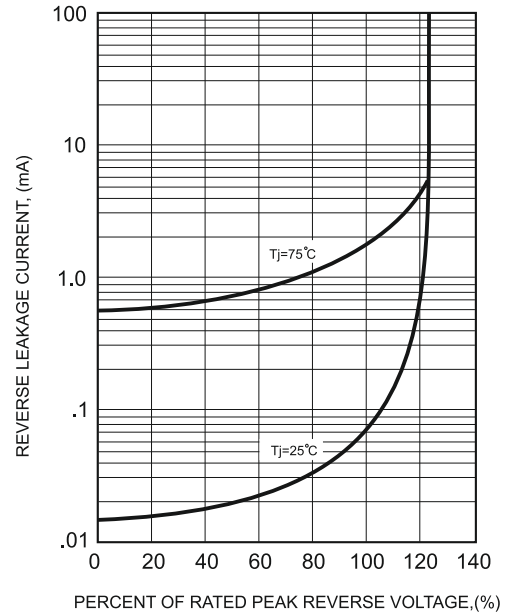


FIG.4-TYPICAL JUNCTION CAPACITANCE

