

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 20 to 100 Volts  
FORWARD CURRENT - 5.0 Amperes

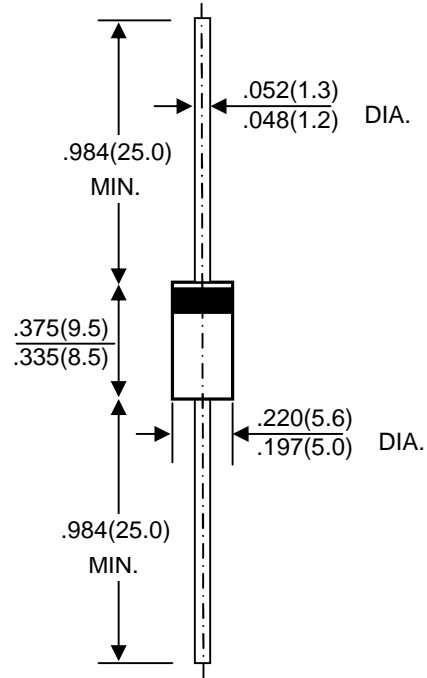
### FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- AEC-Q101 qualified

### MECHANICAL DATA

- Case: JEDEC DO-27 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.04ounces , 1.1grams
- Mounting position: Any

### DO-27



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths @T <sub>L</sub> =95 °C	I <sub(av)< sub=""></sub(av)<>	5.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	150							A
Maximum Forward Voltage at 5.0A DC	V <sub>F</sub>	0.55		0.7		0.85		V	
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	1.0 50							mA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	500			350			pF	
Typical Thermal Resistance (Note2)	R <sub>θJL</sub>	15			10			°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

- NOTES: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC  
2.Thermal resistance junction to lead,  
3.The typical data above is for reference only(典型值仅供参考).

# RATING AND CHARACTERISTIC CURVES

## SR520 thru SR5100



FIG. 1 - FORWARD CURRENT DERATING CURVE

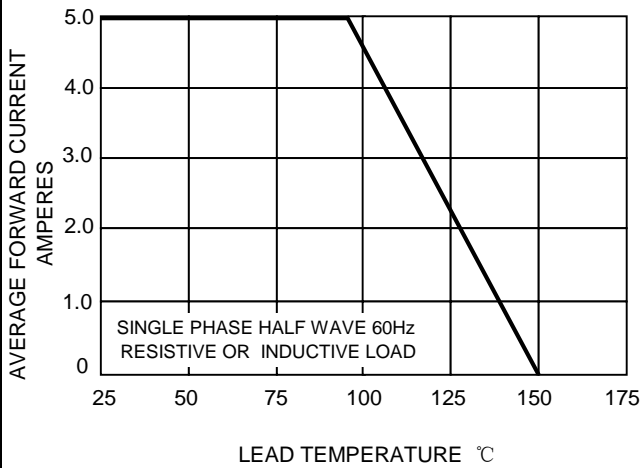


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

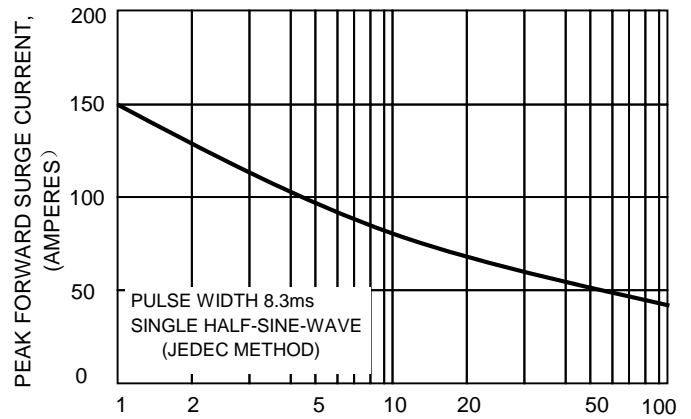


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

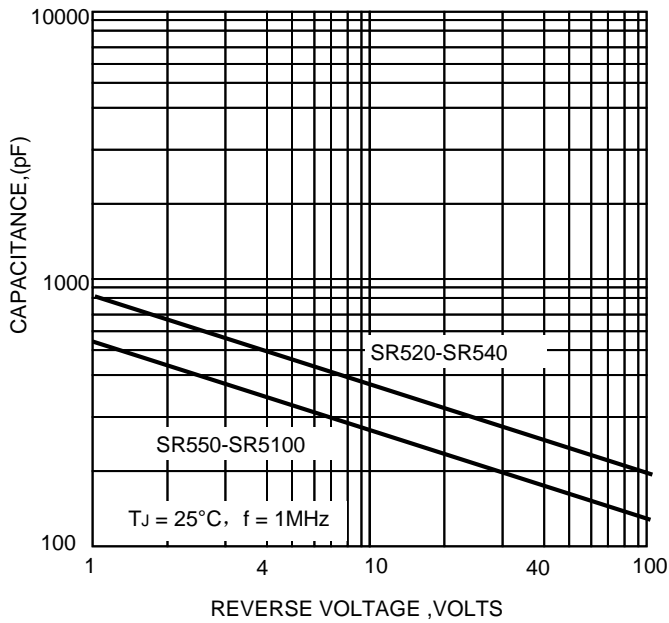


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

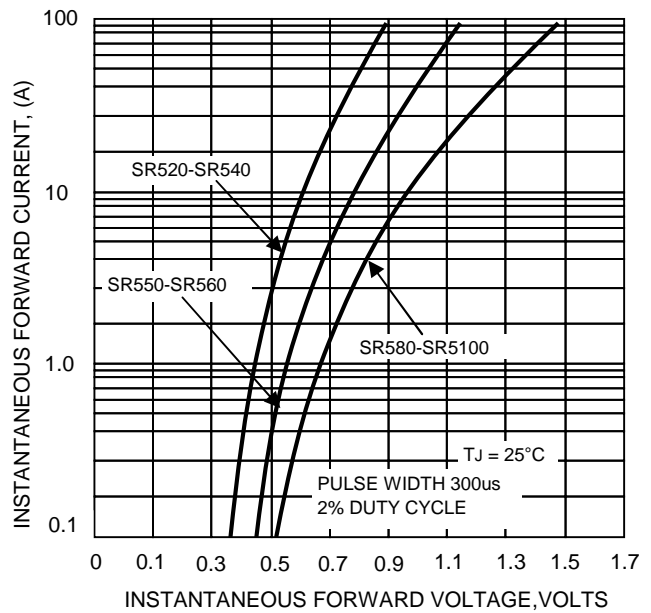
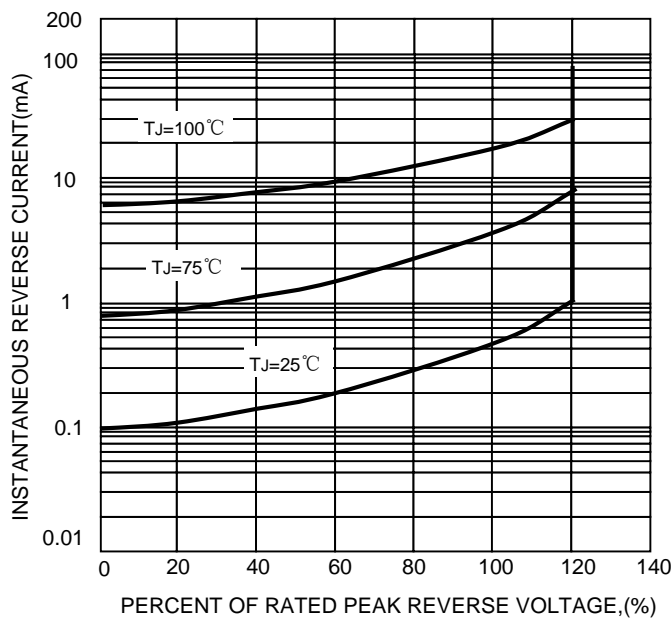


FIG. 5 - TYPICAL REVERSE



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!