



## Schottky Barrier Rectifiers

**Reverse Voltage - 20 to 200 Volts**  
**Forward Current - 5.0 Amperes**

### Features

- Low forward voltage drop
- High surge capability
- The plastic material carries UL recognition 94V-0

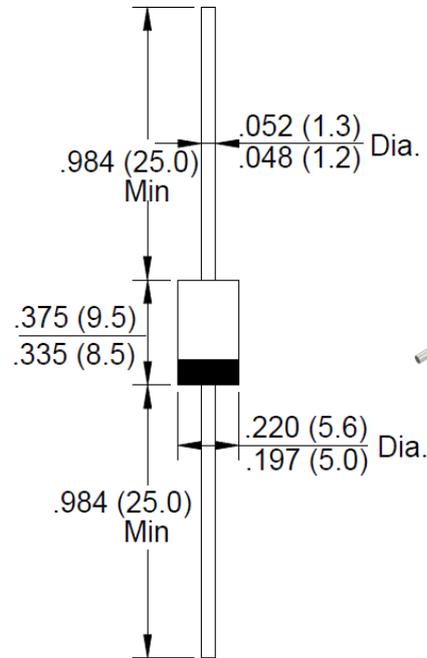
### Mechanical Data

- Case: JEDEC DO-27 molded plastic
  - Polarity: Color band denotes cathode
  - Mounting position: Any
- Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

### Applications

- For use in low voltage, high frequency inverters, polarity protection applications

### DO-27



RoHS  
COMPLIANT

Package Outline Dimensions in Inches (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	SR5150	SR5200	Unit	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	V	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	V	
Maximum Average Forward Rectified Current @ T <sub>L</sub> =95 °C	I(AV)	5.0									A	
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load ( JEDEC Method )	I <sub>FSM</sub>	150									A	
Peak Forward Voltage at 5.0 A DC	V <sub>F</sub>	0.55			0.7		0.85		0.95		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 Junction to Lead	R <sub>θJL</sub>	15			10						°C/W	
Junction 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. The typical data above is for reference only.



Fig. 1 - Forward Current Derating Curve

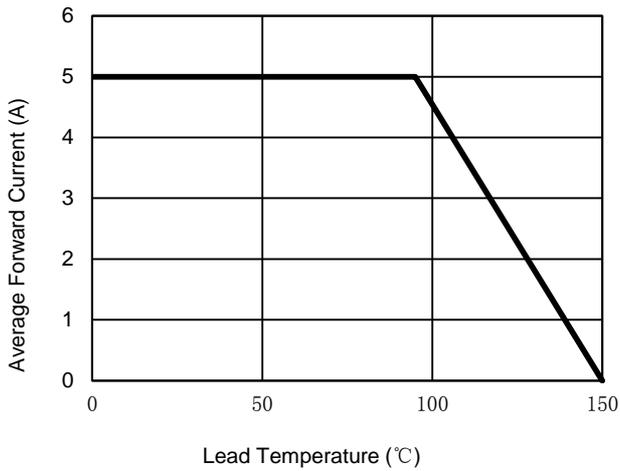


Fig. 2 - Maximum Non-Repetitive Surge Current

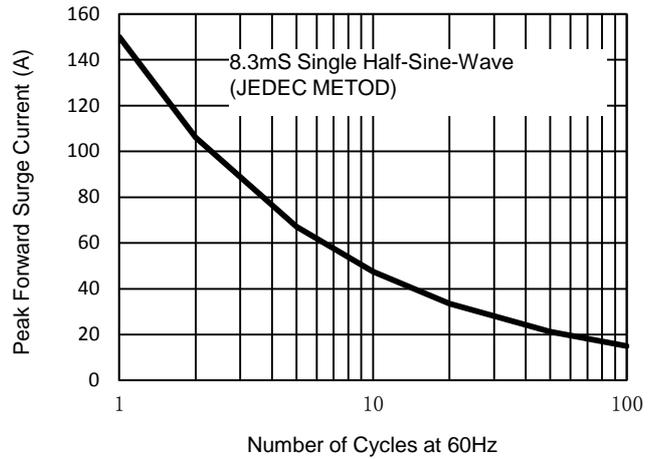


Fig. 3 - Typical Reverse Characteristics

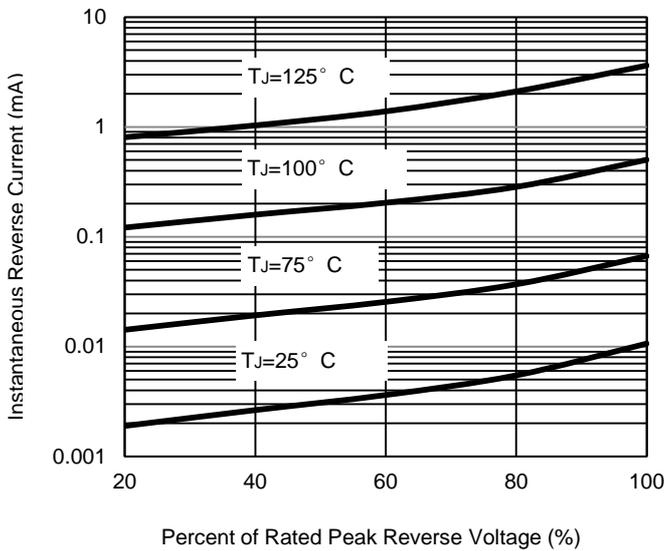


Fig. 4 - Typical Forward Characteristics

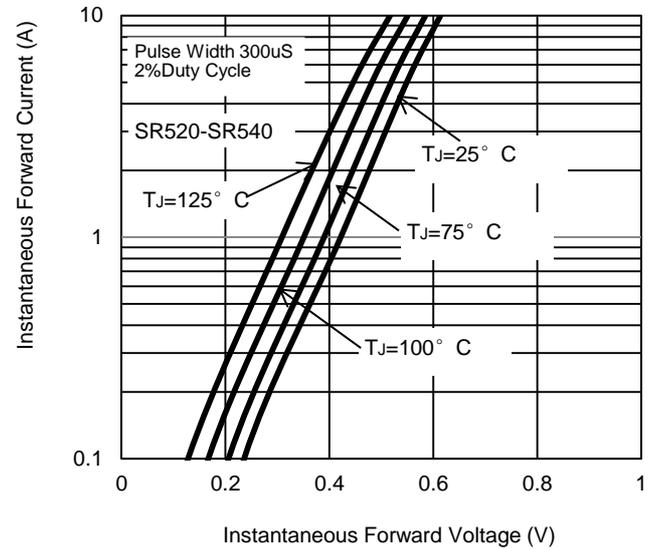


Fig. 5 - Typical Forward Characteristics

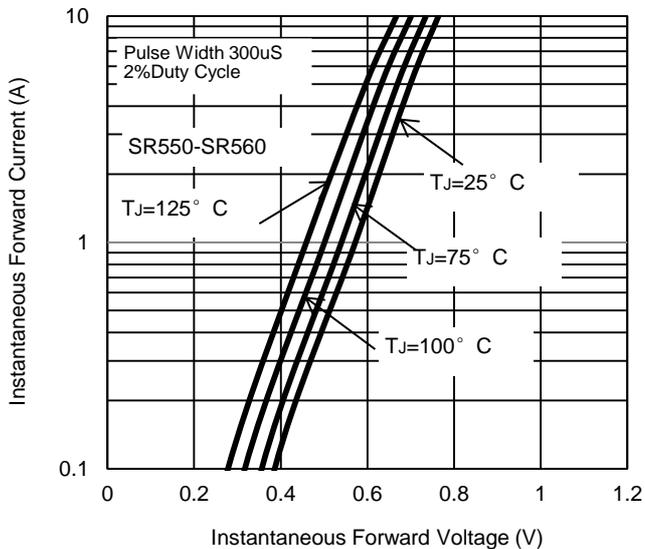
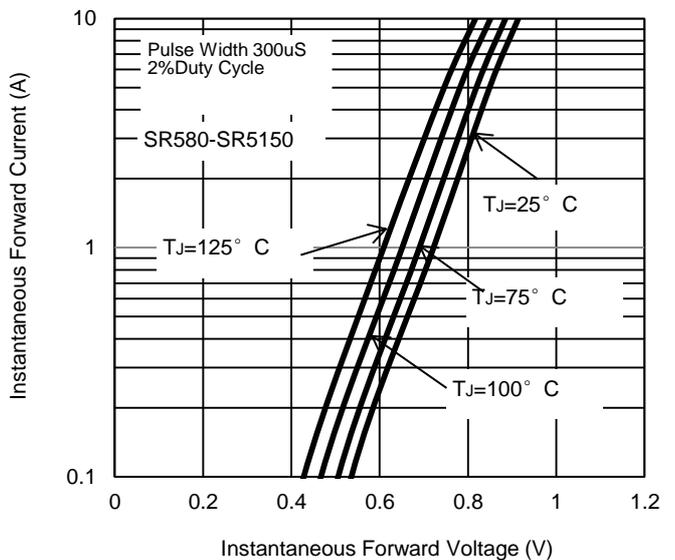


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



Fig. 7 - Typical Forward Characteristics

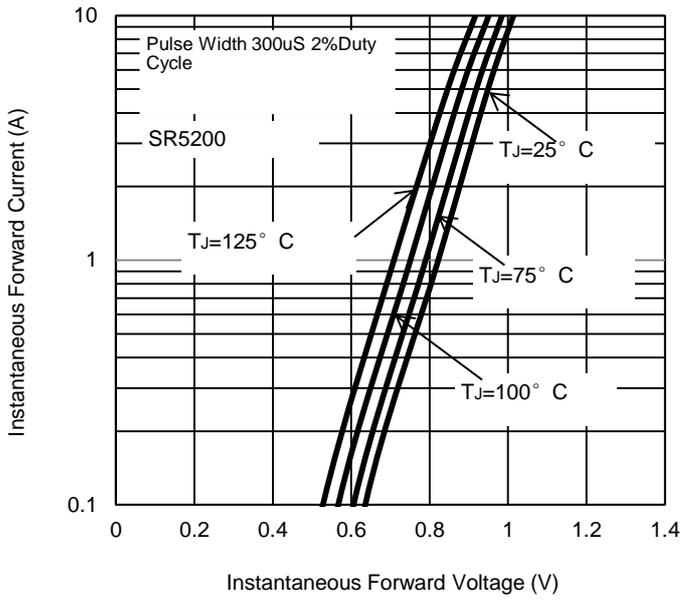
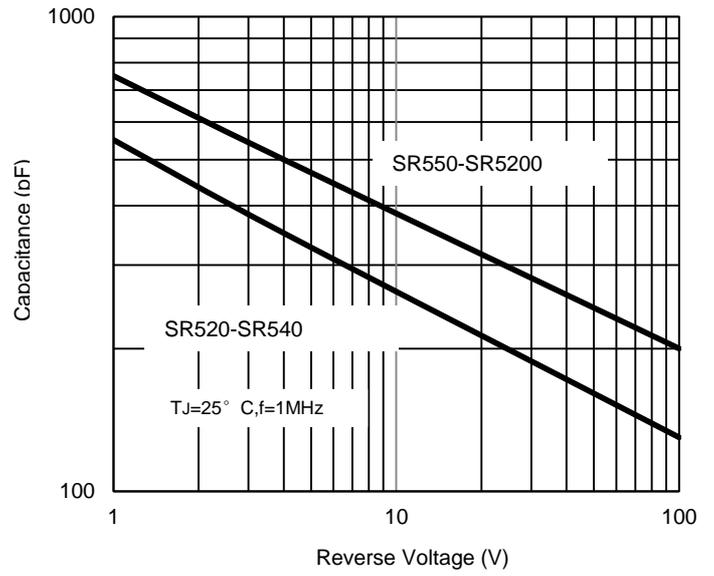


Fig. 8 - Typical Junction Capacitance





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