



## Schottky Barrier Rectifiers

Reverse Voltage - 200 Volts

Forward Current - 5.0 Amperes

### Features

- Low forward voltage drop
- Extremely fast switching
- High frequency operation

### Mechanical Data

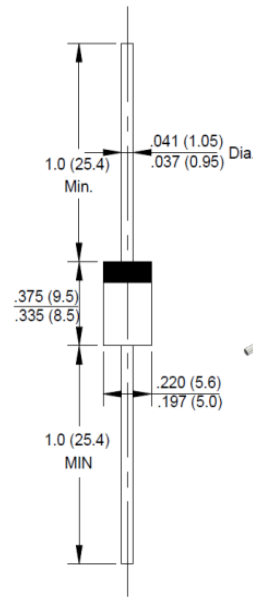
- Case: JEDEC DO-201AE
- Polarity: As marked on the body
- Mounting position: Any

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-201AE



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	SR5	SR5	SR5	SR5	SR5	SR5	SR5	SR5	SR5	SR5	SR5	Unit	
		20E	30E	40E	50E	60E	70E	80E	90E	100E	150E	200E		
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	150	200	V	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	105	140	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	150	200	V	
Maximum Average Forward Rectified Current @TL=95°C	I <sub>(AV)</sub>	5											A	
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load ( JEDEC Method )	I <sub>FSM</sub>	150											A	
Typical Thermal Resistance Junction to Ambient, Lead or Case	R <sub>θJA</sub>	25											°C/W	
	R <sub>θJL</sub>	15			10									°C/W
	R <sub>θJC</sub>	8											°C/W	
Typical Junction Capacitance ( Note1 )	C <sub>J</sub>	500			350									pF
Maximum Instantaneous Forward Voltage at 5.0A DC (Note2)	V <sub>F</sub>	0.55		0.7			0.85			0.95			V	
Maximum DC Reverse Current @T <sub>J</sub> =25°C	I <sub>R</sub>	1.0											mA	
at Rated DC Blocking Voltage @T <sub>J</sub> =100°C		50												
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. 300us pulse width, 2% duty cycle.

3. The typical data above is for reference only.



Fig. 1 - Forward Current Derating Curve

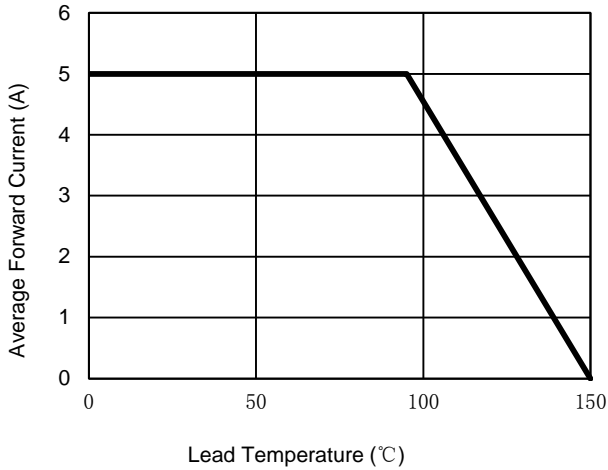


Fig. 2 - Maximum Non-Repetitive Surge Current

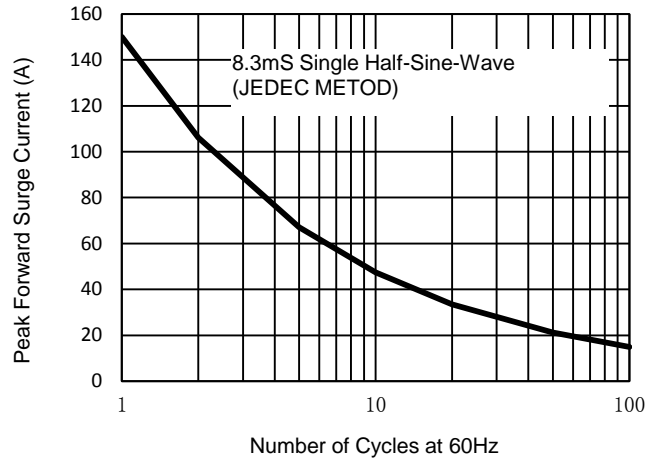


Fig. 3 - Typical Reverse Characteristics

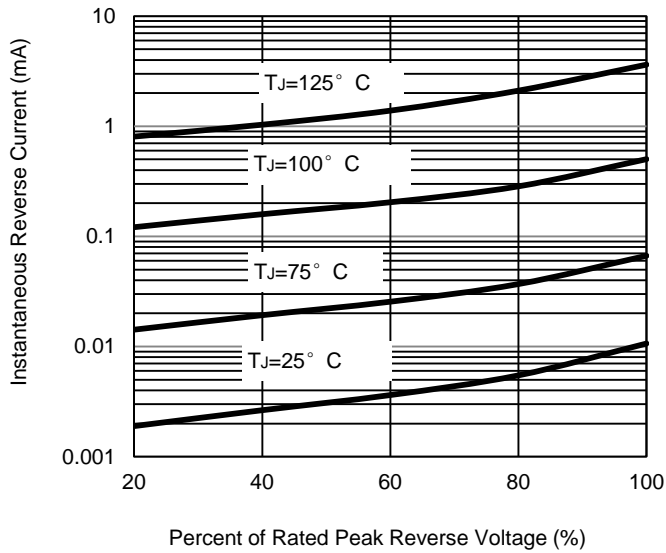


Fig. 4 - Typical Forward Characteristics

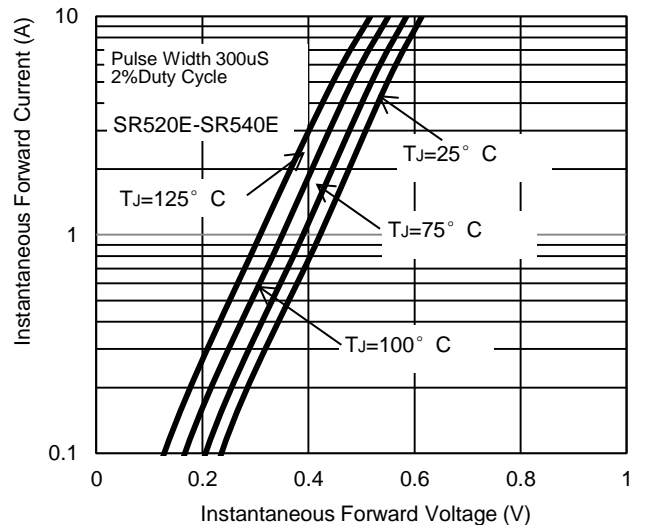


Fig. 5 - Typical Forward Characteristics

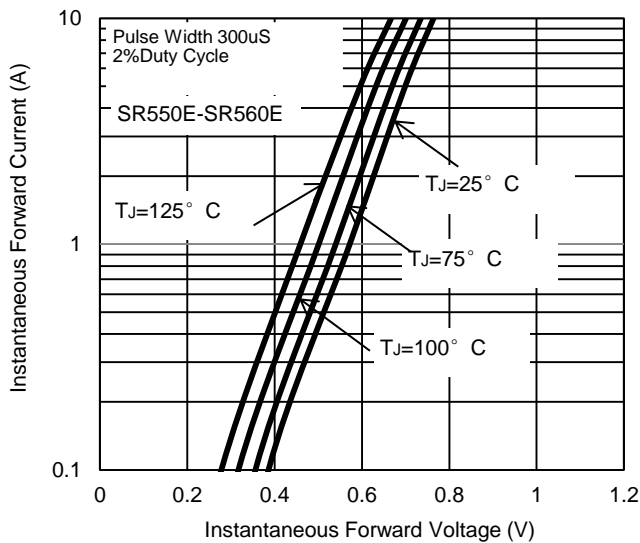
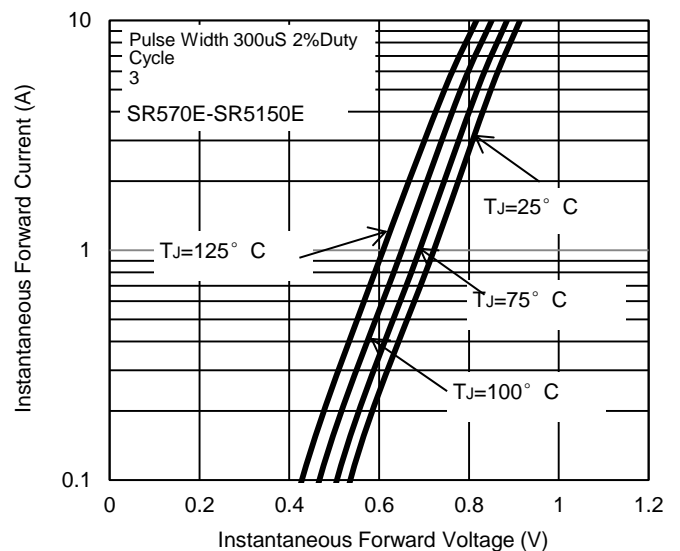


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



Fig. 7 - Typical Forward Characteristics

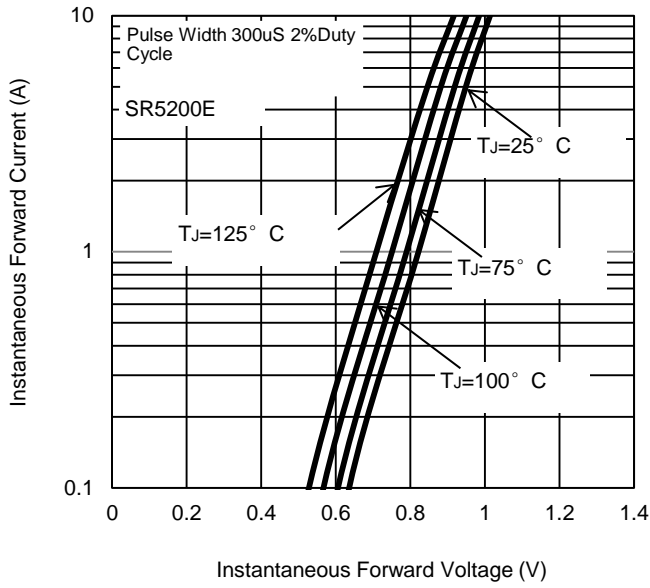
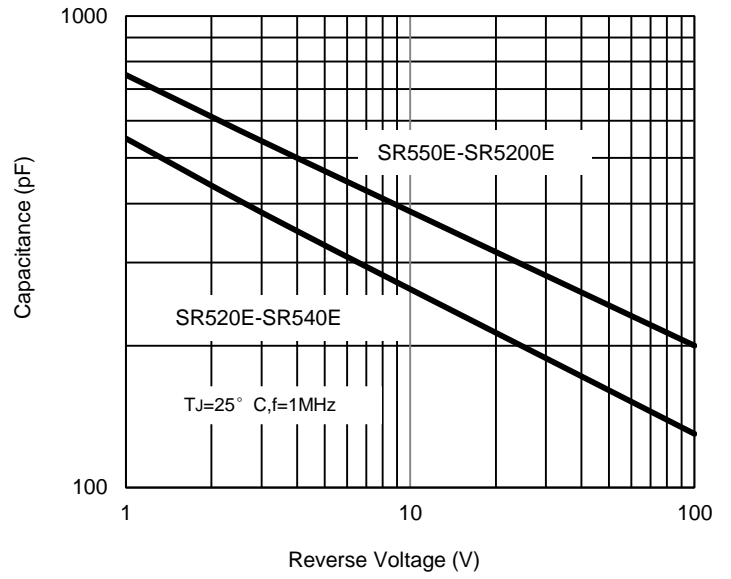


Fig. 8 - Typical Junction Capacitance



The curve above is for reference only.



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