



Surface Mount 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

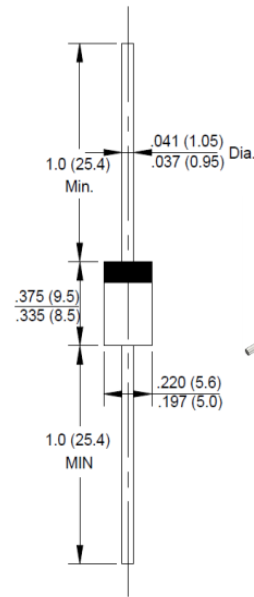
- Case: JEDEC DO-201AE
- Polarity: As marked on the body
- Mounting position: Any

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 _{RRM}	20	30	40	50	60	70	80	90	100	150	200	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	105	140	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	70	80	90	100	150	200	V	
Maximum Average Forward Rectified Current @TL=95°C	I _(AV)	5											A	
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150											A	
Typical Thermal Resistance Junction to Ambient, Lead or Case	R _{θJA}	25											°C/W	
	R _{θJL}	15			10									°C/W
	R _{θJC}	8											°C/W	
Typical Junction Capacitance (Note1)	C _J	500				350								pF
Maximum Instantaneous Forward Voltage at 5.0A DC (Note2)	V _F	0.55		0.7			0.85					0.95	V	
Maximum DC Reverse Current @T _J =25°C	I _R	1.0											mA	
at Rated DC Blocking Voltage @T _J =100°C		50												
Junction Temperature Range	T _J	-55 to + 150											°C	
Storage Temperature Range	T _{STG}	-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

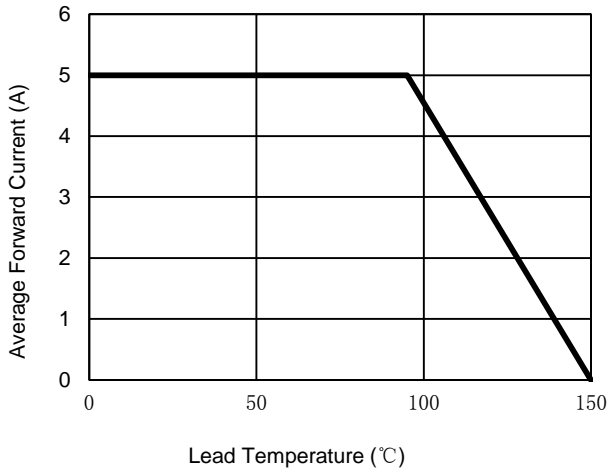


Fig. 2 - Maximum Non-Repetitive Surge Current

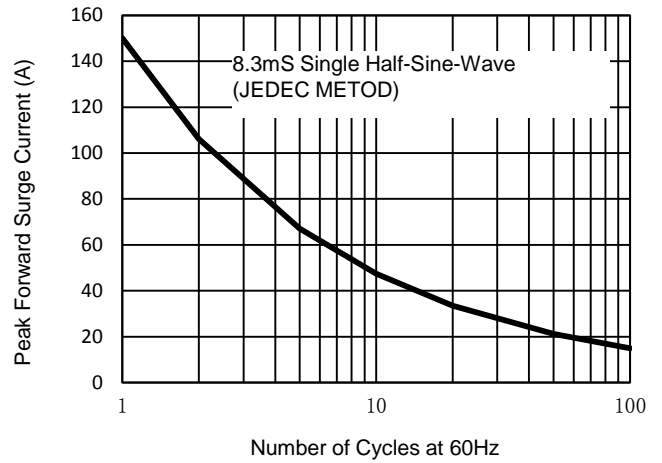


Fig. 3 - Typical Reverse Characteristics

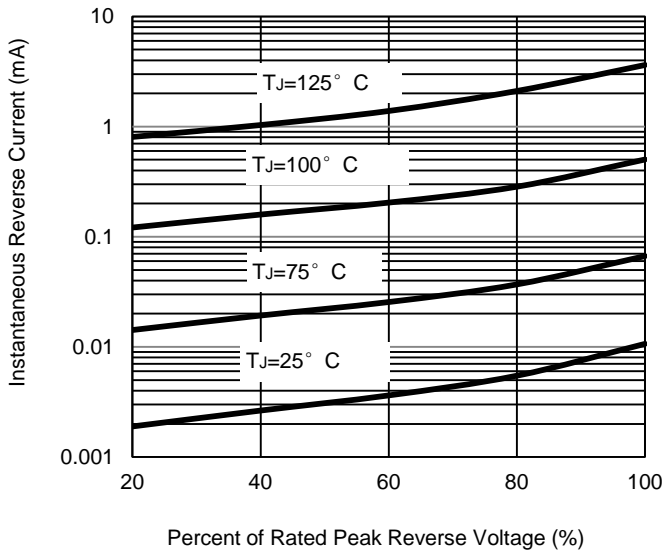


Fig. 4 - Typical Forward Characteristics

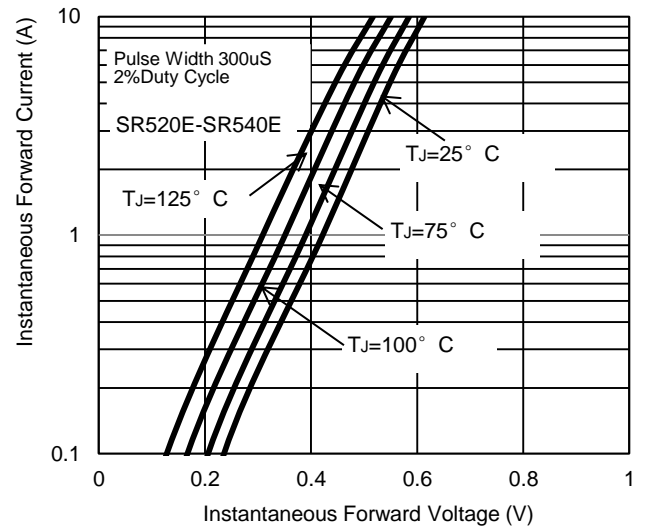


Fig. 5 - Typical Forward Characteristics

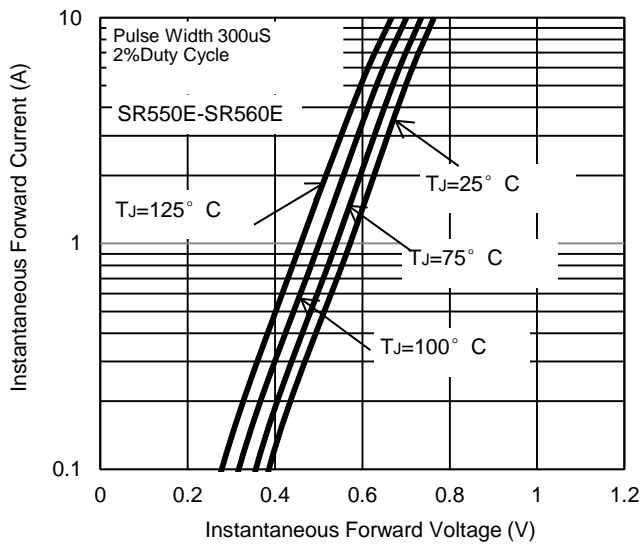
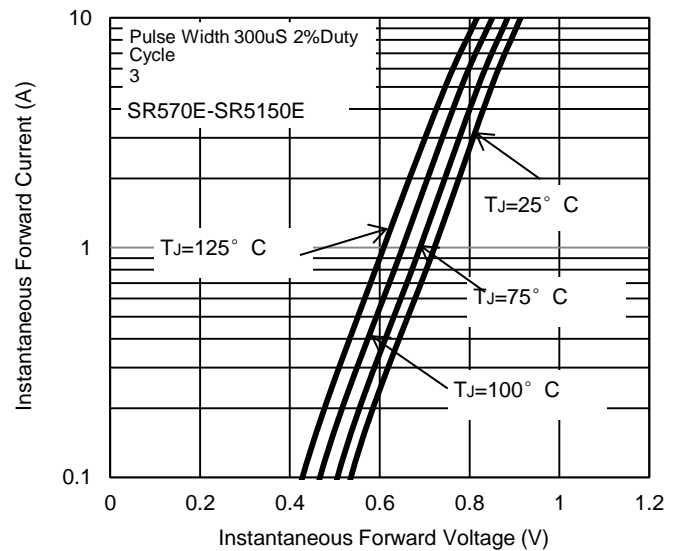


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



Fig. 7 - Typical Forward Characteristics

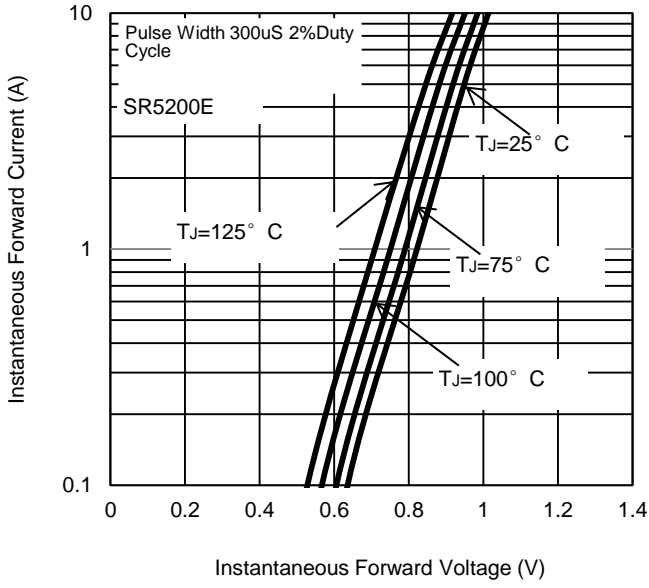
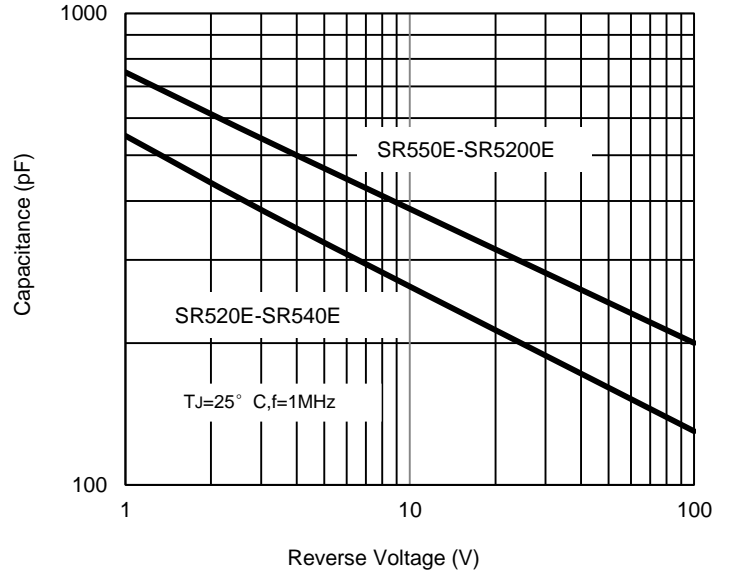


Fig. 8 - Typical Junction Capacitance



The curve above is for reference only.



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