SR520E THRU SR5200E

Surface Mount Schottky Barrier Recitifiers

Reverse Voltage - 200 Volts

Forward Current - 5.0 Amperes

Features

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

Mechanical Data

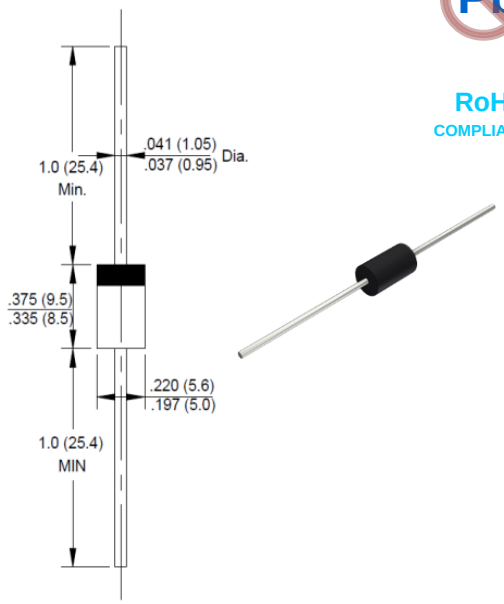
- Case: JEDEC DO-201AE
- Polarity: As marked on the body
- Mounting position: Any

Note: Products with logo HY or hy are made by HY Electronic (Cayman) Limited.

Applications

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

DO-201AE



Package Outline Dimensions in Inches (Millimeters)

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Characteristics	Symbol	SR5 20E	SR5 30E	SR5 40E	SR5 50E	SR5 60E	SR5 70E	SR5 80E	SR5 90E	SR5 100E	SR5 150E	SR5 200E	Unit
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℃	$I_{(AV)}$	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 Juction to Ambient, Lead or Case	$R_{\theta JA}$	25											℃/W
	$R_{\theta JL}$	15				10							℃/W
	$R_{\theta JC}$	8											℃/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℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	1.0 50											mA
Junction Temperature Range	T_J	-55 to + 150											℃
Storage Temperature Range	T_{STG}	-55 to + 150											℃

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.

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Fig. 1 - Forward Current Derating Curve

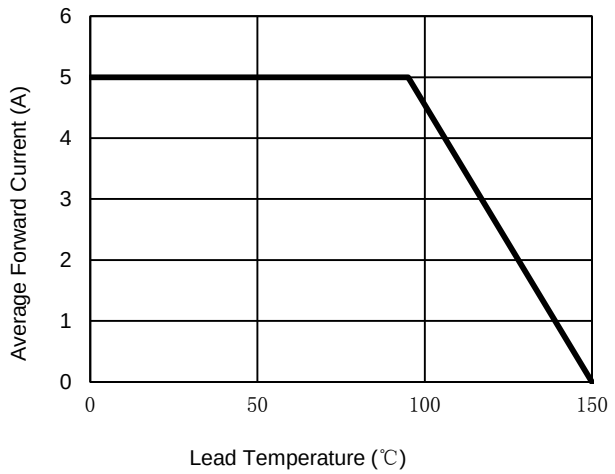


Fig. 2 - Maximum Non-Repetitive Surge Current

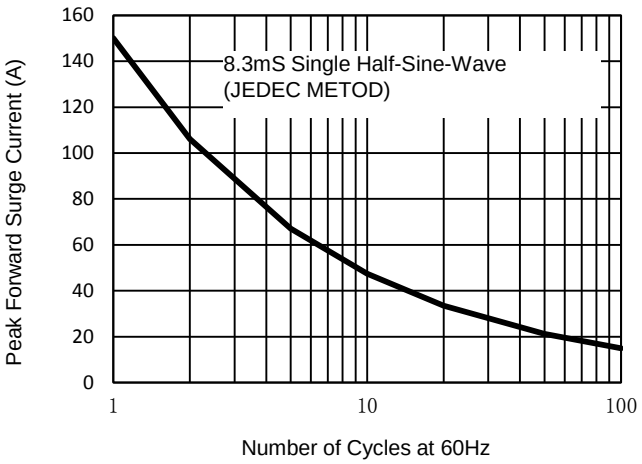


Fig. 3 - Typical Reverse Characteristics

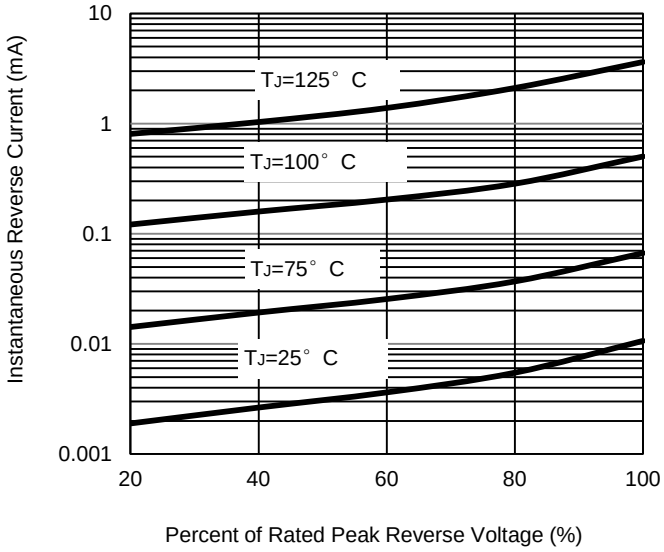


Fig. 4 - Typical Forward Characteristics

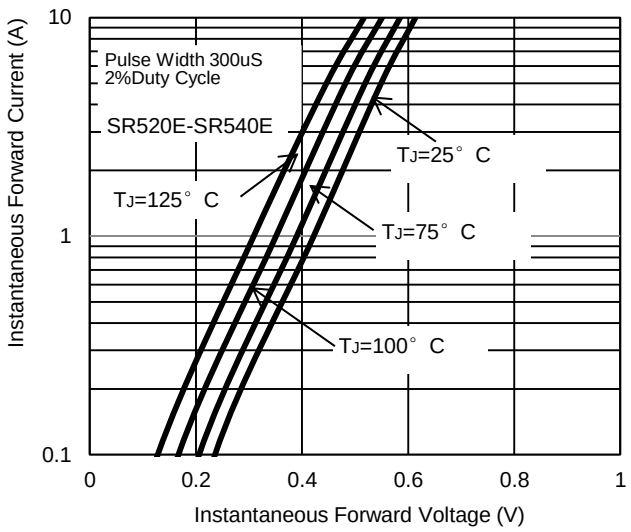


Fig. 5 - Typical Forward Characteristics

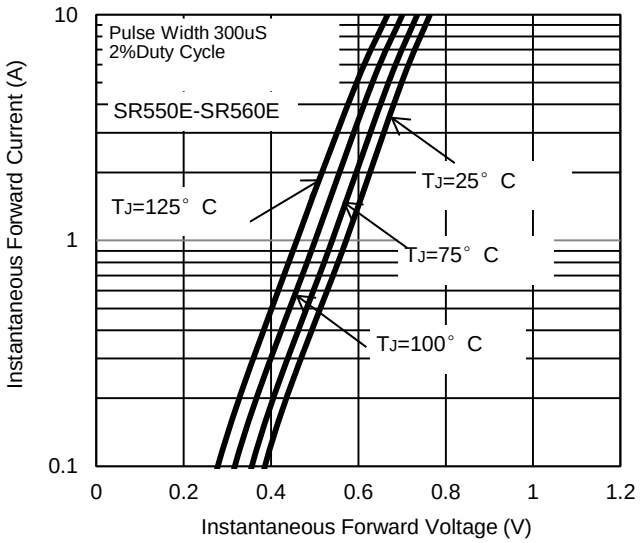
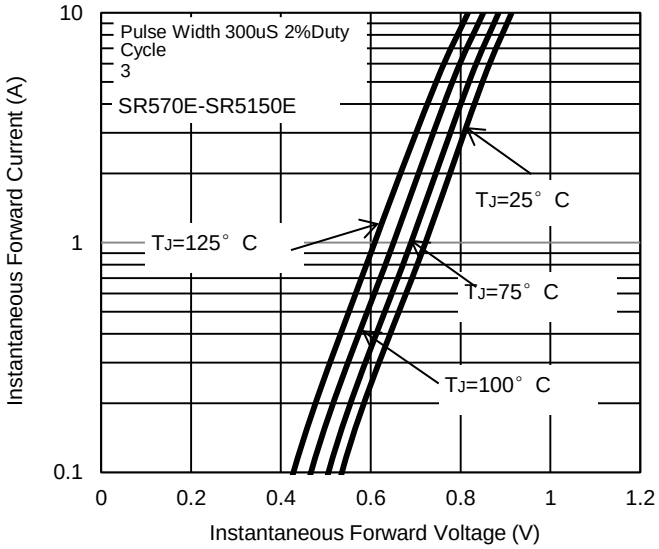


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.

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Fig. 7 - Typical Forward Characteristics

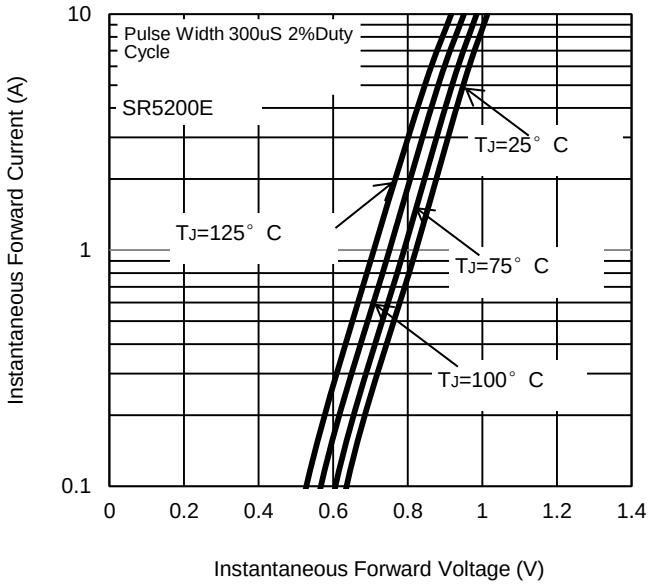
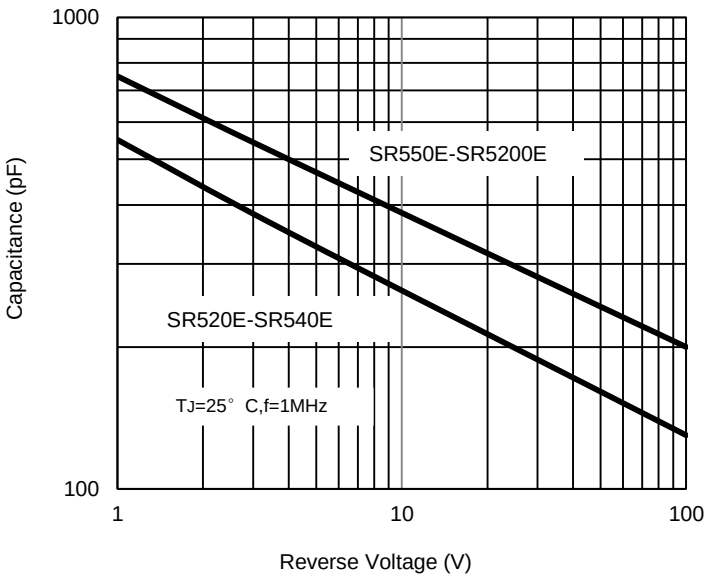


Fig. 8 - Typical Junction Capacitance



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