SR1030CT THRU SR10150CT

Schottky Barrier Recitifiers

Reverse Voltage - 30 to 150 Volts
Forward Current - 10.0 Amperes

Features

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

Mechanical Data

- Case: JEDEC TO-220AB molded plastic
- Polarity: As marked on the body
- Mounting position: Any

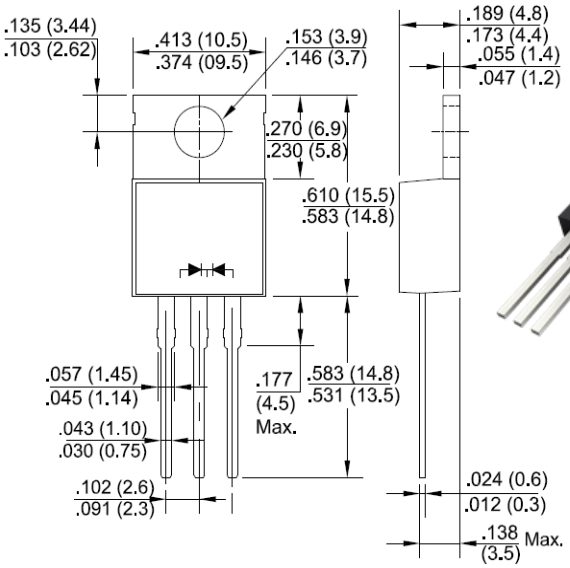
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Applications

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

TO-220AB

RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

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	SR 1030CT	SR 1040CT	SR 1050CT	SR 1060CT	SR 1080CT	SR 10100CT	SR 10150CT	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	40	50	60	80	100	150	V
Maximum RMS Voltage	V_{RMS}	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	V_{DC}	30	40	50	60	80	100	150	V
Maximum Average Forward Rectified Current @T_C=95 ℃	$I_{(AV)}$	10							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120							A
Peak Forward Voltage at 5.0 A DC (Note1)	V_F	0.55		0.70		0.85		0.95	V
Maximum DC Reverse Current @T_J=25℃	I_R	1.0							mA
at Rated DC Blocking Voltage @T_J=100℃		50							
Typical Junction Capacitance (Note2)	C_J	250							pF
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	3.0							℃/W
Junction Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Notes: 1: 300us pulse width,2% duty cycle. 300uS.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
3. The typical data above is for reference only.

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Fig. 1 - Forward Current Derating Curve

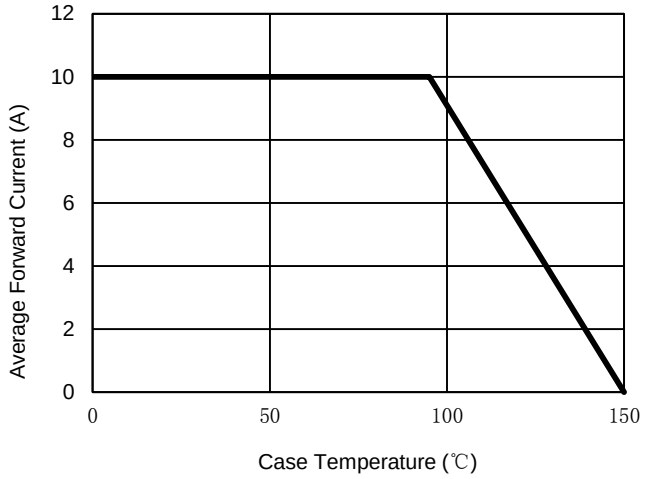


Fig. 2 - Maximum Non-Repetitive Surge Current

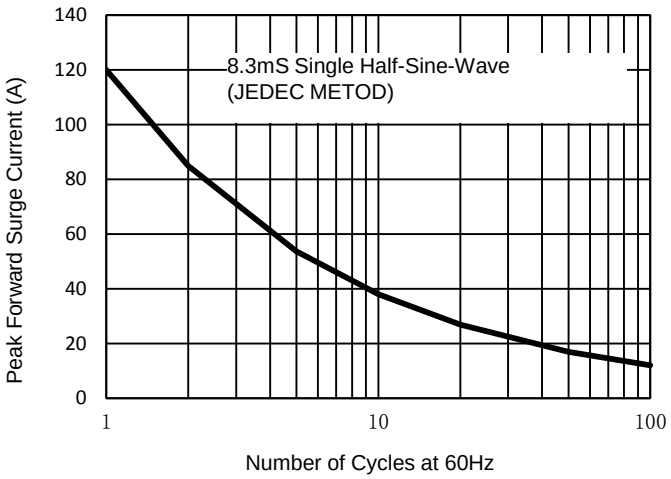


Fig. 3 - Typical Reverse Characteristics

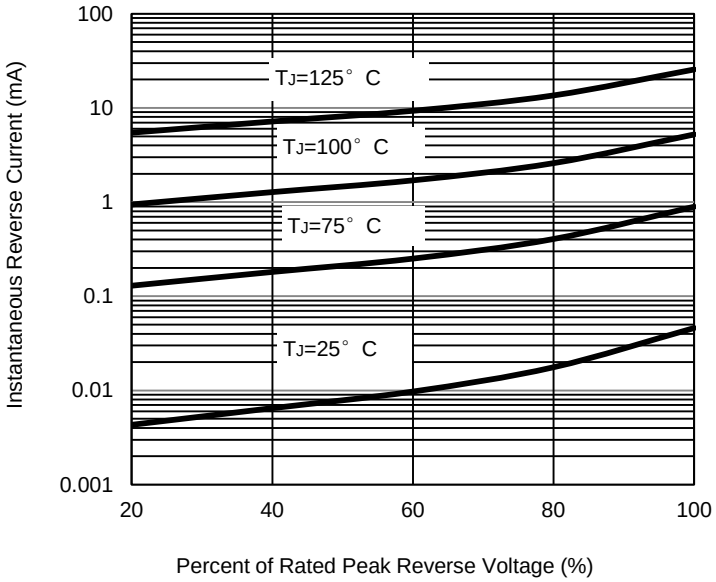


Fig. 4 - Typical Forward Characteristics

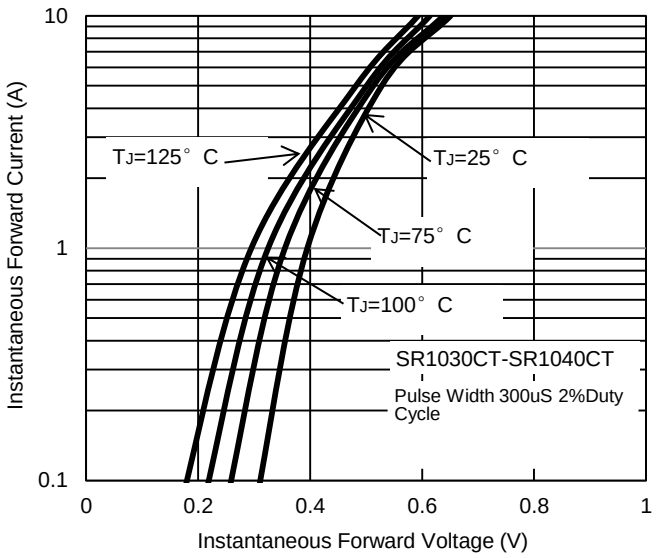


Fig. 5 - Typical Forward Characteristics

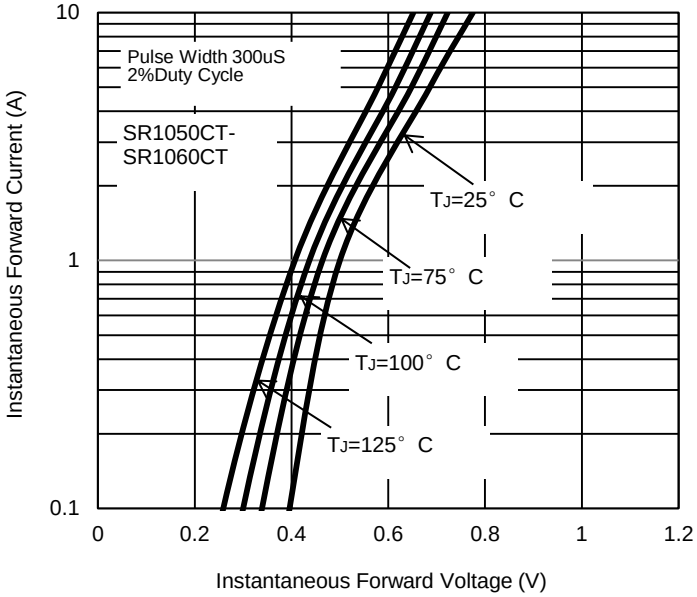
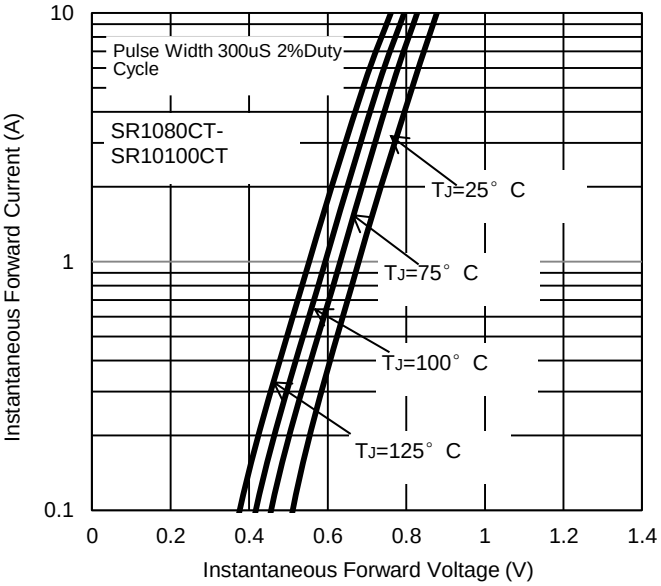


Fig. 6 - Typical Forward Characteristics



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Fig. 7 - Typical Forward Characteristics

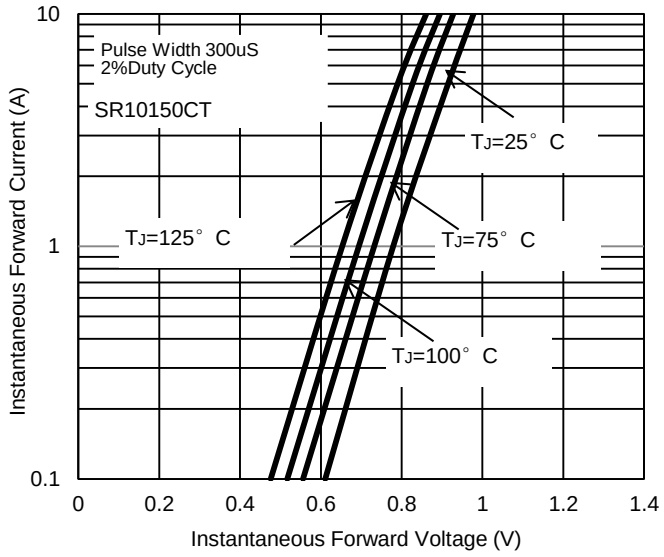
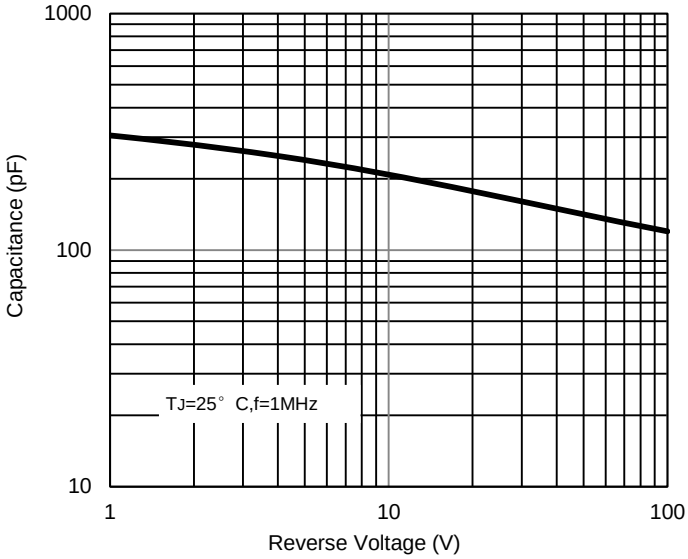


Fig. 8 - Typical Junction Capacitance



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