

## Schottky Barrier Rectifiers

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

### Features

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

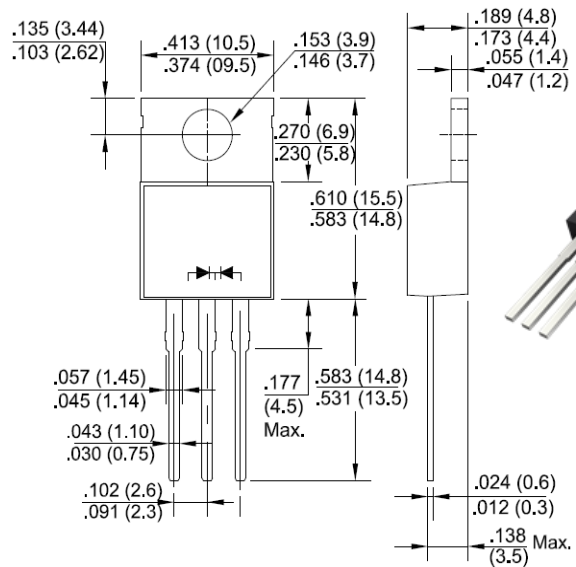
### Mechanical Data

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

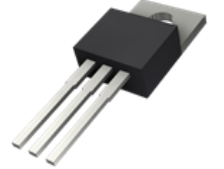
### Applications

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

### TO-220AB



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	SR	SR	SR	SR	SR	SR	SR	Unit
		1030CT	1040CT	1050CT	1060CT	1080CT	10100CT	10150CT	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	30	40	50	60	80	100	150	V
Maximum RMS Voltage	V <sub>RMS</sub>	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	40	50	60	80	100	150	V
Maximum Average Forward Rectified Current @T <sub>c</sub> =95 °C	I <sub>(AV)</sub>	10							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load ( JEDEC Method )	I <sub>FSM</sub>	120							A
Peak Forward Voltage at 5.0 A DC (Note1)	V <sub>F</sub>	0.55	0.70		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							
Typical Junction Capacitance ( Note2 )	C <sub>J</sub>	250							pF
Typical Thermal Resistance Junction to Case	R <sub>θJC</sub>	3.0							°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: 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.

Fig. 1 - Forward Current Derating Curve

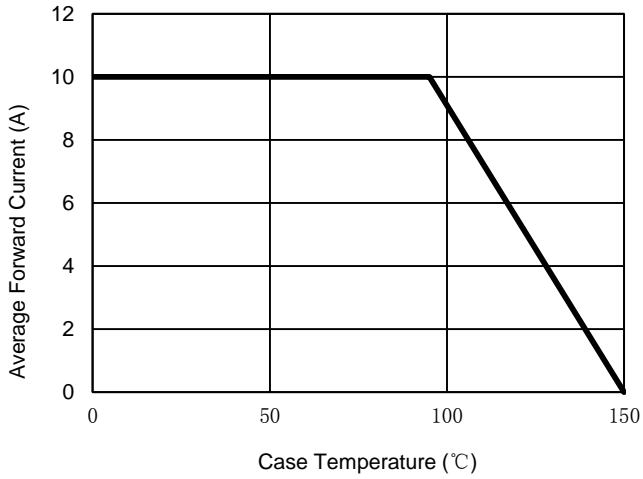


Fig. 2 - Maximum Non-Repetitive Surge Current

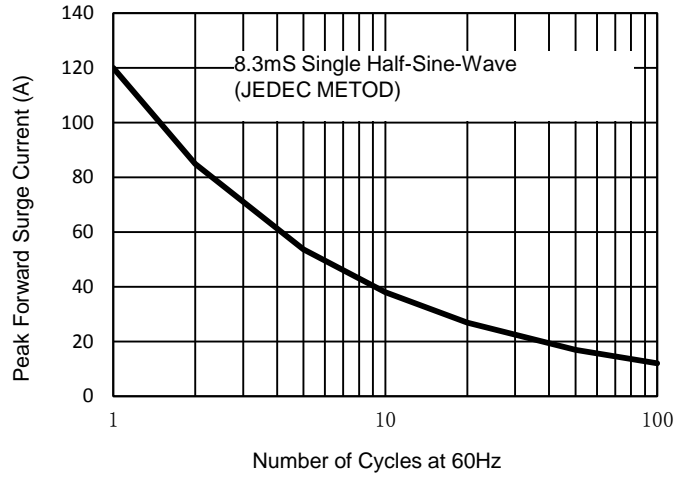


Fig. 3 - Typical Reverse Characteristics

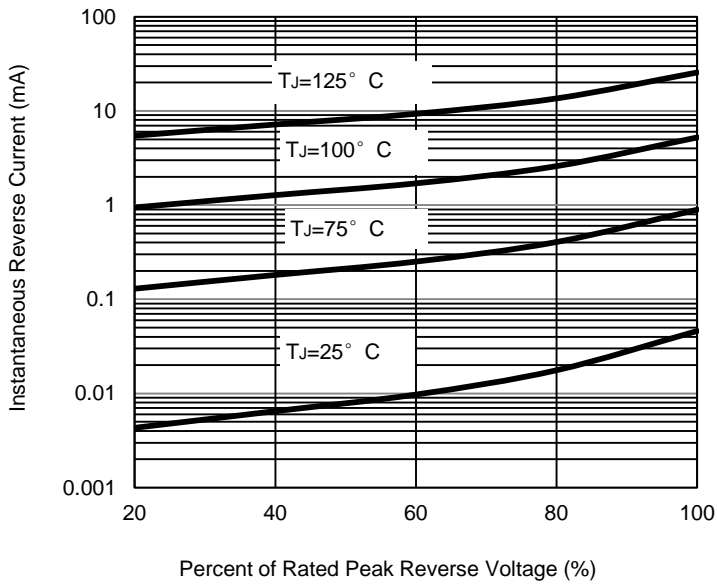


Fig. 4 - Typical Forward Characteristics

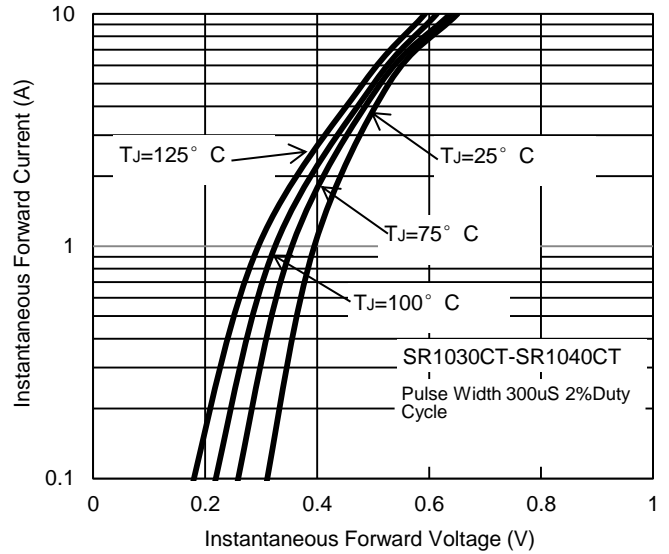


Fig. 5 - Typical Forward Characteristics

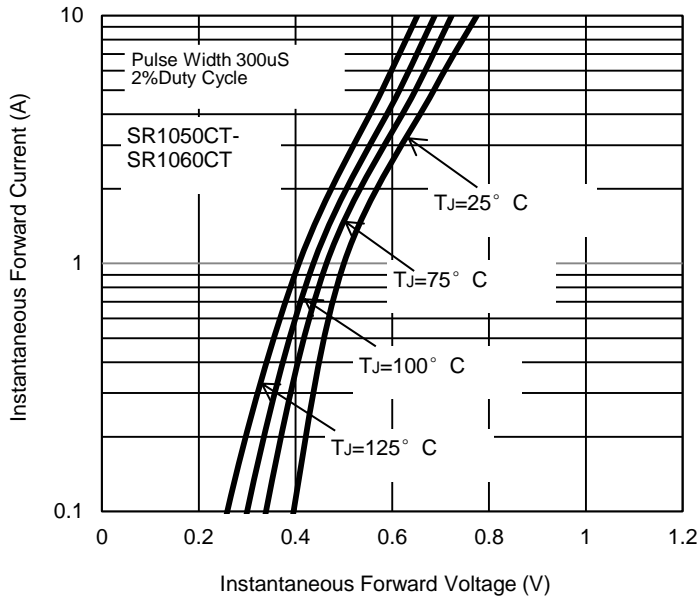
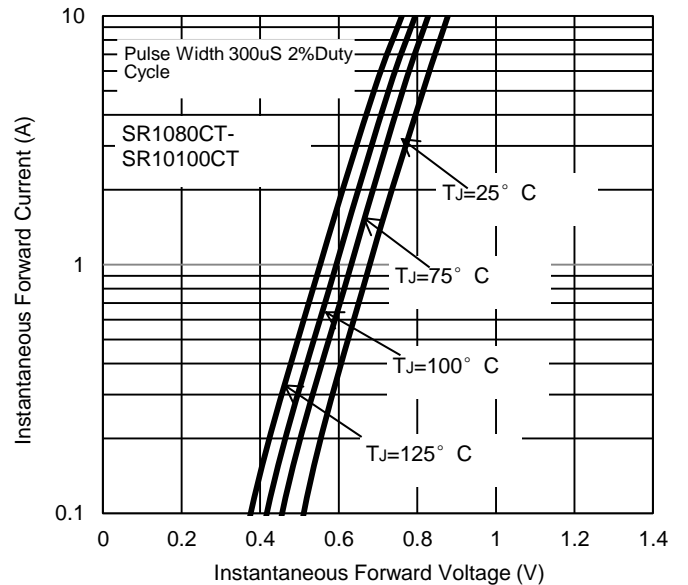


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



Fig. 7 - Typical Forward Characteristics

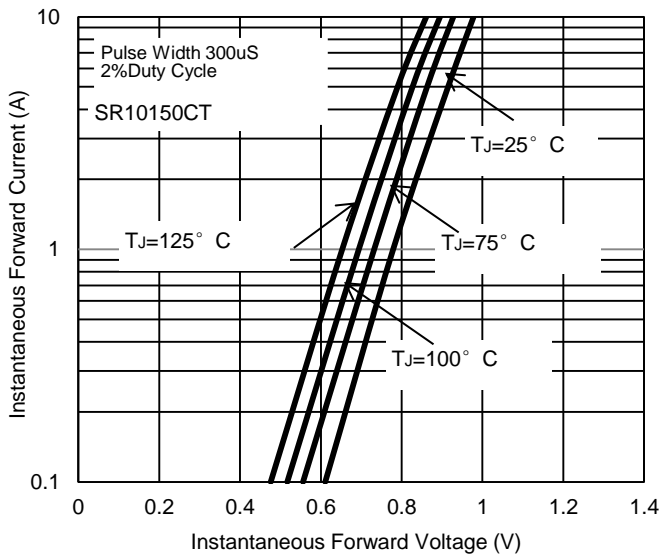
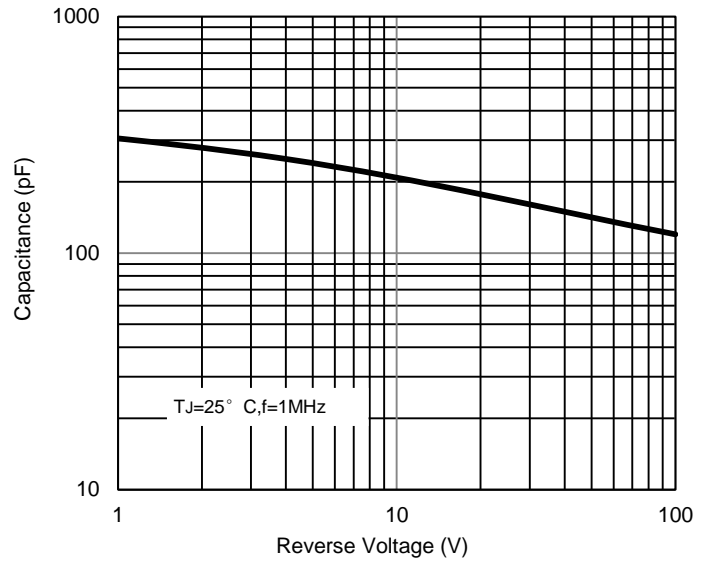


Fig. 8 - Typical Junction Capacitance



The curve above is for reference only.



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