

Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 30 to 150 Volts
Forward Current - 16.0 Amperes

Features

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

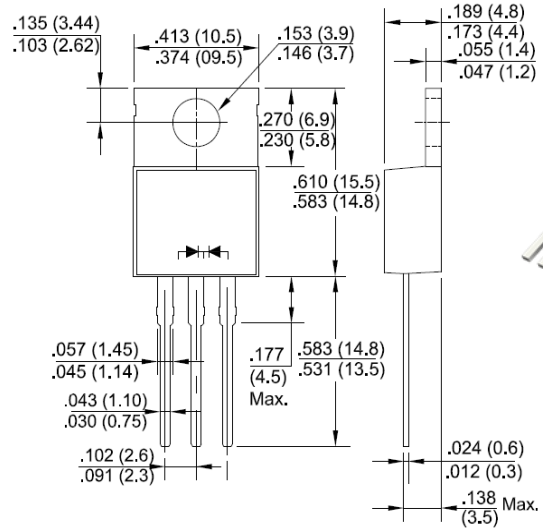
Mechanical Data

- 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	
		2030CT	2040CT	2050CT	2060CT	2080CT	20100CT	20150CT		
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	I _(AV)	20							A	
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	200							A	
Peak Forward Voltage at 10.0A DC(Note1)	V _F	0.55	0.70		0.85		0.95		V	
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	1.0							50	mA
Typical Junction Capacitance (Note2)	C _J	600							pF	
Typical Thermal Resistance Junction to Case	R _{θJC}	2.0							°C/W	
Junction Temperature Range	T _J	-55to+150							°C	
Storage Temperature Range	T _{STG}	-55to+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

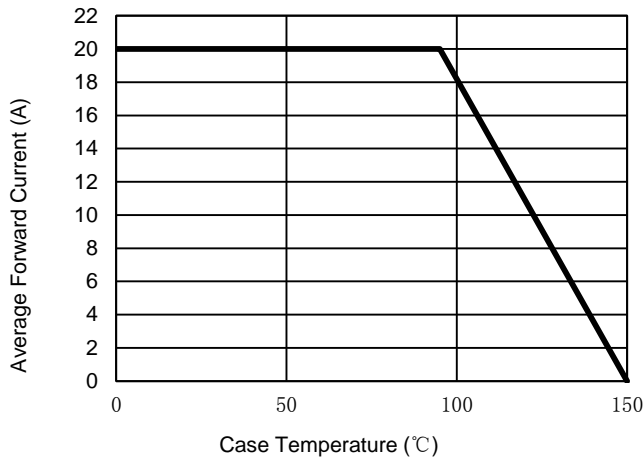


Fig. 2 - Maximum Non-Repetitive Surge Current

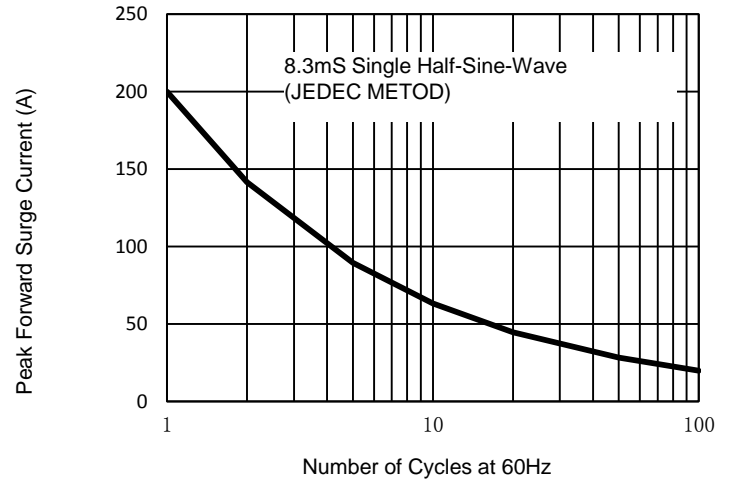


Fig. 3 - Typical Reverse Characteristics

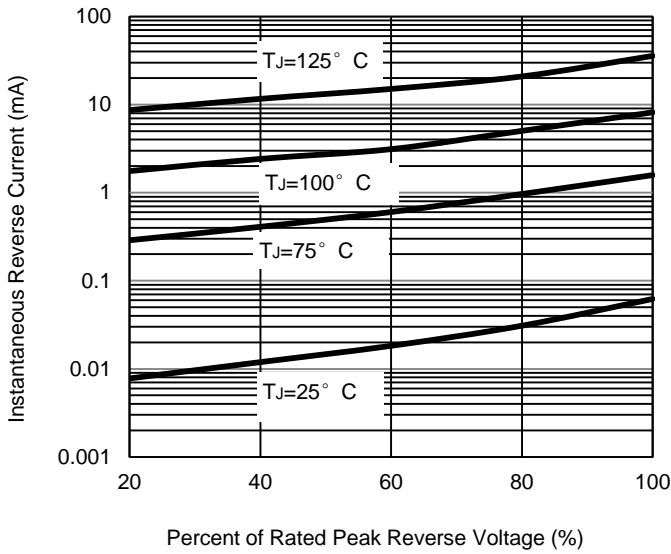


Fig. 4 - Typical Forward Characteristics

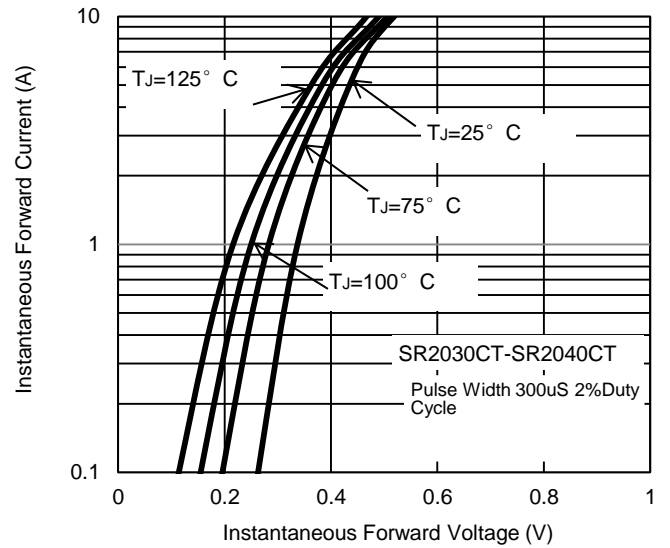


Fig. 5 - Typical Forward Characteristics

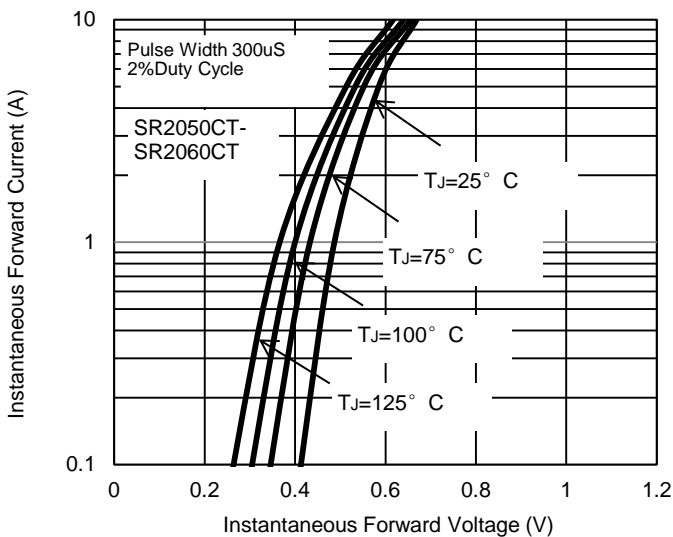
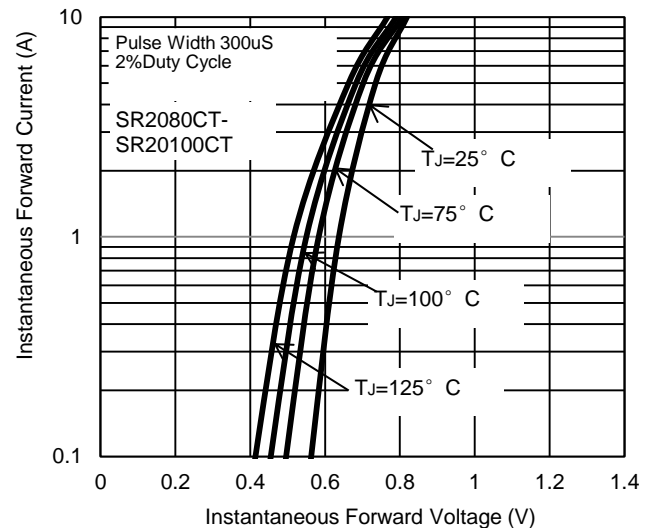


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.

Fig. 7 - Typical Forward Characteristics

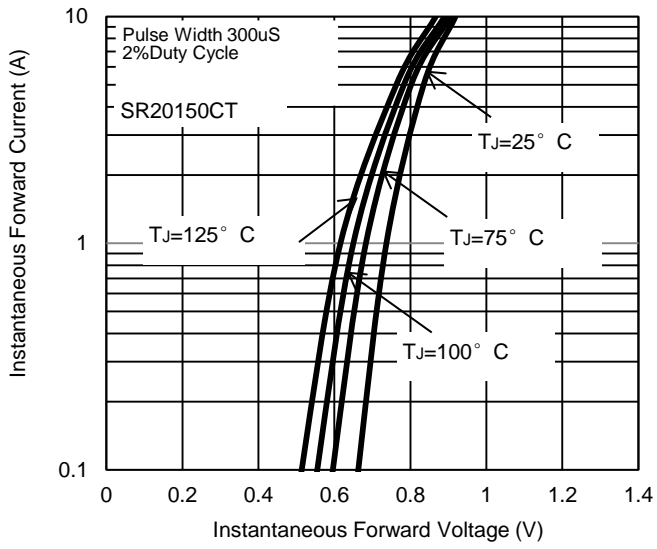
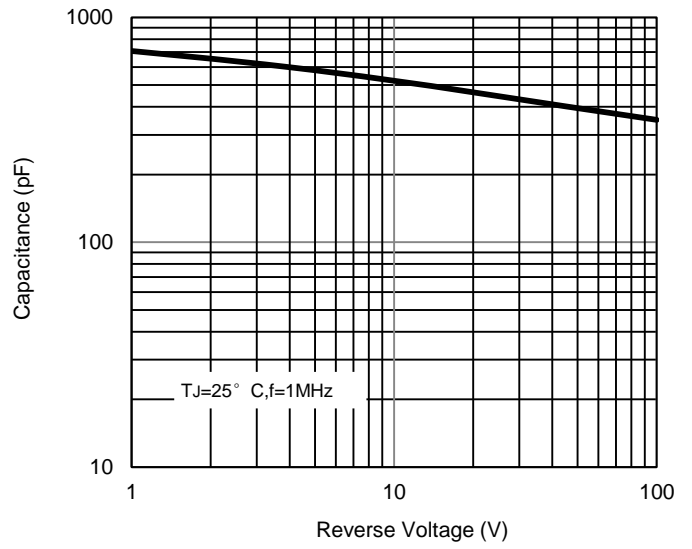


Fig. 8 - Typical Junction Capacitance



The curve above is for reference only.



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