

Surface Mount Schottky Barrier Rectifiers

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

Features

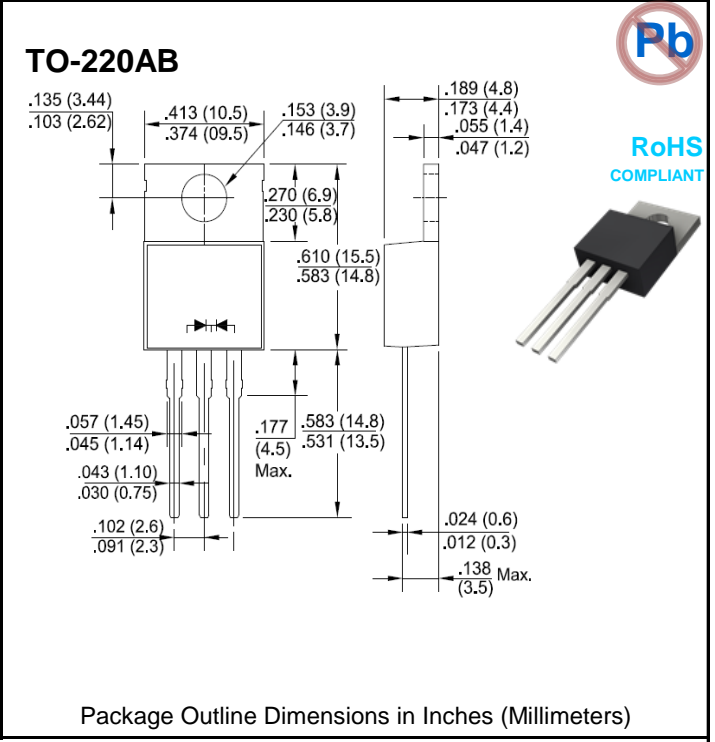
- Low forward voltage drop
- High current capability
- High surge capability
- The plastic material carries UL recognition 94V-0

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.



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
		1630CT	1640CT	1650CT	1660CT	1680CT	16100CT	16150CT	
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°C	I _(AV)	16							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150							A
Peak Forward Voltage at 8.0A DC (Note1)	V _F	0.55	0.70		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							
Typical Junction Capacitance (Note2)	C _J	350							pF
Typical Thermal Resistance Junction to Case	R _{θJC}	2.5							°C/W
Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

Notes: 1. 300us pulse width, 2% duty cycle.
 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

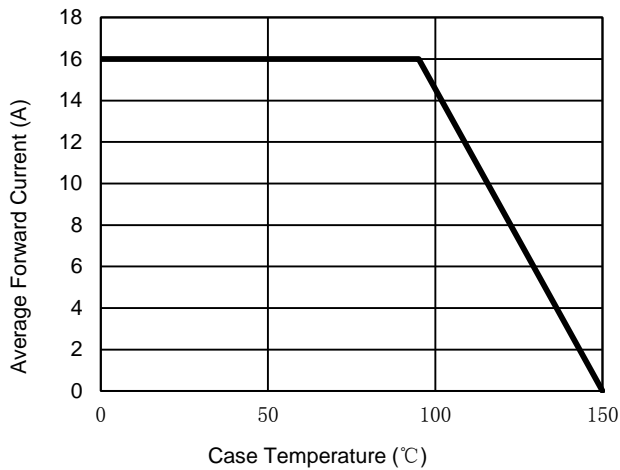


Fig. 2 - Maximum Non-Repetitive Surge Current

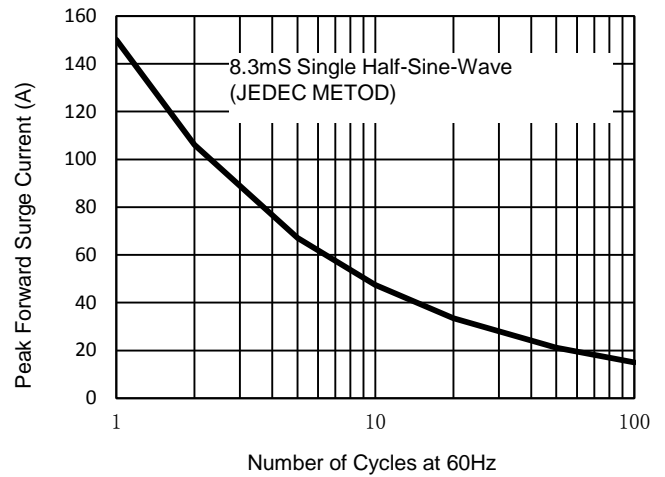


Fig. 3 - Typical Reverse Characteristics

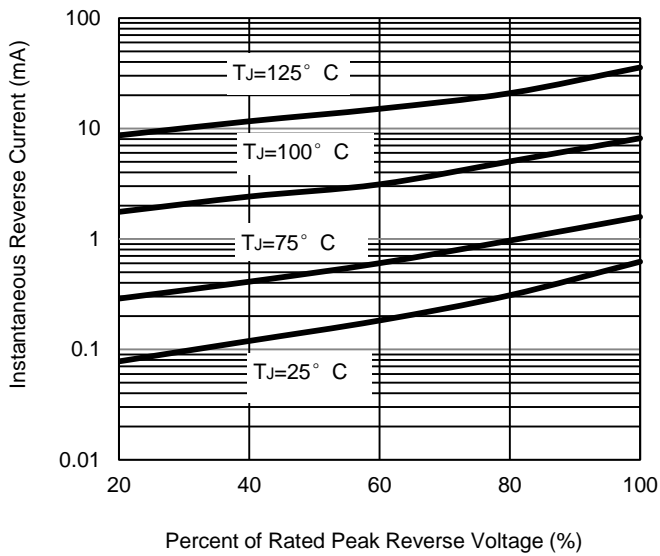


Fig. 4 - Typical Forward Characteristics

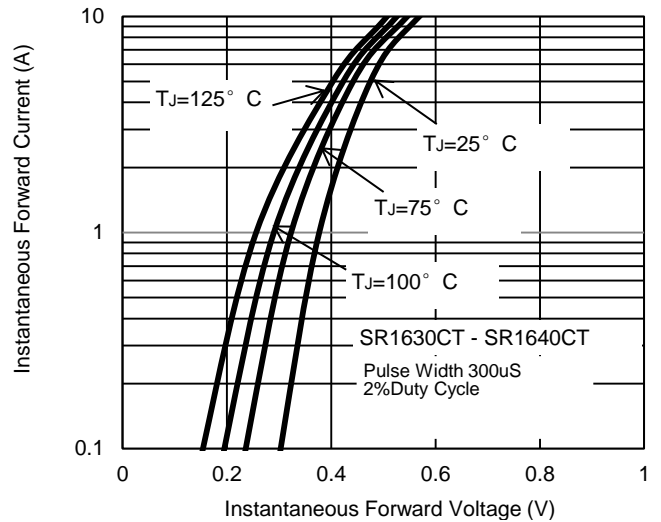


Fig. 5 - Typical Forward Characteristics

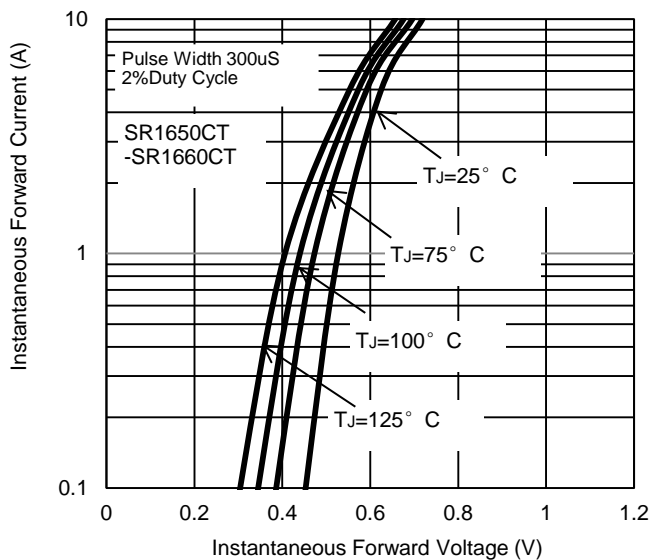
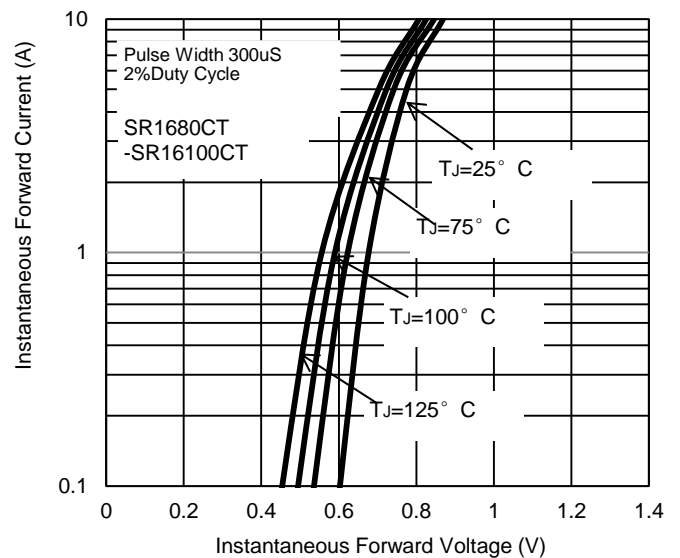


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



Fig. 7 - Typical Forward Characteristics

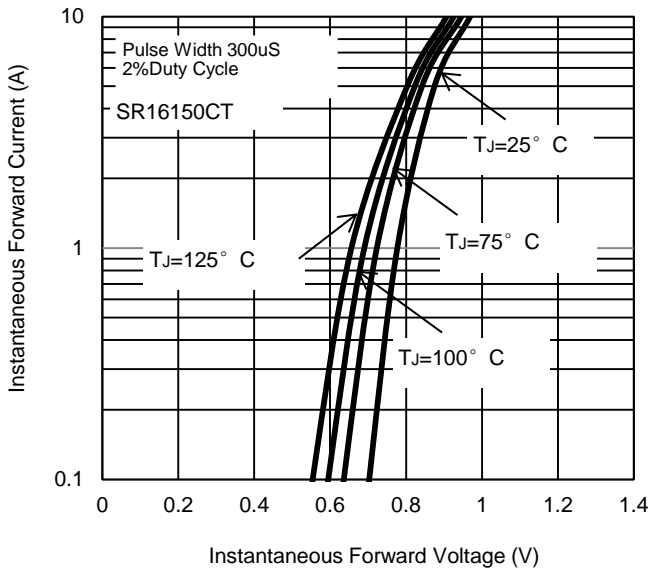
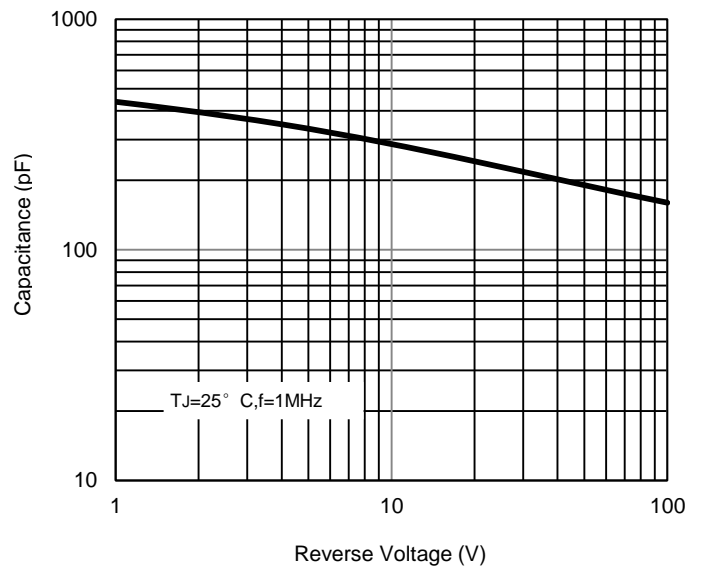


Fig. 8 - Typical Junction Capacitance





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