

VOLTAGE RANGE: 40 - 200 V
CURRENT: 16 A



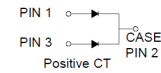
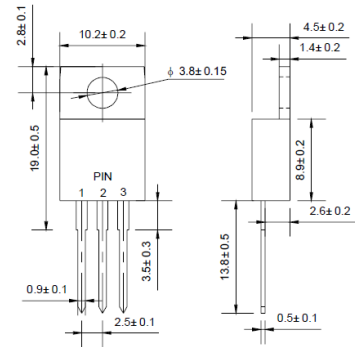
TO-220AB

Features

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

Mechanical Data

- ◇ Case: JEDEC TO-220AB, molded plastic body
- ◇ Polarity: As marked
- ◇ Position: Any
- ◇ Weight: 0.071ounce, 2.006 grams



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MBR 1640CT	MBR 1660CT	MBR 16100CT	MBR 16150CT	MBR 16200CT	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	60	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	60	100	150	200	V
Maximum Average Forward Rectified Current (See Fig.1)	I _(AV)	16.0					A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	150					A
Peak Forward Voltage (Note1) IF=8A @T _J =25℃	V _F	0.70	0.75	0.85	0.92		V
Maximum DC Reverse Current @T _J =25℃ at Rated DC Bolcking Voltage @T _J =125℃	I _R	0.5 30		0.2 10			mA
Typical Thermal Resistance (Note2)	R _{θJC}	3.0					℃/W
Operating Temperature Range	T _J	-55 to +150					℃
Storage Temperature Range	T _{STG}	-55 to +150					℃

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

2. Thermal resistance junction to case.

3. The typical data above is for reference only.

RATING AND CHARACTERISTIC CURVES

Fig. 1 - Forward Current Derating Curve

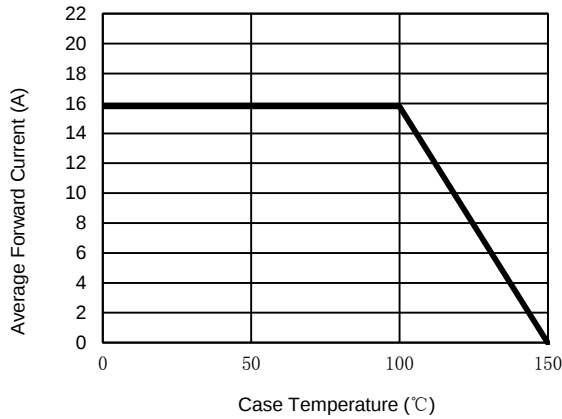


Fig. 2 - Maximum Non-Repetitive Surge Current

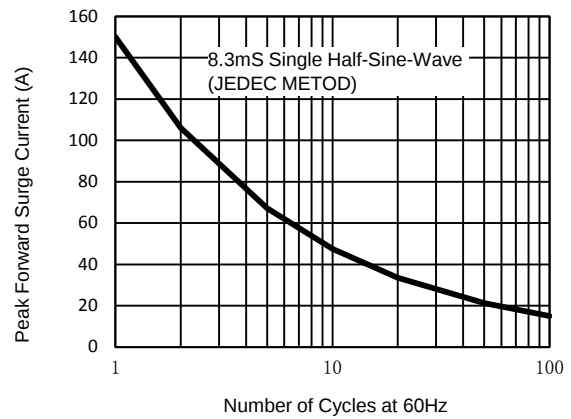


Fig. 3 - Typical Reverse Characteristics

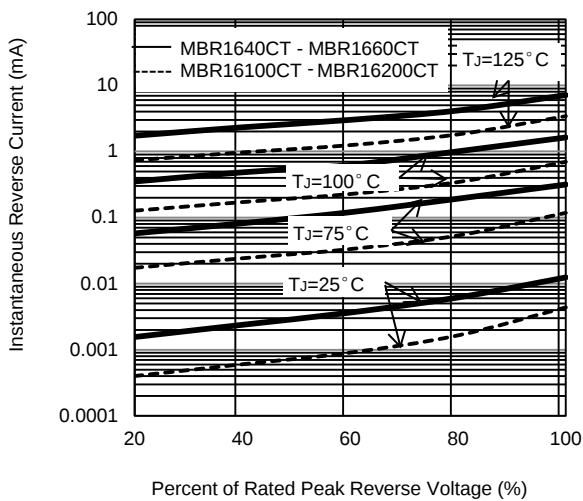


Fig. 4 - Typical Forward Characteristics

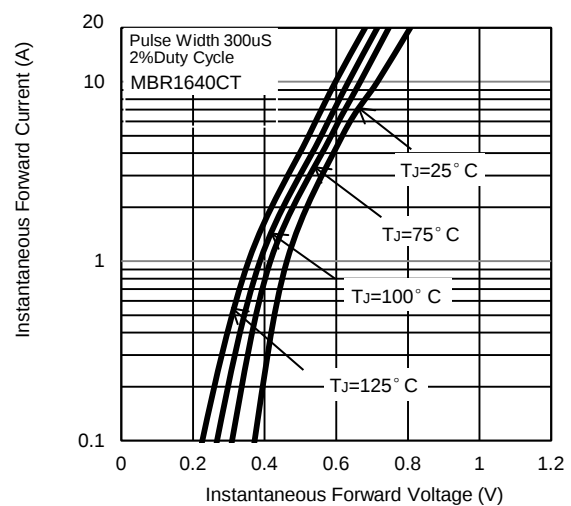


Fig. 5 - Typical Forward Characteristics

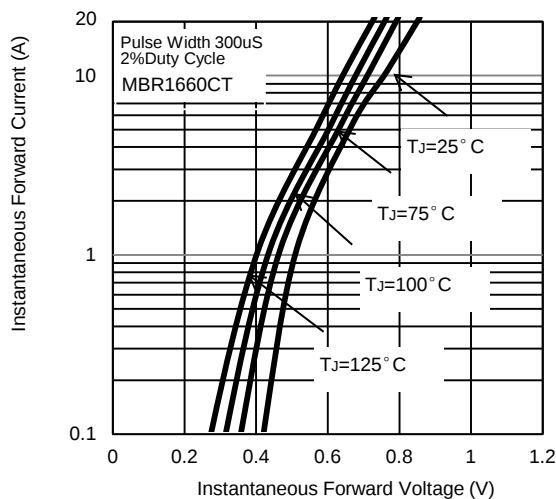
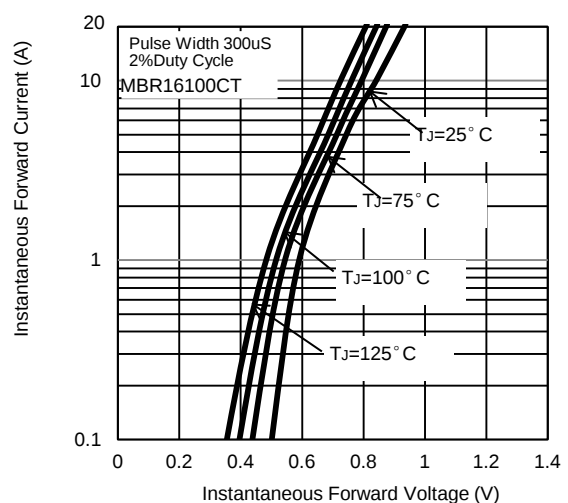


Fig. 6 - Typical Forward Characteristics



The curve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

Fig. 7 - Typical Forward Characteristics

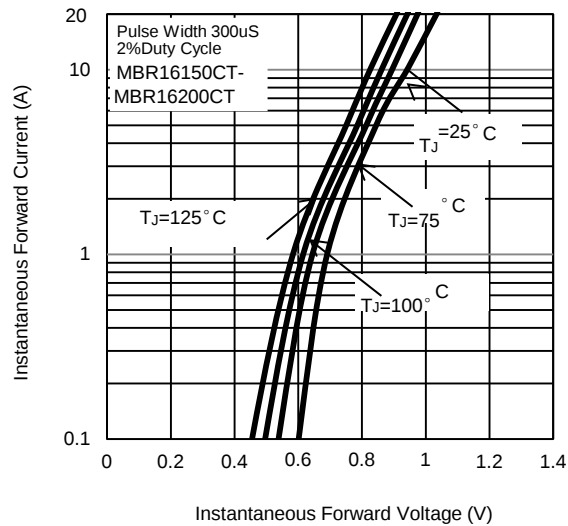
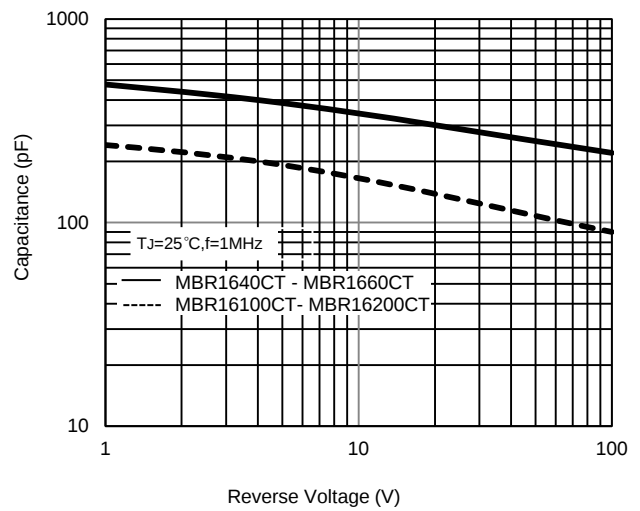


Fig. 8 - Typical Junction Capacitance



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)