

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 20 to 200 Volts
FORWARD CURRENT - 20.0 Amperes

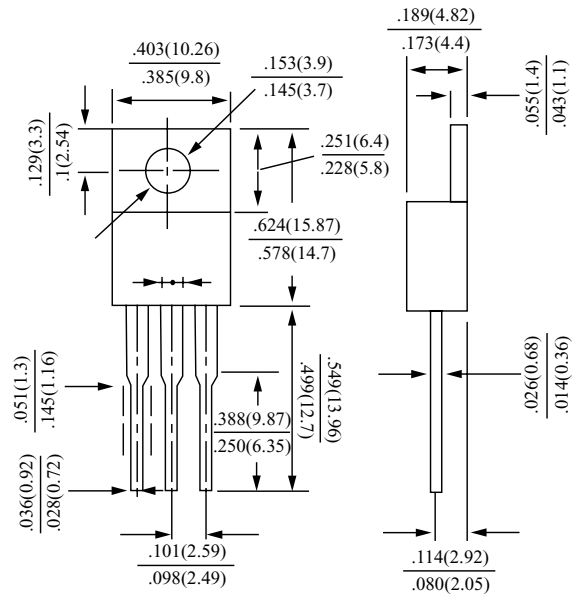
FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case : TO-220AB molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.948 grams
- Mounting position : Any

TO-220AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR 2020CT	MBR 2040CT	MBR 2050CT	MBR 2060CT	MBR 2080CT	MBR 20100CT	MBR 20150CT	MBR 20200CT	UNIT
Maximum repetitive peak reverse voltage	VRRM	20	40	50	60	80	100	150	200	V
Maximum RMS voltage	VRMS	14	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	VDC	20	40	50	60	80	100	150	200	V
Maximum average forward rectified current (per leg 10A)	I _F	20.0								A
Peak forward surge current, 8.3ms single half sine-wave superim posed on rated load	I _{FSM}	150								A
Maximum instantaneous I _F =10A @25°C @100°C	V _F	0.70 0.60		0.75 0.70		0.85 0.75		0.92 0.82		V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	I _R	0.2 20.0								mA
Typical Junction Capacitance	C _J	410		300		250		200	170	pF
Typical Thermal Resistance	R _{θJC}	3								°C/W
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +175								°C

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

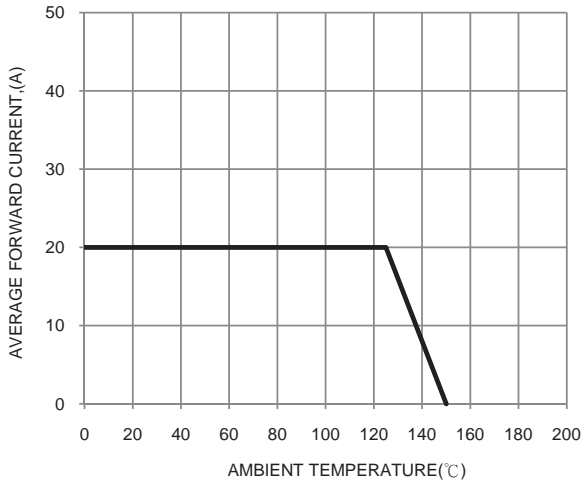


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

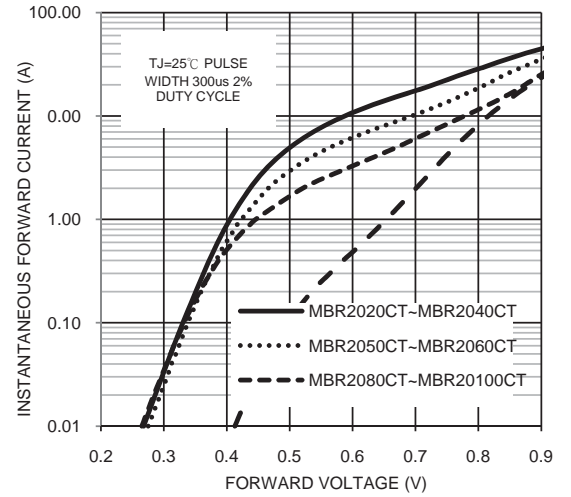


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

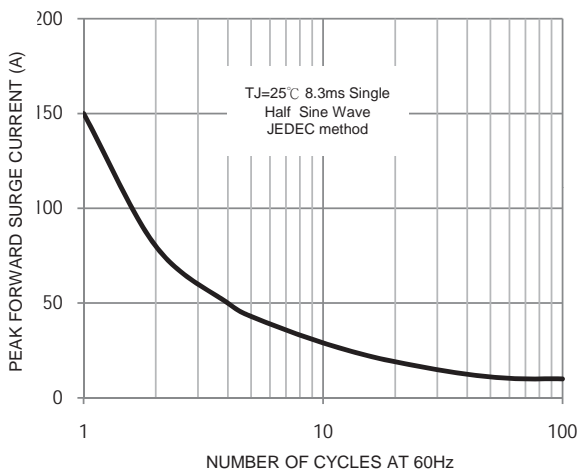


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

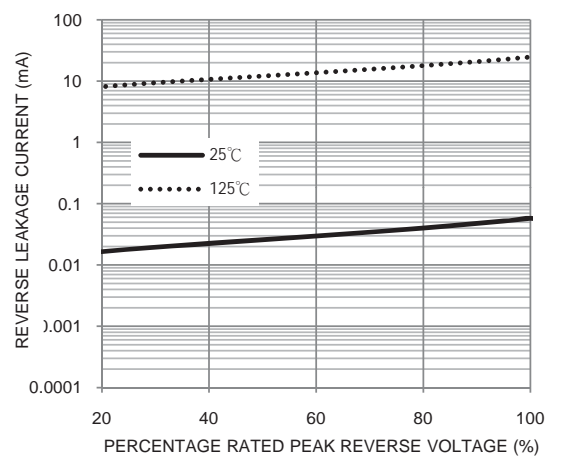


FIG. 5-TYPICAL JUNCTION CAPACITANCE

