



DATA SHEET

MBR2020CT~MBR20100CT

20 AMPERES SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts **CURRENT** 20 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- Guardring for overvoltage protection
- For use in low voltage,high frequency inverters free wheeling , and polarity protection applications.
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: TO-220AB molded plastic

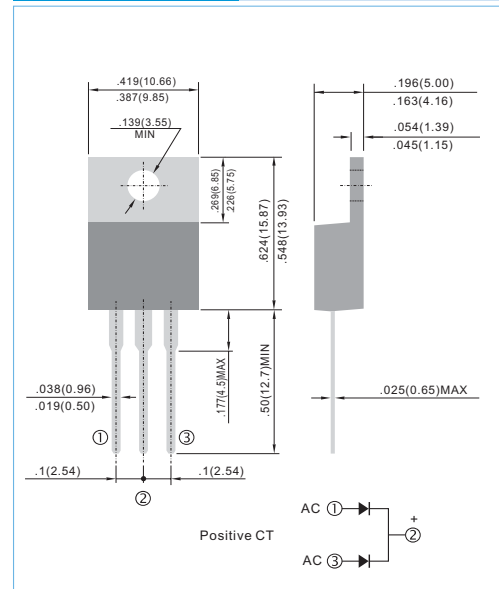
Terminals: solder plated, solderable per MIL-STD-750, Method 2026

Polarity: As marked.

Mounting Position: Any

Weight: 0.08 ounces, 2.24grams.

TO-220AB Unit : inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR2020CT	MBR2030CT	MBR2040CT	MBR2045CT	MBR2050CT	MBR2060CT	MBR2080CT	MBR20100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	45	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	45	50	60	80	100	V
Maximum Average Forward Current (See fig.1)	I _{AV}	20								A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	150								A
Maximum Forward Voltage at 10A, per leg	V _F	0.65				0.8				V
Maximum DC Reverse Current T _c =25 °C at Rated DC Blocking Voltage T _c =125°C	I _R	0.1				20				mA
Typical Thermal Resistance	R _{θJC}	2								°C / W
Operating Junction Temperature Range	T _J	-50 TO + 150								°C
Storage Temperature Range	T _{STG}	-50 TO + 150								°C

Notes :

Both Bonding and Chip structure are available.



RATING AND CHARACTERISTIC CURVES

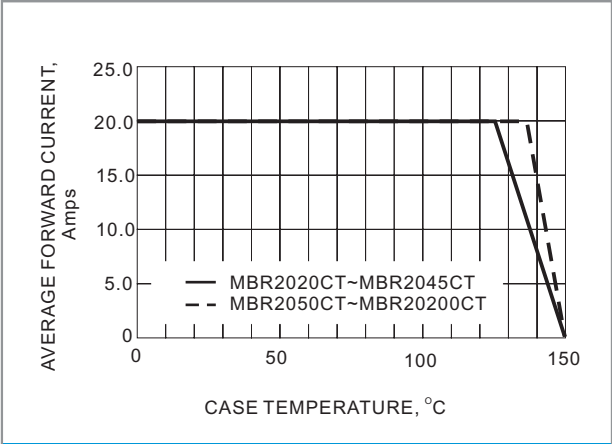


Fig. 1- FORWARD CURRENT DERATING CURVE

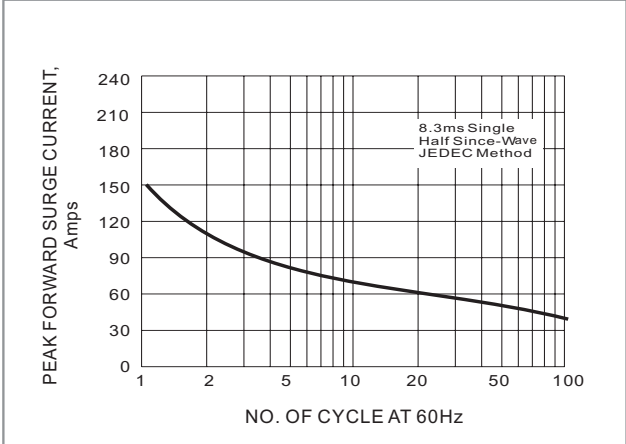


Fig. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT

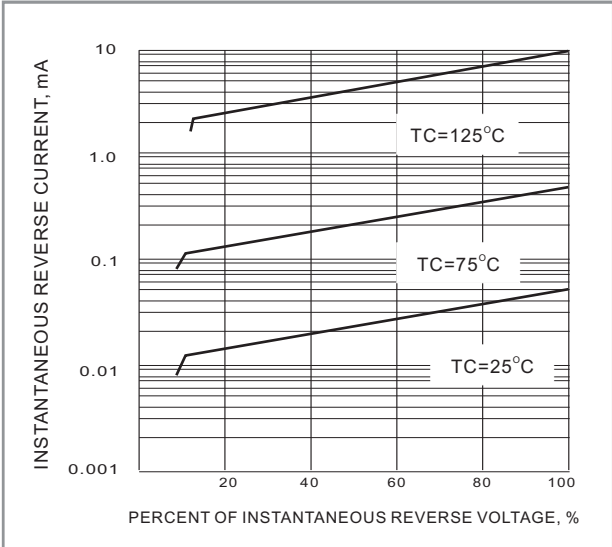


Fig. 3- TYPICAL REVERSE CHARACTERISTICS

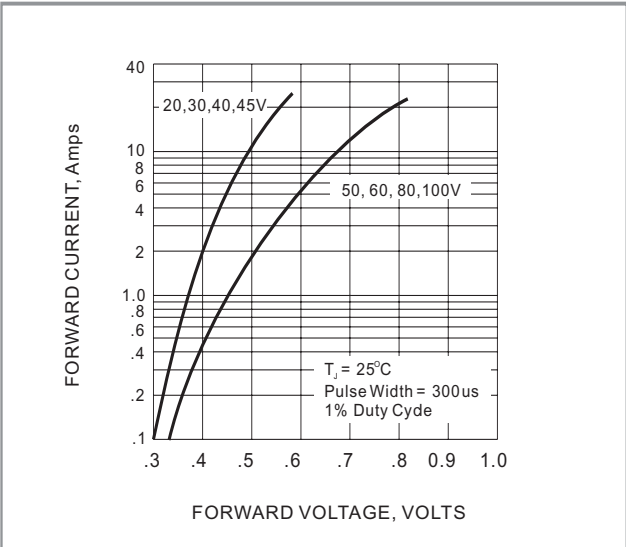


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS