

MBRF2045CT

20 AMPERES SCHOTTKY BARRIER RECTIFIERS

FEATURES

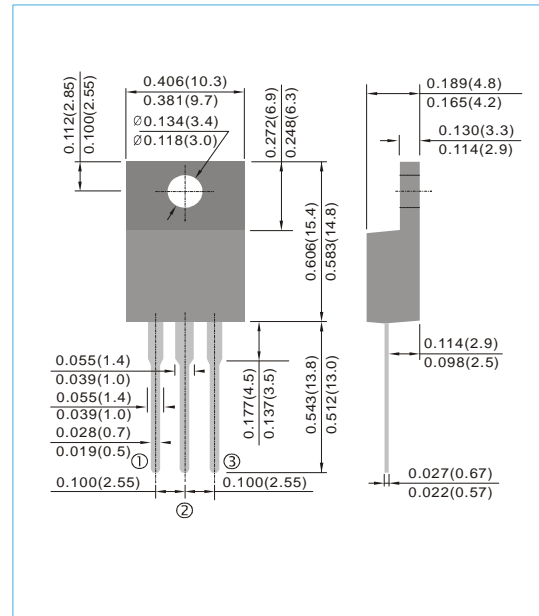
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: TO-220AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.0655 ounces, 1.86 grams.

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	MBRF2045CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	31.5	V
Maximum DC Blocking Voltage	V _{DC}	45	V
Maximum Average Forward Current (See fig.1)	I _{F(AV)}	20	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	200	A
Maximum Forward Voltage at 5A, per leg	V _F	0.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.001 20	μ A
Typical Thermal Resistance	R _{θJC}	2	°C / W
Operating and Storage Junction Temperature Range	T _J , T _{STG}	-65 to + 175	°C

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RATING AND CHARACTERISTIC CURVES

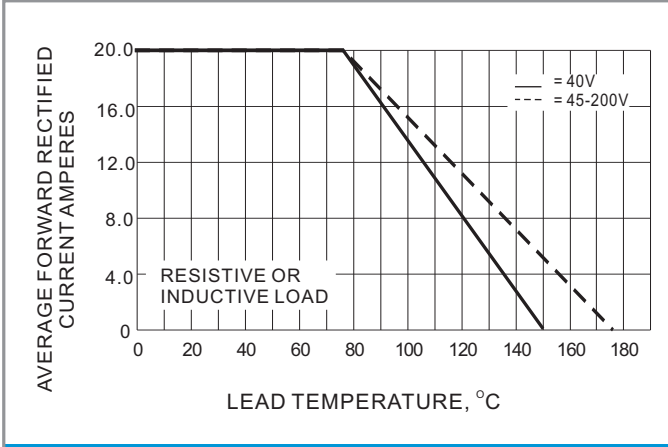


Fig.1- FORWARD CURRENT DERATING CURVE

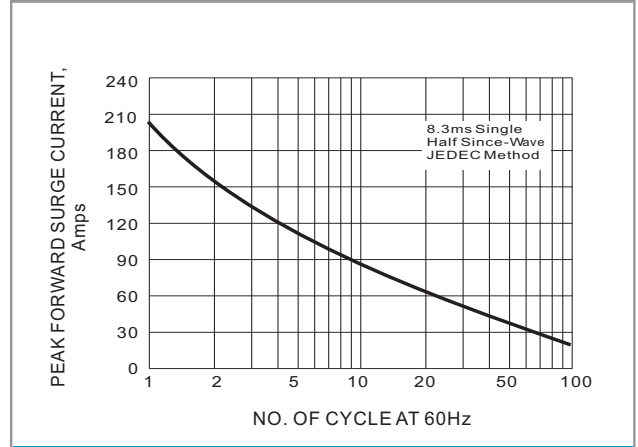


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

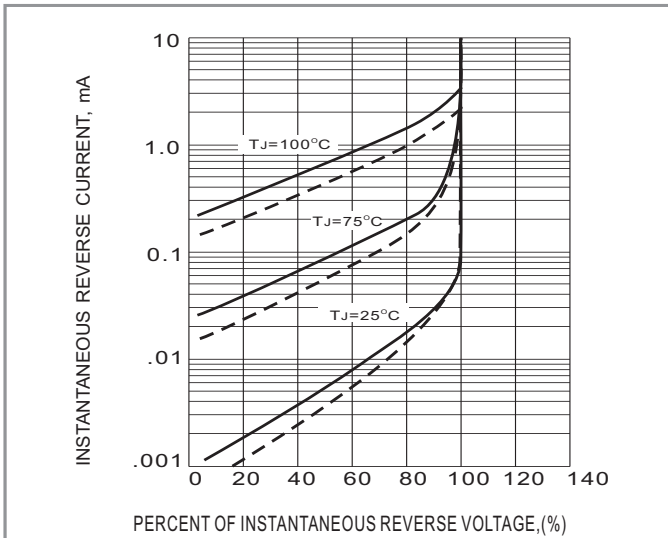


Fig.3- TYPICAL REVERSE CHARACTERISTICS

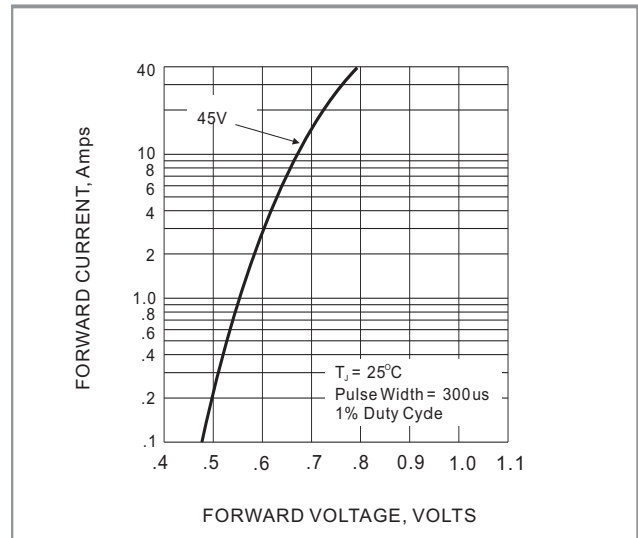


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS