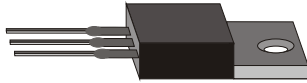
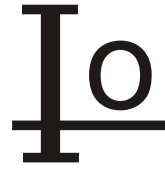


MBR2045CT

20.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any
- * Weight: 1.81 grams
- * Lead Free Finish/RoHS Compliant

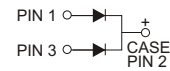
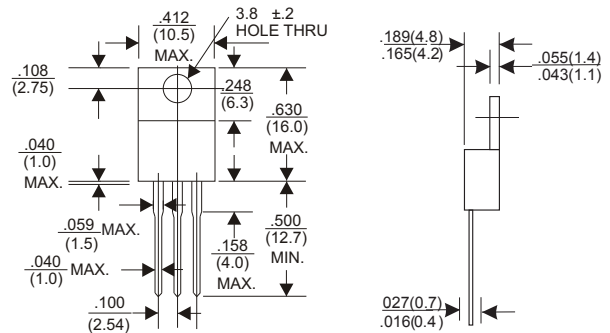
VOLTAGE RANGE

45 Volts

CURRENT

20.0 Ampere

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	MBR2045 CT	UNITS
Maximum Recurrent Peak Reverse Voltage	45	V
Maximum RMS Voltage	31	V
Maximum DC Blocking Voltage	45	V
Maximum Average Forward Rectified Current See Fig. 1	20	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage per Leg at 10.0A	0.65	V
Maximum DC Reverse Current Ta=25°C	500	uA
at Rated DC Blocking Voltage Ta=100°C	100	mA
Typical Junction Capacitance (Note1)	700	pF
Typical Thermal Resistance R _{JC} (Note 2)	3.0	°C/W
Operating Temperature Range T _j	-65 — +125	°C
Storage Temperature Range T _{STG}	-65 — +150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (MBR2045CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

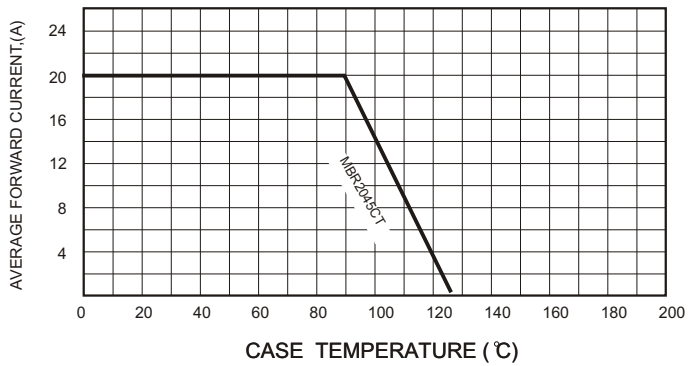


FIG.2-TYPICAL FORWARD CHARACTERISTICS

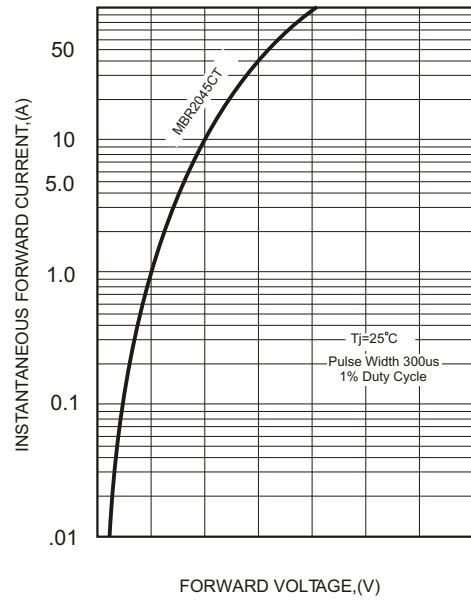


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

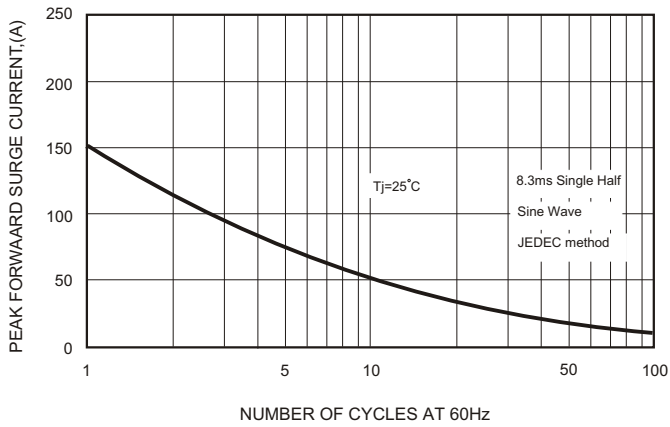


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

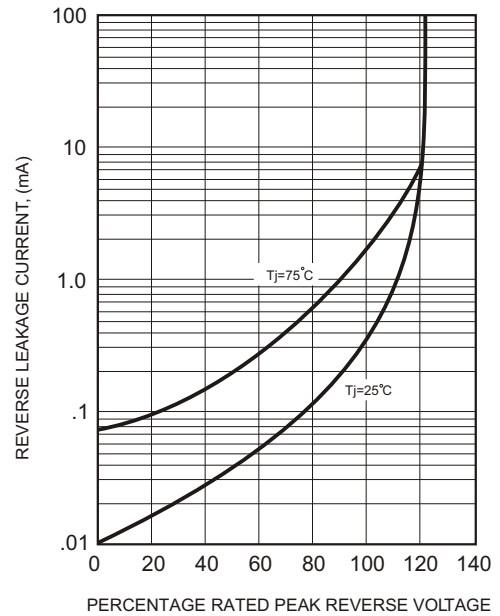


FIG.4-TYPICAL JUNCTION CAPACITANCE

