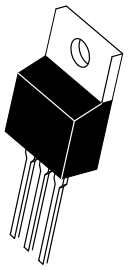
GOODWORK

MBR40L45CT THRU MBR40L100CT

40.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Good for switching mode application

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Lead solderable per MIL-STD-202, method 208 guranteed
* Polarity: As Marked
* Mounting position: Any

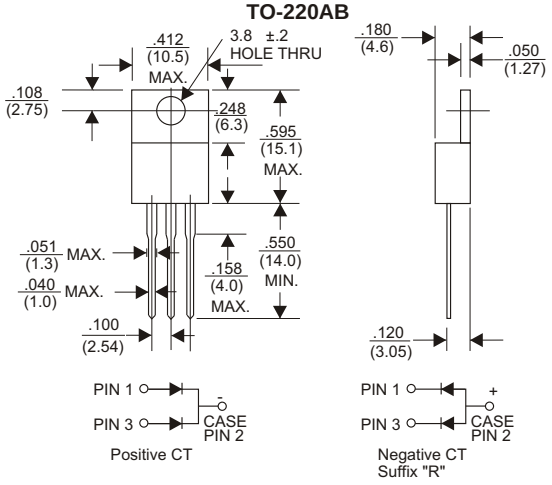
VOLTAGE RANGE

45 to 100 Volts

CURRENT

40.0 Amperes

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	MBR40L45CT	MBR40L60CT	MBR40L100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	45	60	100	V
Maximum RMS Voltage	45	60	100	V
Maximum DC Blocking Voltage	32	42	70	V
Maximum Average Forward Rectified Current at Tc=125℃	40			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	300			A
Maximum Instantaneous Forward Voltage at 40A	0.48	0.55	0.7	0.85	V
Maximum DC Reverse Current Ta=25℃	0.2			mA
at Rated DC Blocking Voltage Ta=100℃	50			mA
Typical Junction Capacitance (Note1)	550			pF
Typical Thermal Resistance RθJC (Note 2)	2.5			℃/W
Operating Temperature Range TJ	-65 —+150			℃
Storage Temperature Range TSTG	-65 — +150			℃

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (MBR40L45CT THRU MBR40L100CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

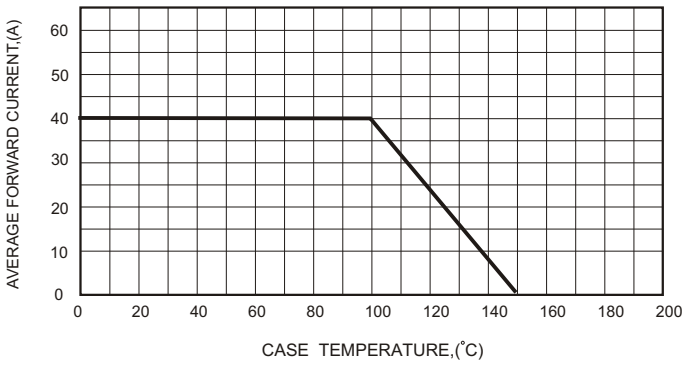


FIG.2-TYPICAL FORWARD CHARACTERISTICS

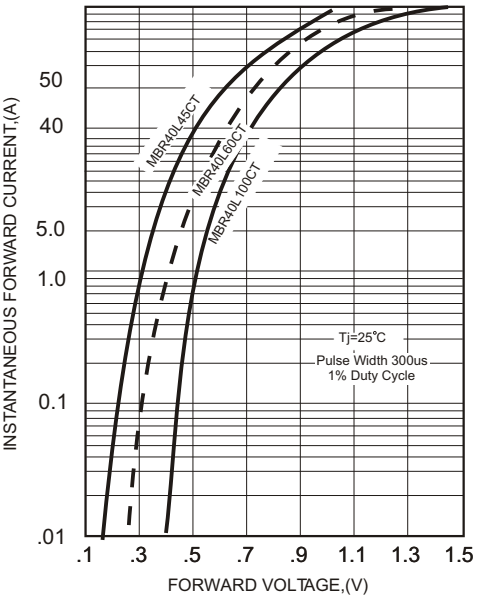


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

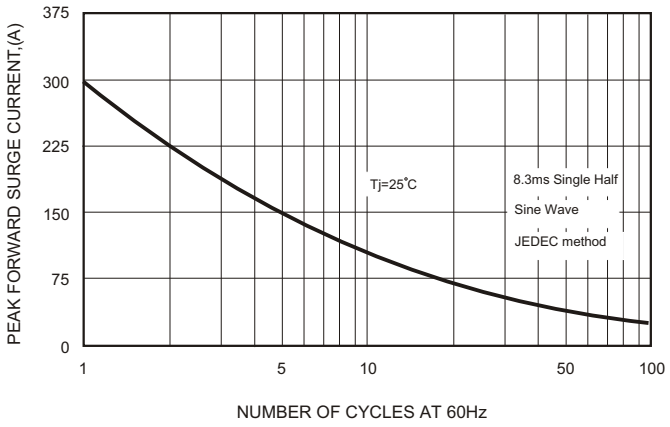


FIG.4-TYPICAL JUNCTION CAPACITANCE

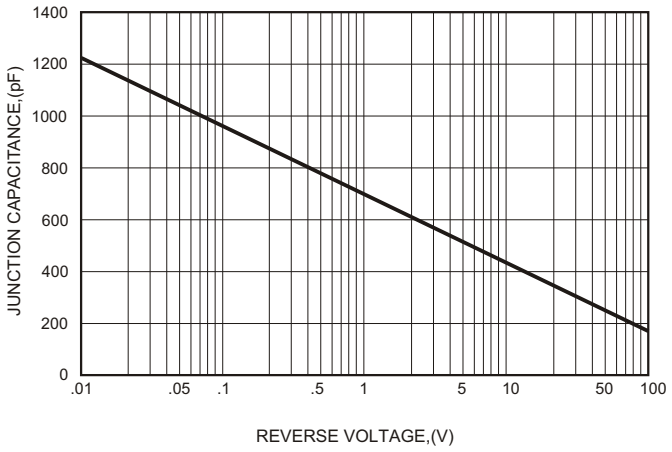


FIG.5 - TYPICAL REVERSE CHARACTERISTICS