

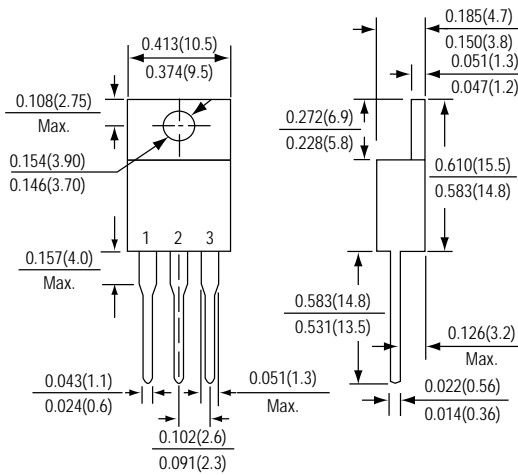


MBR10100CTH THRU MBR10200CTH SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 100 to 200 Volts

Forward Current - 10 Amperes

TO-220AB



*Dimensions in inches and (millimeters)



FEATURES

- * Halogen-free type
- * Lead free product
- * Low forward voltage drop
- * High current capacity
- * High surge current capability
- * Low power loss & high efficiency
- * Plastic Material-UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic body

Terminals : Plated Leads, solderable per MIL-STD-750, Method 2026

Polarity : Molded on body

Mounting Position : Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	MBR10100CTH	MBR10150CTH	MBR10200CTH	UNITS
Maximum repetitive peak reverse voltage	VRRM	100	150	200	Volts
Maximum RMS voltage	VRMS	70	105	140	Volts
Maximum DC blocking voltage	VDC	100	150	200	Volts
Maximum average forward rectified current see Fig. 1	I (AV)	10			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM	125			Amps
Maximum instantaneous forward voltage (IF= 5 A, TA=25°C)	VF	0.85	0.88	0.90	Volts
Maximum DC reverse current at rated DC blocking voltage	IR	0.15 30			mA
Typical junction capacitance (Note 1)	CJ	280			pF
Typical thermal resistance (Note 2)	R JC	3.0			/ W
Operating temperature range	TJ	-50 to +150			
Storage temperature range	TSTG	-55 to +150			

Note : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V.
2. Thermal resistance junction to case.

RATINGS AND CHARACTERISTIC CURVES MBR10100CTH THRU MBR10200CTH

FIG.1 - FORWARD CURRENT DERATING CURVE

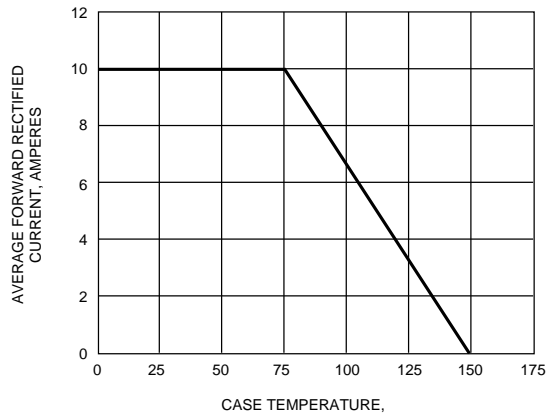


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

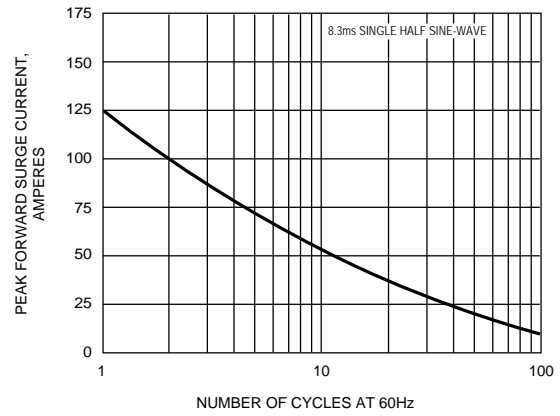


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

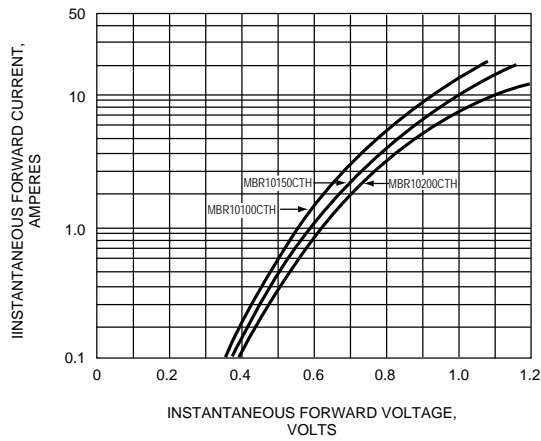


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

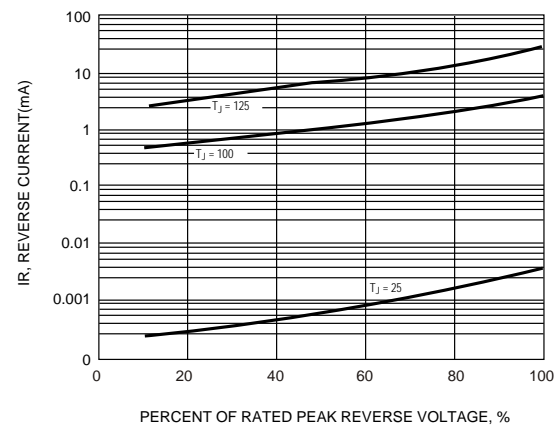


FIG.5 - TYPICAL JUNCTION CAPACITANCE

