

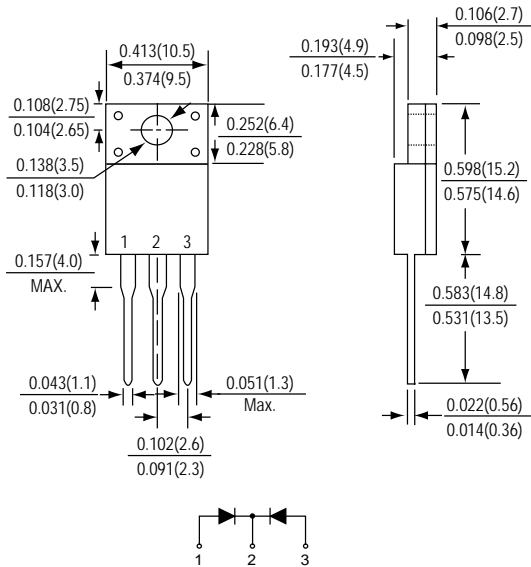


# MBR10100CF THRU MBR10200CF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 100 to 200 Volts

Forward Current - 10 Amperes

ITO-220AB



\*Dimensions in inches and (millimeters)



## FEATURES

- \* Lead free product
- \* Low forward voltage drop
- \* High current capacity
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction
- \* Plastic Material-UL Recognition Flammability Classification 94V-0

## MECHANICAL DATA

**Case :** JEDEC ITO-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	MBR10100CF	MBR10150CF	MBR10200CF	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	70	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	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	I <sub>FSM</sub>	125			Amps
Maximum instantaneous forward voltage ( I <sub>F</sub> = 5 A, T <sub>A</sub> =25 °C )	V <sub>F</sub>	0.85	0.88	0.90	Volts
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	0.15 30			mA
Typical junction capacitance (Note 1)	C <sub>J</sub>	280			pF
Typical thermal resistance (Note 2)	R <sub>JC</sub>	3.2			/ W
Operating temperature range	T <sub>J</sub>	-55 to +150			
Storage temperature range	T <sub>STG</sub>	-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 MBR10100CF THUR MBR10200CF

FIG.1 - FORWARD CURRENT DERATING CURVE

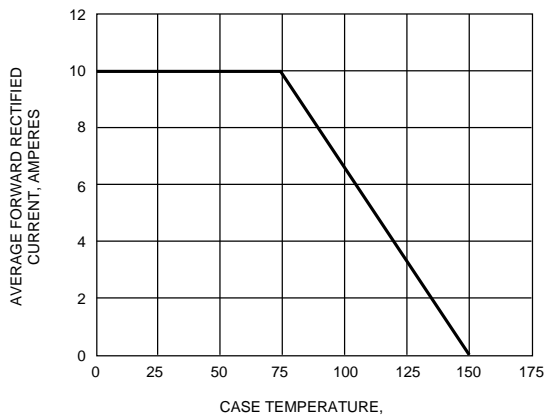


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

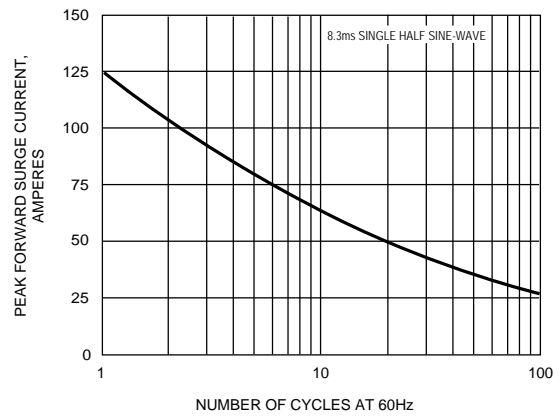


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

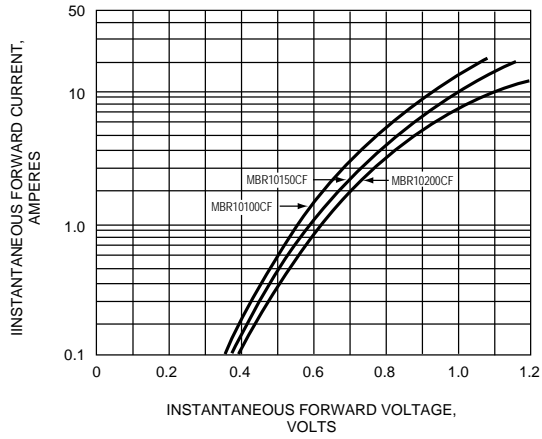


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

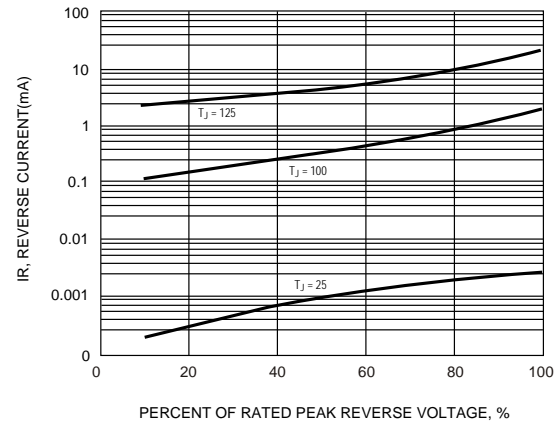


FIG.5 - TYPICAL JUNCTION CAPACITANCE

