



MBRF10150CT THRU MBRF10200CT

Reverse Voltage - 150 to 200 Volts Forward Current - 10.0 Ampere

SCHOTTKY BARRIER RECTIFIER

Features

- ◆ High surge capacity.
For use in low voltage, high frequency inverters, free
- ◆ wheeling, and polarity protection applications.
Metal silicon junction, majority carrier conduction.
- ◆ High current capability, low forward voltage drop.
- ◆ Guard ring for over voltage protection.

Mechanical Data

Case : JEDEC TO-220AB Molded plastic body

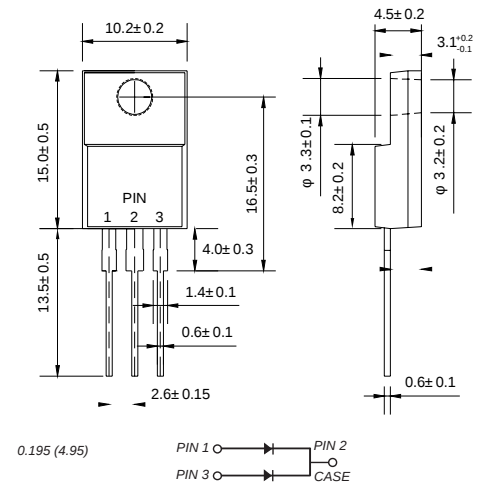
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.060 ounce, 1.67 grams

ITO-220AB



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD MBRF 10150CT	MDD MBRF 10200CT	UNITS
Marking Code				
Maximum repetitive peak reverse voltage	V_{RRM}	150	200	V
Maximum RMS voltage	V_{RMS}	135	140	V
Maximum DC blocking voltage	V_{DC}	150	200	V
Maximum average forward rectified current (see fig.1)	I_{AV}	10.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125		A
Maximum instantaneous forward voltage at 5.0A	V_F	0.95		V
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=100^{\circ}C$	I_R	0.1 15.0		mA
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	1.5		$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150		$^{\circ}C$
storage temperature range	T_{STG}	-55 to +150		$^{\circ}C$

Note:2. Thermal resistance from junction to case.



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Ratings And Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

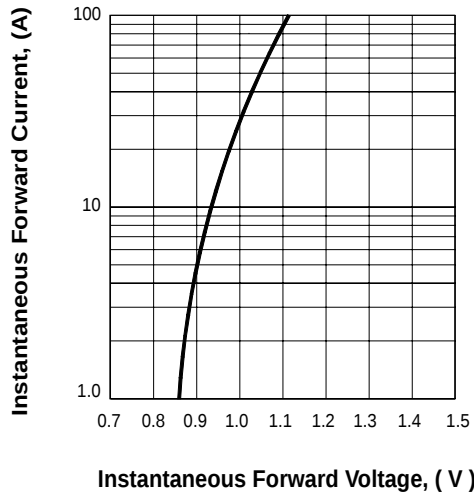


FIG.2 FORWARD DERATING CURVE

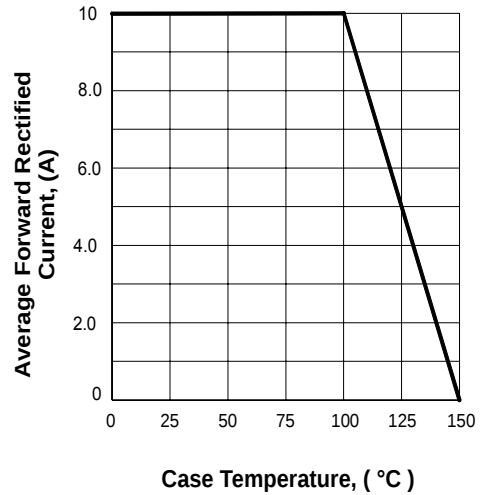
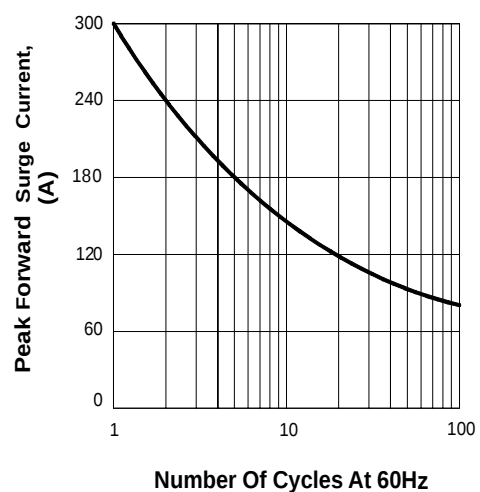
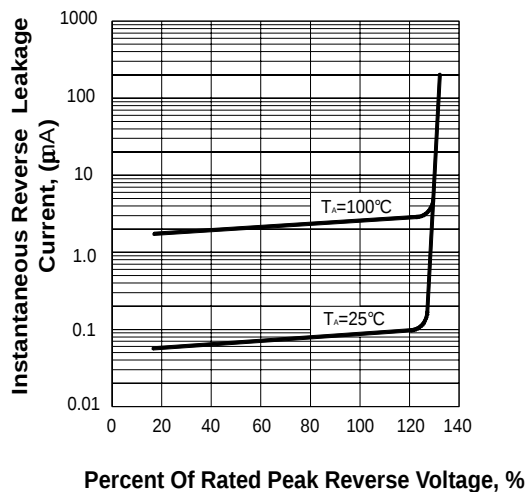


FIG.3 TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.