MBR10150CT THRU MBR1020CT

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

## SCHOTTKY BARRIER RECTIFIER

Features

TO-220AB

RoHS COMPLIANT

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C,0.25"(6.35mm) from case for 10 seconds

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
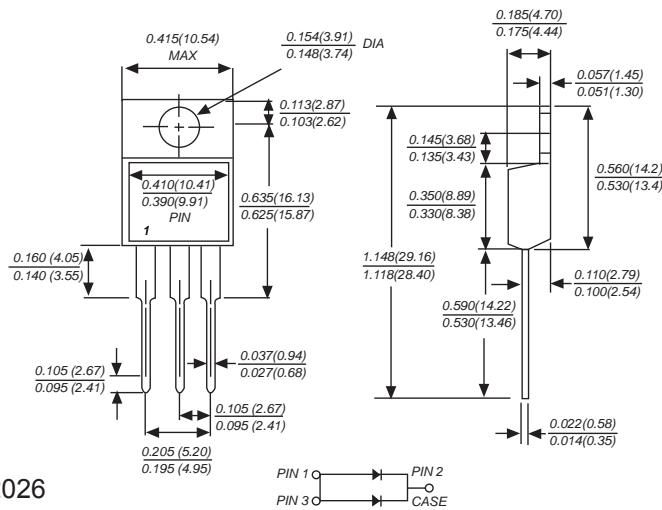
Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

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

Parameter	SYMBOLS	MBR 10150CT	MBR 10200CT	UNITS
Marking Code		MDD MBR 10150CT	MDD MBR 10200CT	
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 15.0A	V_F	0.95		V
Maximum DC reverse current $T_A=25℃$ at rated DC blocking voltage $T_A=100℃$	I_R	0.1 / 15.0		mA
Typical thermal resistance (NOTE 2)	$R_{θJC}$	1.5		℃/W
Operating junction temperature range	T_J	-50 to +150		℃
storage temperature range	T_{STG}	-50 to +150		℃

Note:2.Thermal resistance from junction to case.

Ratings And Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

Instantaneous Forward Current, (A)

Instantaneous Forward Voltage, (V)
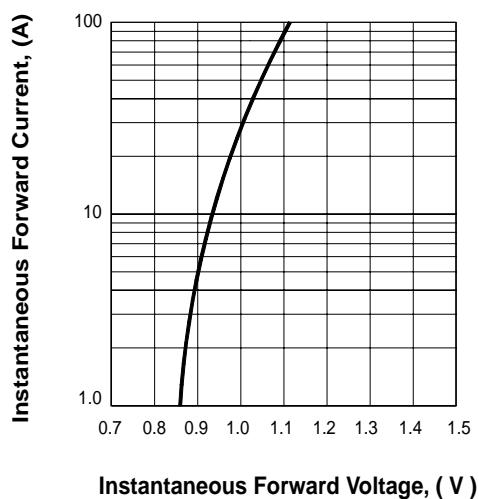
FIG.2 FORWARD DERATING CURVE

Average Forward Rectified Current, (A)

Case Temperature, (°C)
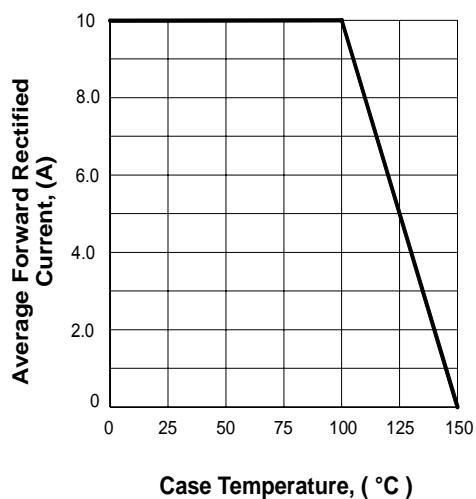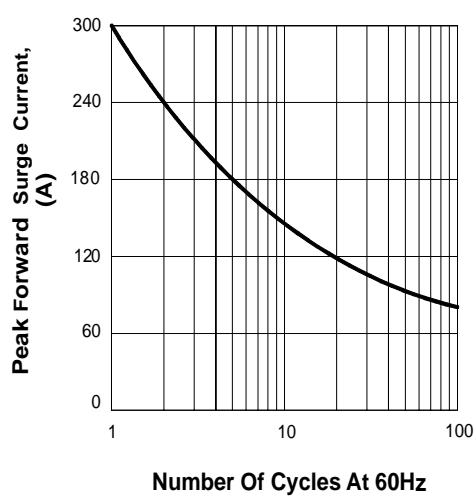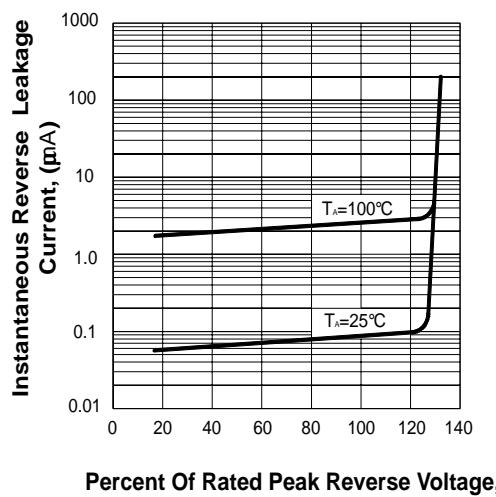
FIG.3 TYPICAL REVERSE CHARACTERISTICS

Instantaneous Reverse Leakage Current, (μA)

T_A=100℃

T_A=25℃

Percent Of Rated Peak Reverse Voltage, %

Peak Forward Surge Current, (A)

Number Of Cycles At 60Hz

The curve above is for reference only.