



MBR30150CT THRU MBR30200CT

Reverse Voltage - 150 to 200 Volts Forward Current - 30.0 Ampere

SCHOTTKY BARRIER RECTIFIER

Features

- ◆ 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

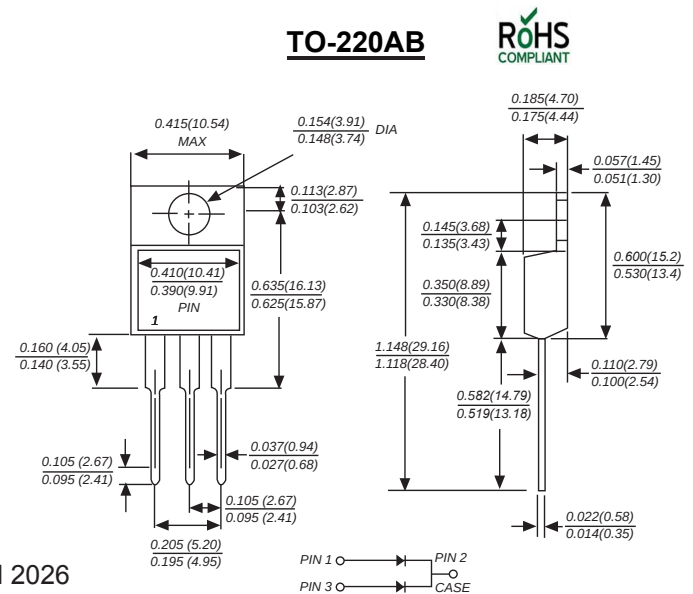
Case : JEDEC TO-220AB Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.080 ounce, 2.24 grams



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 MBR 30150CT	MDD MBR 30200CT	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}	30.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300		A
Maximum instantaneous forward voltage at 15.0A	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	0.2 50.0		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: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to case.



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Ratings And Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

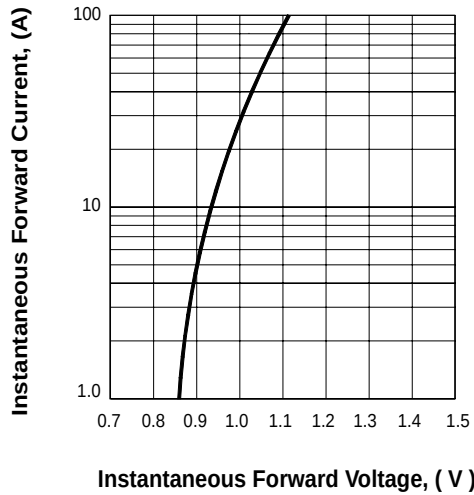


FIG.2 FORWARD DERATING CURVE

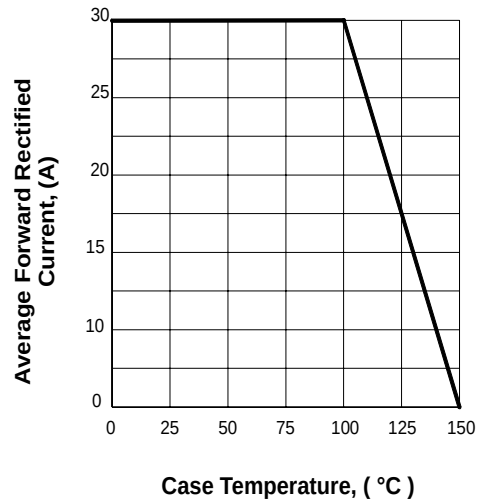
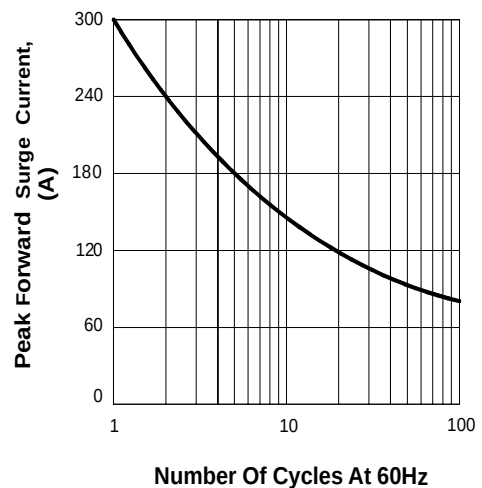
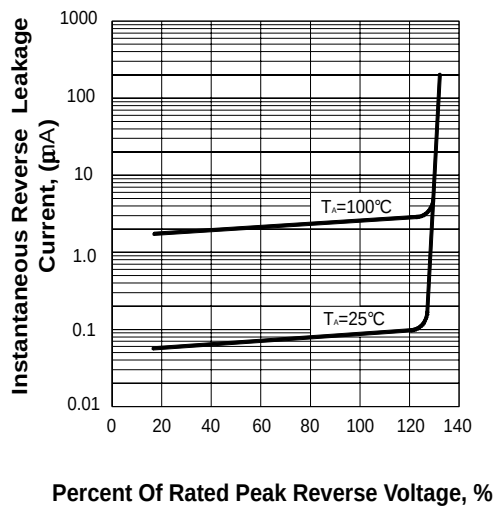


FIG.3 TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.