

MBR20300LCT

20.0Amp Schottky Barrier Rectifiers

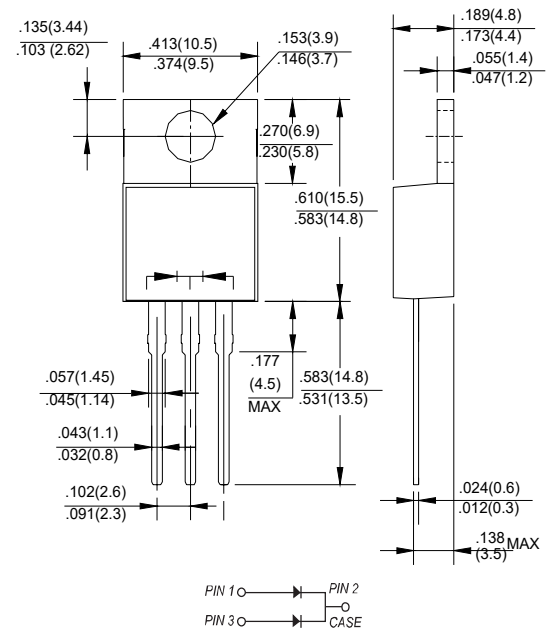
TO-220AB

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/10 seconds at terminals

Mechanical Data

Terminals : Pure tin plated leads, solderable per MIL-STD-202, Method 208 guaranteed
 Polarity : Polarity symbol marking on body
 Mounting torque: 5 in- lbs, max
 Weight: 1.92 grams



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	MBR 20300LCT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	300	V
Maximum RMS voltage	V_{RMS}	210	V
Maximum DC blocking voltage	V_{DC}	300	V
Maximum average forward rectified current at $T_C=95^\circ\text{C}$ (See Fig.1)	$I_{(AV)}$	20.0 10.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0	A
Peak Forward Voltage at 10.0A DC (Note1)	V_F	0.90	V
Maximum DC reverse current at rated DC blocking voltage	I_R	0.1 20	mA
Typical Thermal Resistance (Note3)	R_{qJC}	3.0	°C/W
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

NOTES:1.300us pulse width,2% duty cycle.

2.Thermal resistance junction to case.

3.The typical data above is for reference only(典型值仅供参考).

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Ratings And Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

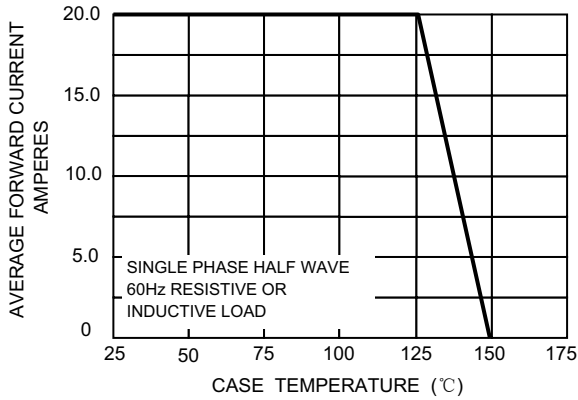


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

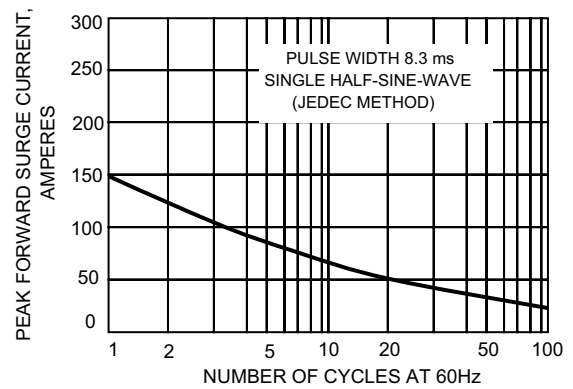


FIG.3-TYPICAL REVERES CHARACTERISTICS

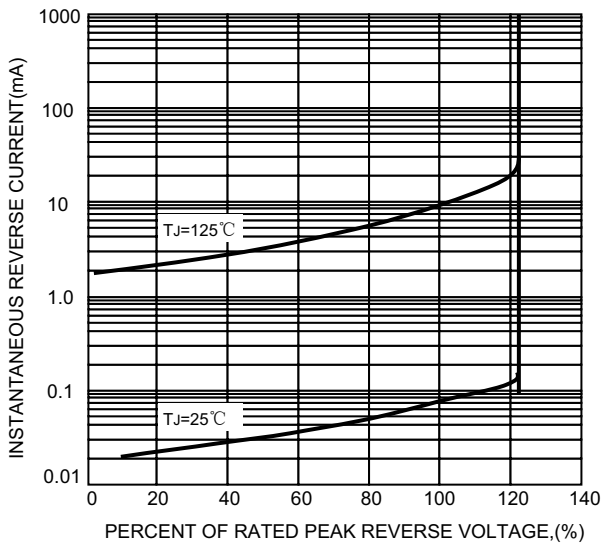


FIG.4-TYPICAL FORWARD CHARACTERISTICS

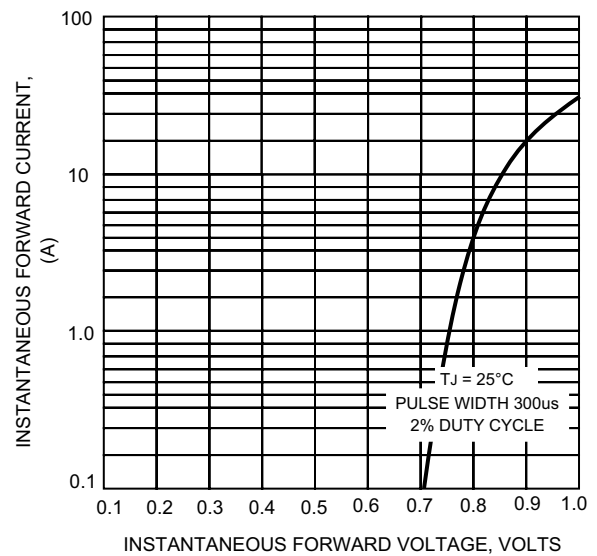
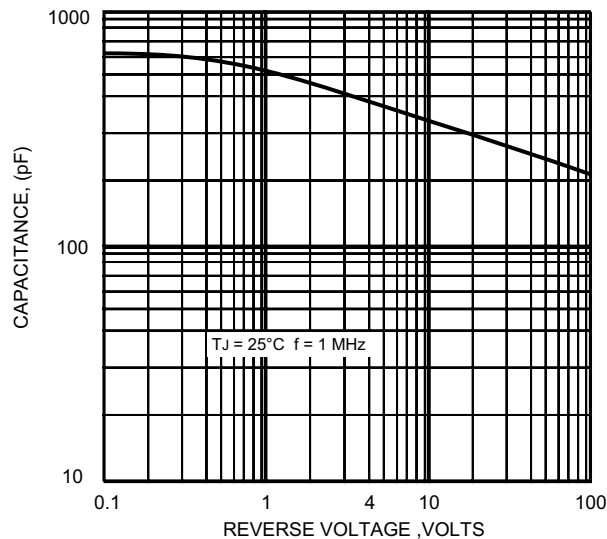


FIG.5 – TYPICAL JUNCTION CAPACITANCE



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考!)