

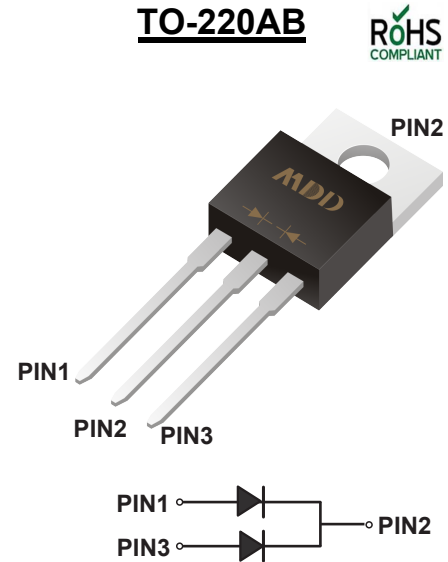
GCHOTTKY BARRIER RECTIFIERS

Features

- ◆ High current capability
- ◆ Low forward voltage drop
- ◆ Low power loss, high efficiency
- ◆ High surge capability
- ◆ High temperature soldering guaranteed
- ◆ Mounting position: any

Mechanical Data

- Case : JEDEC TO-220AB Molded plastic body
- Weight : 0.067ounce, 1.9 grams
- Terminals: Lead solderable per MIL-STD-202, Method 208



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

MCHARACTERISTICS	SYMBOL	MBR20U100DCT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current per leg per device	$I_{(AV)}$	10 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) per leg	I_{FSM}	200	A
Maximum instantaneous forward voltage at 10A(per leg)	V_F	0.72	V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	0.1 20	mA
Typical Junction Capacitance(note1)	C_J	600	pF
Maximum Thermal Resistance Junction To Case	$R_{\theta JC}$	2	$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Note: 1. Measured at 1 MHz and applied reverse voltage of 4 V D.C

Ratings And Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

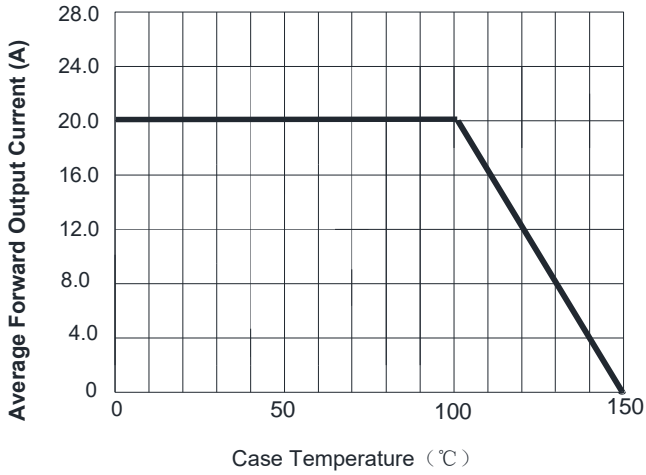


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

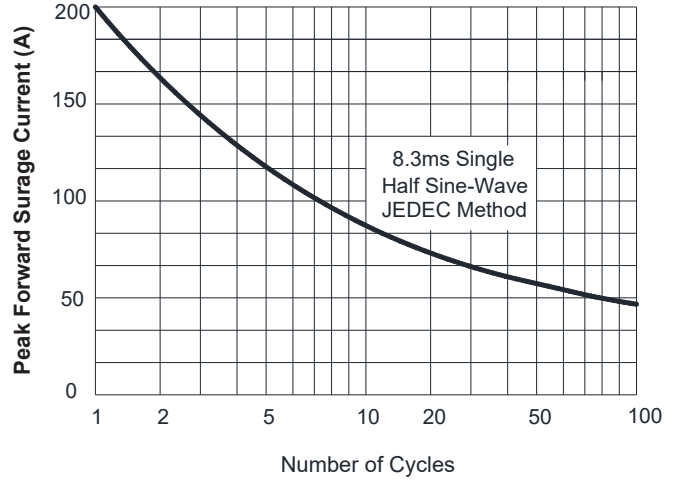


Fig.3 Typical Forward Characteristic(per leg)

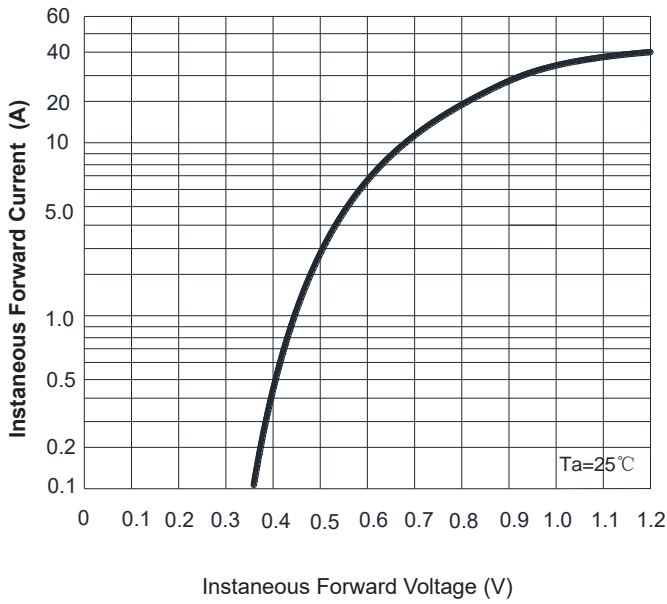
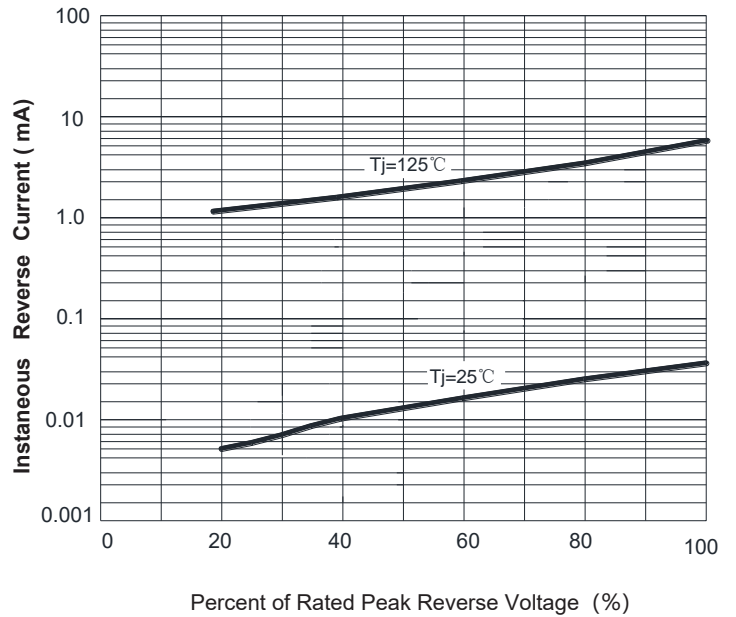


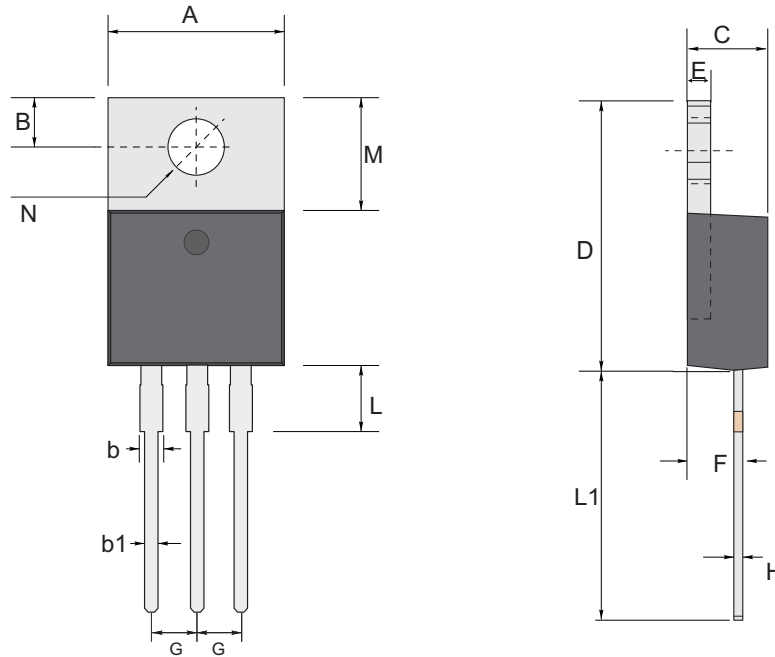
Fig.2 Typical Reverse Characteristics



The curve above is for reference only.

Outline

TO-220AB Package Outline Dimensions



TO-220AB mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	10.45	2.94	1.77	0.94	4.76	16.0	1.40	2.90	2.54 TYPICAL	0.64	4.2	14.79	6.60	3.86
	min	9.85	2.54	1.14	0.62	4.42	14.6	1.14	2.20		0.35	2.8	13.00	6.13	3.8

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