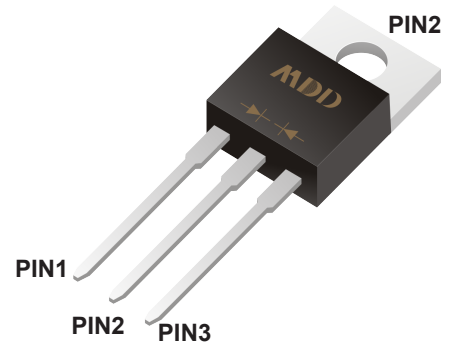


SCHOTTKY BARRIER RECTIFIER

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

TO-220AB



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

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 3045CT	MDD MBR 3060CT	MDD MBR 30100CT	MDD MBR 30150CT	MDD MBR 30200CT	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V _{RRM}	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	32	42	70	135	140	V
Maximum DC blocking voltage	V _{DC}	45	60	100	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}	250			300		A
Maximum instantaneous forward voltage at 15.0A	V _F	0.60	0.75	0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage	I _R	1.0			0.2		mA
		15.0	50.0		50.0		
Typical thermal resistance (NOTE 2)	R _{θJC}	2.0			1.5		°C/W
Operating junction temperature range	T _J	-55 to +150					°C
storage temperature range	T _{STG}	-55 to +150					°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to case.

Ratings And Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

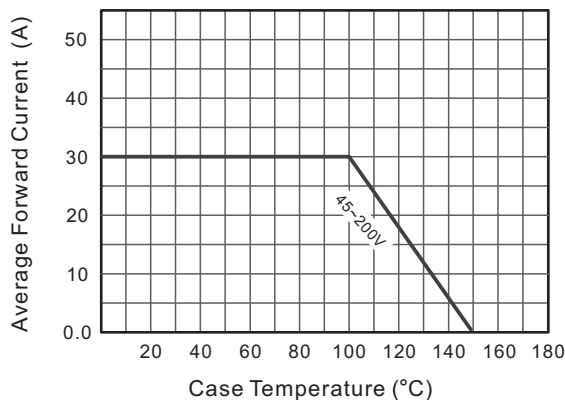


Fig.2 Typical Reverse Characteristics

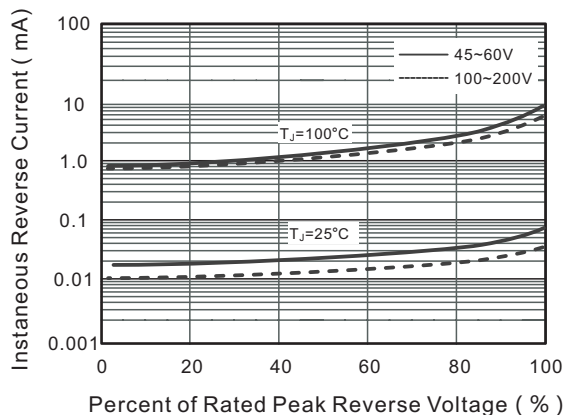


Fig.3 Typical Forward Characteristic(per leg)

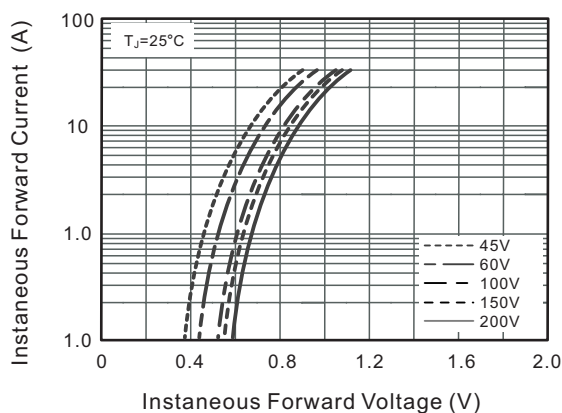
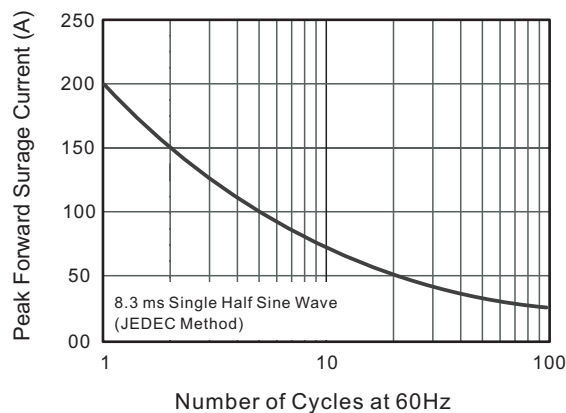


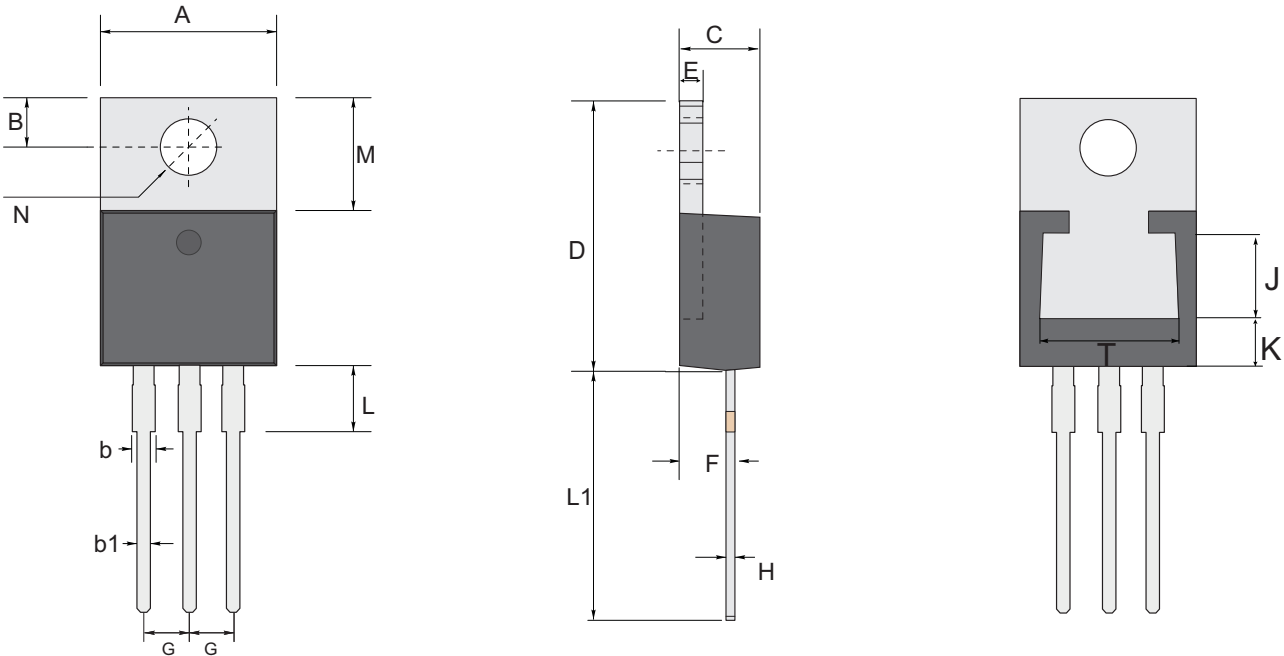
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.

Outlitne

TO-220AB Package Outline Dimensions



TO-220AB mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N	J	T	K
mm	max	10.45	2.94	1.77	0.94	4.76	16.0	1.40	2.80	2.54 TYPICAL	0.64	4.2	14.79	6.6 TYPICAL	3.8 TYPICAL	4.65 ref.	7.70 ref.	3.22 ref.
	typ	9.94	2.74	1.27	0.81	4.53	15.09	1.27	2.69		0.38	3.89	13.18					
	min	9.85	2.54	1.14	0.62	4.42	14.6	1.14	2.20		0.35	2.8	13.08					
mil	max	411	116	70	40	187	630	55	110	100 TYPICAL	25	165	582	259 TYPICAL	150 TYPICAL	1.83 ref.	303 ref.	126 ref.
	typ	391	107	50	31	178	594	50	105		15	153	519					
	min	388	100	45	24	174	575	45	87		14	110	515					