



MBR1040CT~MBR10200CT

10 AMPERES SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volt **CURRENT** 10 Ampere

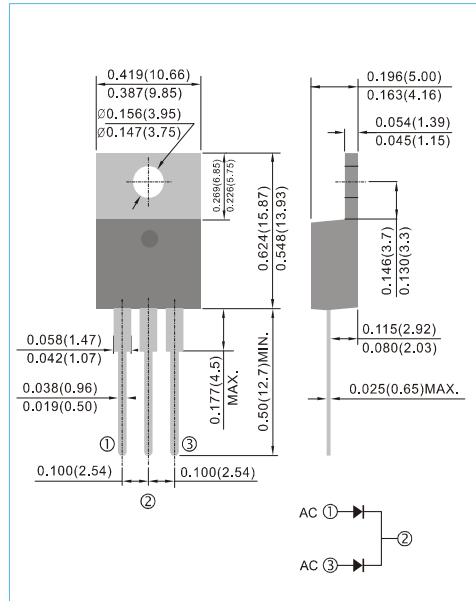
TO-220AB Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: TO-220AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Weight: 0.067 ounces, 1.89 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR1040 CT	MBR1045 CT	MBR1050 CT	MBR1060 CT	MBR1080 CT	MBR1090 CT	MBR10100 CT	MBR10150 CT	MBR10200 CT	UNITS		
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	50	60	80	90	100	150	200	V		
Maximum RMS Voltage	V _{RMS}	28	31.5	35	42	56	63	70	105	140	V		
Maximum DC Blocking Voltage	V _{DC}	40	45	50	60	80	90	100	150	200	V		
Maximum Average Forward Current (See fig.1)	I _{F(AV)}	10									A		
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150									A		
Maximum Forward Voltage at 5A, per leg	V _F	0.7	0.75		0.8			0.9			V		
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =125°C	I _R	0.05					20					mA	
Typical Thermal Resistance	R _{θJC}	2											°C / W
Operating and Storage Junction Temperature Range	T _J , T _{STG}	-55 to +150		-65 to +175									°C

Notes :

Both Bonding and Chip structure are available.



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TYPICAL CHARACTERISTIC CURVES

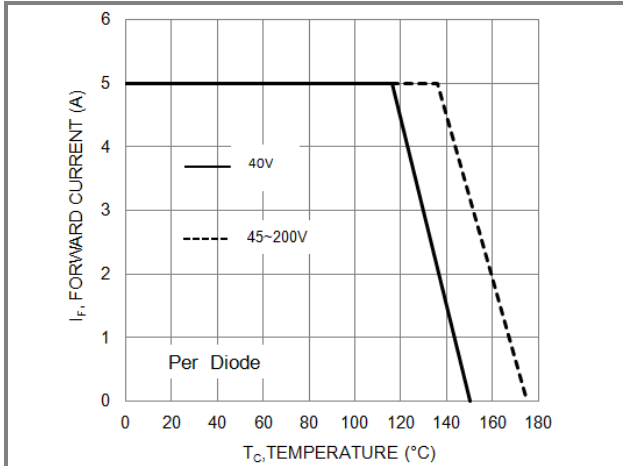


Fig.1 Forward Current Derating Curve

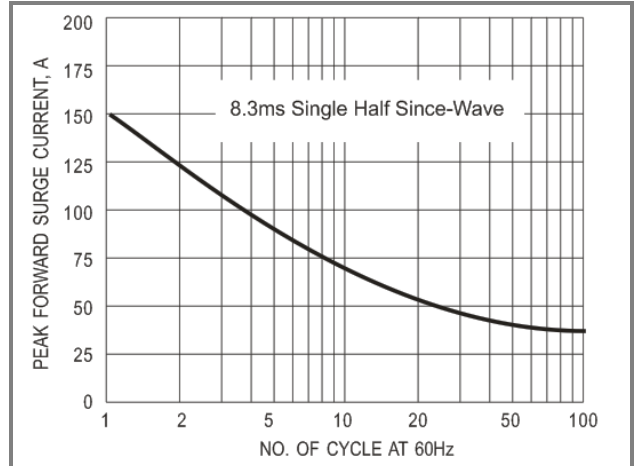


Fig.2 Typical Instantaneous Forward Capacitance

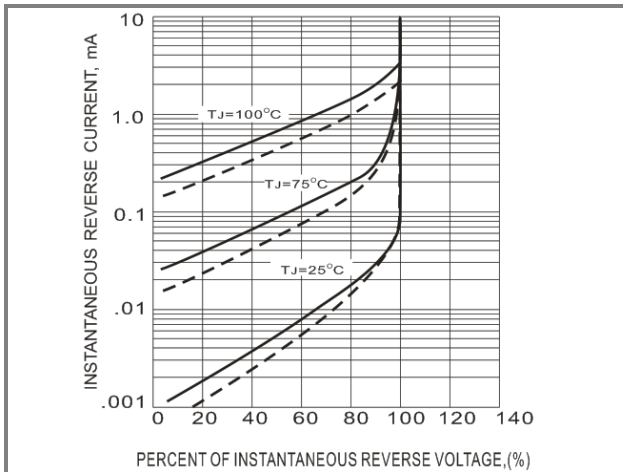


Fig.3 Typical Reverse Characteristics

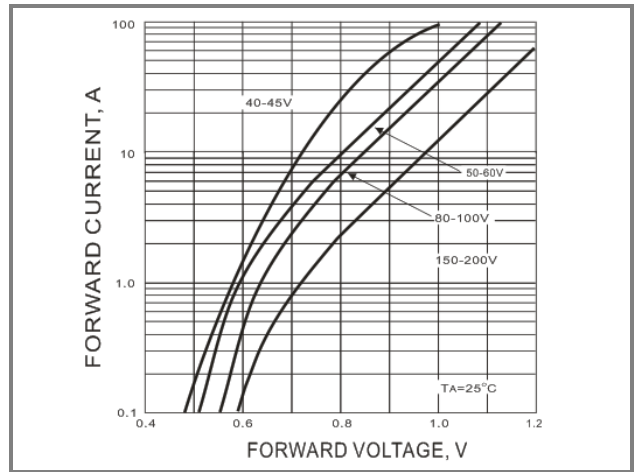


Fig.4 Typical Forward Characteristics

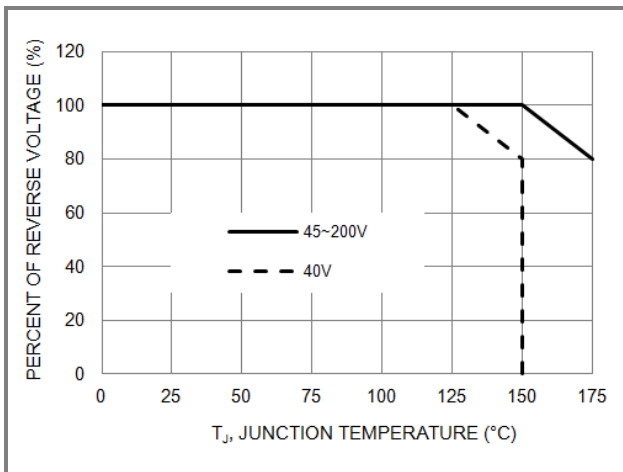


Fig.5 Operating Temperature Derating Curve



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Part No_packing code_Version

MBR1040CT_T0_00001

For example :

RB500V-40 **R2** **00001**



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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