



### 20 AMPERES SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volt CURRENT 20 Ampere

#### **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 polarlity protection applications.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

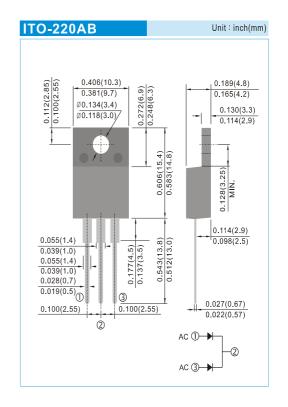
### **MECHANICAL DATA**

• Case: ITO-220AB molded plastic

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

· Polarity: As marked.

• Weight: 0.056 ounces, 1.6 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%

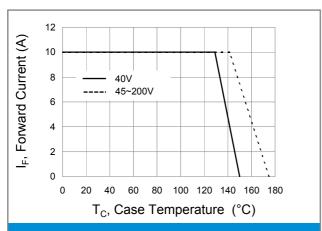
PARAMETER	SYMBOL	MBR2040FCT	MBR2045FCT	MBR2050FCT	MBR2060FCT	MBR2080FCT	MBR2090FCT	MBR20100FCT	MBR20150FCT	MBR20200FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	45	50	60	80	90	100	150	200	٧
Maximum RMS Voltage	V <sub>RMS</sub>	28	31.5	35	42	56	63	70	105	140	٧
Maximum DC Blocking Voltage	VDC	40	45	50	60	80	90	100	150	200	٧
Maximum Average Forward Current (See fig.1)	I <sub>F(AV)</sub>	20						A			
Peak Forward Surge Current : 8.3ms single half sine- wave superimposed on rated load	I <sub>FSM</sub>	200							А		
Maximum Forward Voltage at 10A, per leg	V <sub>F</sub>	0	0.7 0.75 0.8 0.9			.9	٧				
Maximum DC Reverse Current at Rated DC T <sub>.j</sub> =25°C Blocking Voltage T <sub>.j</sub> =125°C	I <sub>R</sub>	0.05 20						mA			
Typical Thermal Resistance	R <sub>eJC</sub>	2							°C / W		
Operating and Storage Junction Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150 -65 to +175							°C		

Notes :

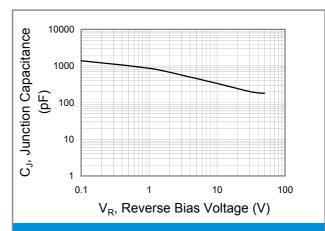
Both Bonding and Chip structure are available.







**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

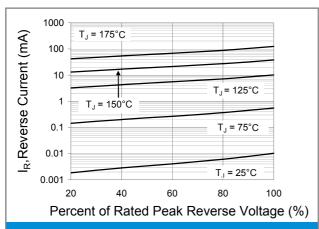
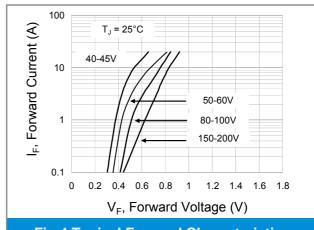
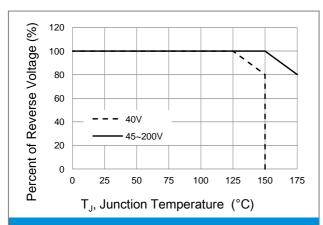


Fig.3 Typical Reverse Characteristics



**Fig.4 Typical Forward Characteristics** 



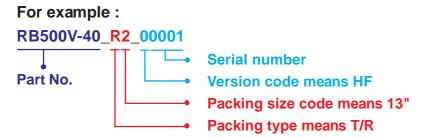
**Fig.5 Operating Temperature Derating Curve** 





## Part No\_packing code\_Version

MBR2040FCT\_T0\_00001



Packing Code XX					Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code		
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number		
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number		
Bulk Packing (B/P)	В	13"	2					
Tube Packing (T/P)	Т	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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