



### **SCHOTTKY BARRIER RECTIFIERS**

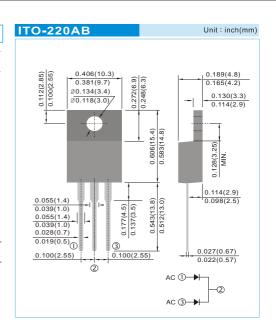
VOLTAGE 40 to 200 Volt CURRENT 6 Amper

### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- · Low power loss, high efficiency.
- · Low forward voltge, high current capability
- · High surge capacity.
- 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

#### **MECHANICAL DATA**

- Case: ITO-220AB full molded plastic package
- Terminals: Lead 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. Resistive or inductive load.

PARAMETER	SYMBOL	MBR640FCT	MBR645FCT	MBR650FCT	MBR660FCT	MBR680FCT	MBR690FCT	MBR6100FCT	MBR6150FCT	MBR6200FCT	UNITS
Maximum Recurrent Peak Reverse Voltage		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	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	45	50	60	80	90	100	150	200	٧
Maximum Average Forward Current (See Figure 1)	I <sub>F(AV)</sub>	6							А		
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	75							А		
Maximum Forward Voltage at 3A per leg	V <sub>F</sub>	0.7 0.75 0.8 0.9		.9	V						
Maximum DC Reverse Current at Rated DC Blocking T <sub>J</sub> =25°C Voltage T <sub>J</sub> =100°C	I <sub>R</sub>	0.05 20						mA			
Typical Thermal Resistance	R <sub>eJC</sub>	3					°C / W				
Operating Junction and Storage 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.





## **RATING AND CHARACTERISTIC CURVES**

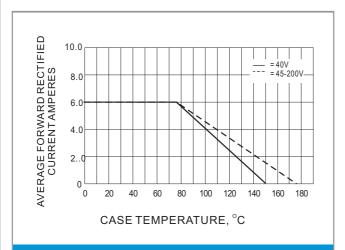


Fig. 1- FORWARD CURRENT DERATING CURVE

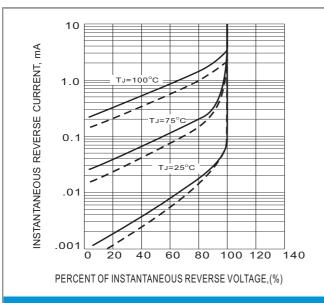


Fig.3-TYPICAL REVERSE CHARACTERISTIC

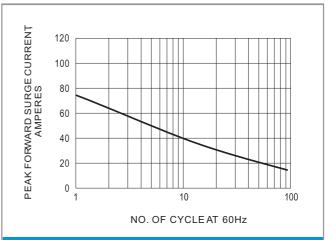


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

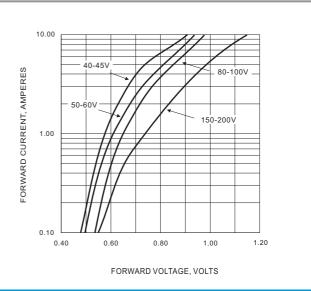


Fig.4- TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTIC





## Part No\_packing code\_Version

MBR640FCT\_T0\_00001 MBR640FCT\_T0\_10001

# For example : RB500V-40\_R2\_00001 Part No. Serial number Version code means HF Packing size code means 13" Packing type means T/R

Packing Code XX					Version Code XXXXX				
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1st 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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