



# MBR640FCT~MBR6200FCT

## SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 40 to 200 Volt **CURRENT** 6 Amper

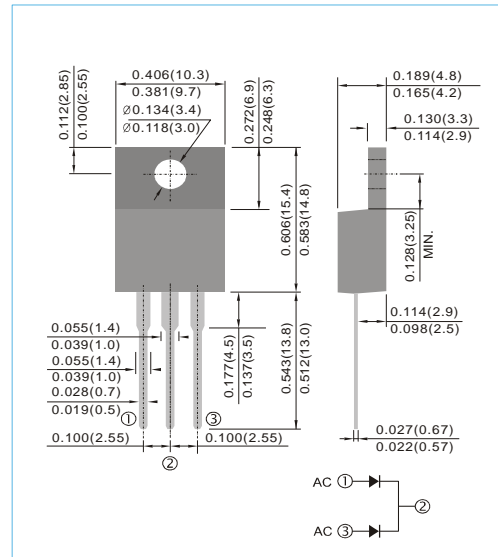
**ITO-220AB** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarity 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	$V_{RRM}$	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 Figure 1)	$I_{F(AV)}$	6									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	75									A
Maximum Forward Voltage at 3A per leg	$V_F$	0.7	0.75		0.8			0.9		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=100^{\circ}C$	$I_R$					0.05		20		mA	
Typical Thermal Resistance	$R_{\theta JC}$					3			$^{\circ}C / W$		
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150				-65 to +175			$^{\circ}C$		

NOTES : Both Bonding and Chip structure are available.



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## RATING AND CHARACTERISTIC CURVES

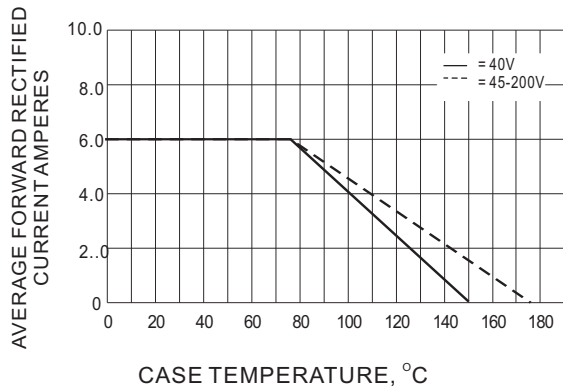


Fig. 1- FORWARD CURRENT DERATING CURVE

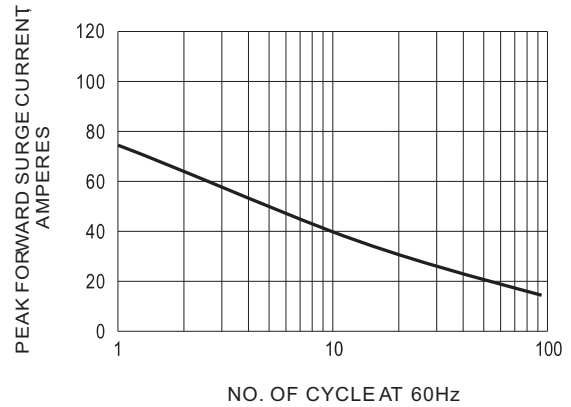


Fig. 2- MAXIMUM NON - REPETITIVE SURGE CURRENT

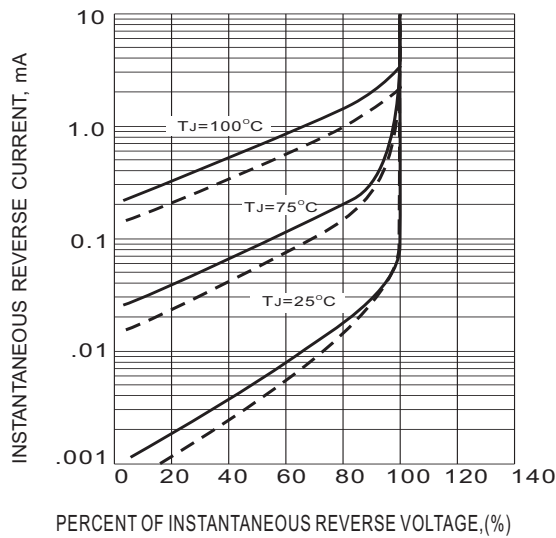


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

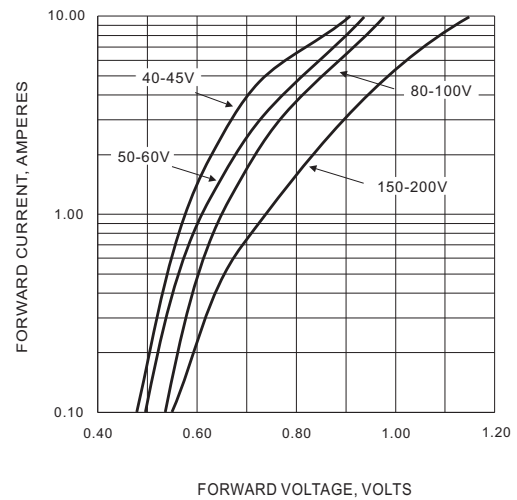


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



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### Part No\_packing code\_Version

MBR640FCT\_T0\_00001

MBR640FCT\_T0\_10001

For example :

RB500V-40\_R2\_00001



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
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)	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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