



#### SCHOTTKY BARRIER RECTIFIERS

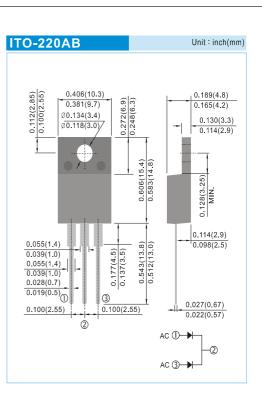
VOLTAGE 40 to 200 Volt CURRENT 25 Ampere

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O.
  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 polarlity protection applications.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **MECHANCEAL DATA**

- Case: ITO-220AB Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- · Polarity: As marked.
- Standard packaging: Any
- 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	MBR2540FCT	MBR2545FCT	MBR2550FCT	MBR2560FCT	MBR2580FCT	MBR2590FCT	MBR25100FCT	MBR25150FCT	MBR25200FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	45	50	60	80	90	100	150	200	۷
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	V
Maximum Average Forward Current (See fig.1)	I <sub>F(AV)</sub>	25						A			
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	200						A			
Maximum Forward Voltage at 12.5A, per leg	V <sub>F</sub>	0.7		0.	0.75		0.8		0.9		V
Maximum DC Reverse Current at Rated DC Blocking $T_{j}$ =25°C Voltage $T_{j}$ =125°C	I <sub>R</sub>	0.05						mA			
Typical Thermal Resistance	R <sub>ejc</sub>	2						°C / W			
Operating Junction and Storage Temperature Range	Tj,Tstg	-50 to + 150 -65 to +175						٥C			

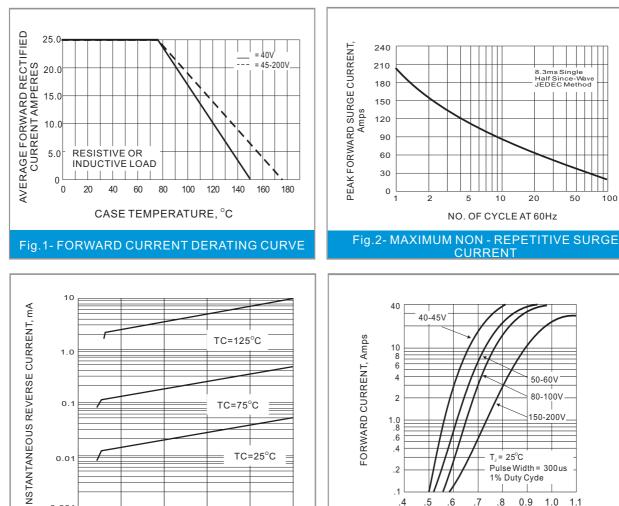
NOTES:

Both Bonding and Chip structure are available.



## MBR2540FCT~MBR25200FCT

### **RATING AND CHARACTERISTIC CURVES**



.4 .5 .6 .7 .8 0.9 1.0 FORWARD VOLTAGE, VOLTS

Fig.4- TYPICAL INSTANTANEOUS FORWARD **CHARACTERISTICS** 

Fig.3- TYPICAL REVERSE CHARACTERISTICS

40

60

PERCENT OF INSTANTANEOUS REVERSE VOLTAGE, %

80

100

20

0.001

50

1.1

100



# MBR2540FCT~MBR25200FCT

### Part No\_packing code\_Version

MBR2540FCT\_T0\_00001

### 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	1 <sup>st</sup> Code	2 <sup>nd~5<sup>th</sup> Code</sup>			
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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