



MB24-AU SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 to 100 Volt **CURRENT** 2 Ampere

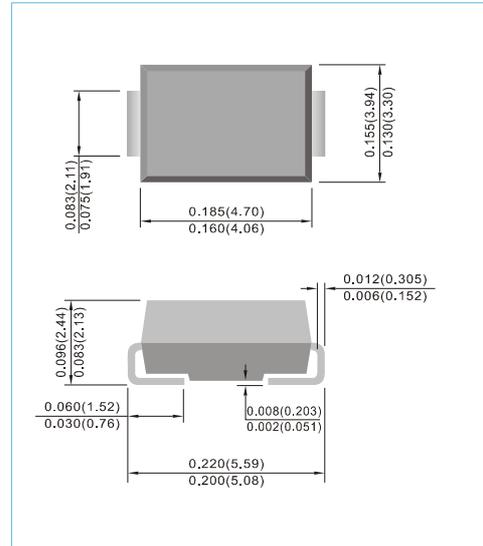
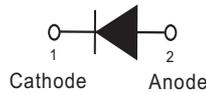
SMB / DO-214AA Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0032 ounce, 0.092 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	MB24-AU	MB210-AU	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	100	V
Maximum RMS Voltage	V_{RMS}	28	70	V
Maximum DC Blocking Voltage	V_{DC}	40	100	V
Maximum Average Forward Current	$I_{F(AV)}$	2		A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50		A
Maximum Forward Voltage at 2A (Note 1)	V_F	0.7	0.8	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 (Note 2)	$R_{\theta JL}$	12		$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	-55 to +175	$^{\circ}C$

NOTES :

1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8mm² (0.013mm thick) copper pad areas.



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RATING AND CHARACTERISTIC CURVES

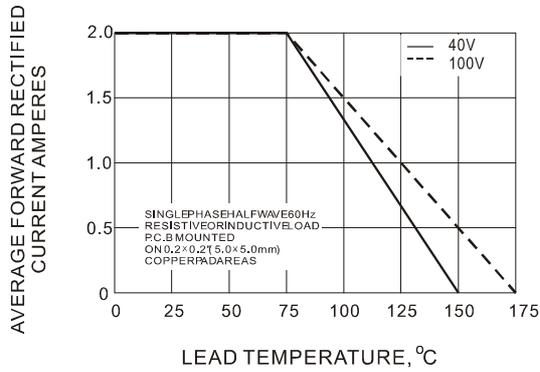


Fig.1-FORWARD CURRENT DERATING CURVE

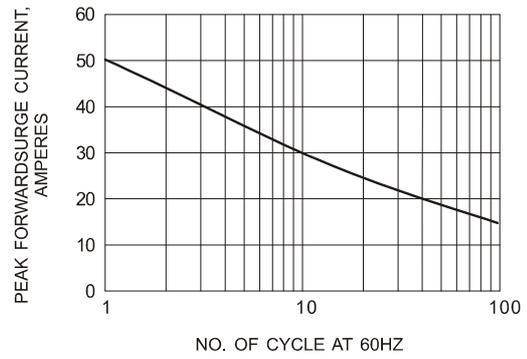


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

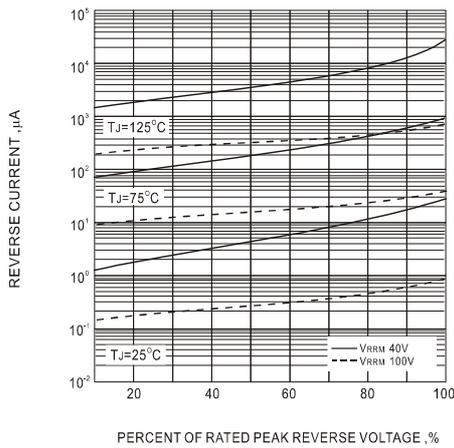


Fig.3-TYPICAL REVERSE CHARACTERISTIC

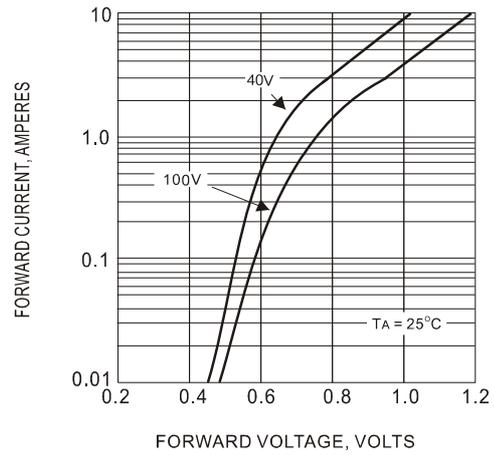


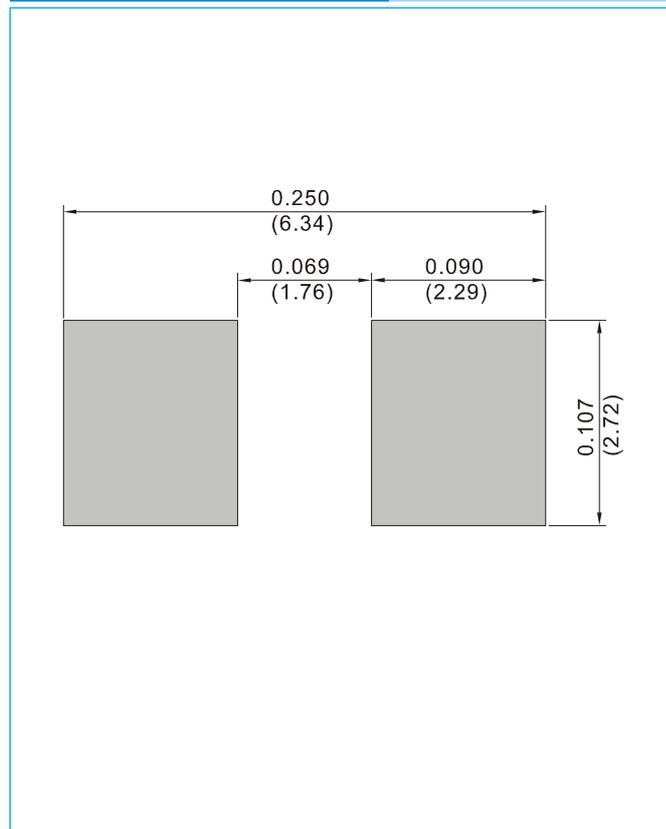
Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



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MOUNTING PAD LAYOUT

SMB / DO-214AA Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.5K per 7" plastic Reel



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Part No_packing code_Version

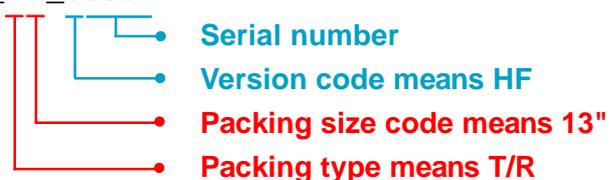
MB24-AU_R1_000A1

MB24-AU_R2_000A1

For example :

RB500V-40_R2_00001

Part No.



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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