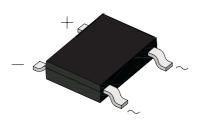
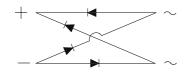


TO-269AA (MBS)





Voltage 600 V to 1000 V

Current 0.5 A

FEATURES

- Saves space on printed circuit boards
- Ideal for automated placement
- High surge current capability
- Solder dip 260°C, 10s
- AEC-Q101 qualified
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C

MECHANICAL DATA

- Case: TO-269AA (MBS). Epoxy meets UL 94V-0 flammability rating.
- Polarity: As marked on body.
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.

TYPICAL APPLICATIONS

Used in general purpose ac-to-dc bridge full wave rectification for power supply, lighting ballaster, Battery charger, home appliances, office equipement, and terlecommunication applications.

Maximun Ratings and Electrical Characteristics at 25°C

		MB6SA	MB8SA	MB10SA
	Marking Code	MB6	MB8	MB10
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	600	800	1000
V _{RMS}	Maximum RMS Voltage (V)	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	600	800	1000
I _{F(AV)}	Maximum Average Forward Output Current (see Fig. 1) On glass-epoxy P.C.B. On aluminum substrate	0.5 A ⁽¹⁾ 0.8 A ⁽²⁾		
I _{FSM}	Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	30 A		
V _F	Maximum Instantaneous Forward Voltage @ 0.5 A			
I _R	Maximum DC Reverse Current @ Ta = 25 °C at Rated DC Blocking Voltage @ Ta = 125 °C	5 μΑ 100 μΑ		
Cj	Typical Junction Capacitance Per Leg 13 pF			
$\begin{array}{c} R_{th~(j-a)} \\ R_{th~(j-a)} \\ R_{th~(j-l)} \end{array}$	Typical Thermal Resistance Per Leg	85 °C/W ⁽¹⁾ 70 °C/W ⁽²⁾ 20 °C/W ⁽¹⁾		
T _j	Operating Temperature Range	-55 to + 150 °C		
T _{stg}	Storage Temperature Range	-55 to + 150 °C		

Notes: 1. On glass epoxy P.C.B. mounted 1.3x1.3mm pads

2. On aluminium substrate P.C.B. whith an area of 20x20mm mounted on 1.3x1.3mm solder pad

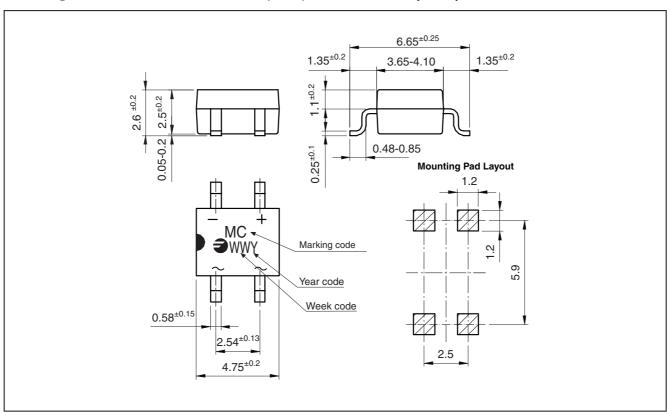
Revision: 3



Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
MB6SA TR	TR	13" diameter tape and reel	3,000	0.22

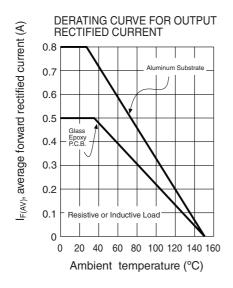
Package Outline Dimensions: (mm) TO-269AA (MBS)



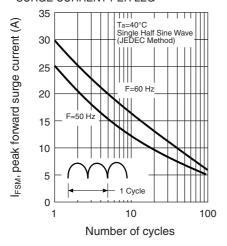


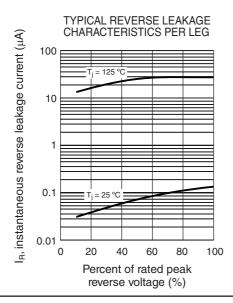


Ratings and Characteristics (Ta 25 °C unless otherwise noted)

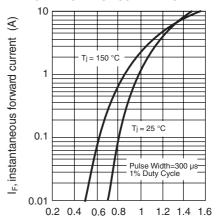


MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG



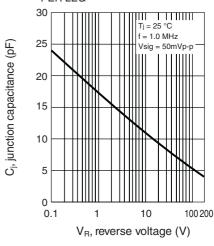


TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

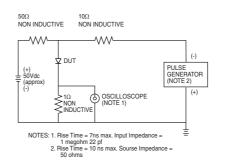


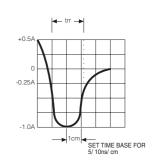
V_F, instantaneous forward voltage (V)

TYPICAL JUNCTION CAPACITANCE PER LEG



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM









Revision History

Date	Revision	Description of Changes
14-Jan-2012	0	Original Data Sheet
01-Dec-2014	1	Modified Package Outline Dimensions
03-Feb-2015	2	Modified Package Outline Dimensions
20-May-2016	3	Updated VF specification

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