

Single-Phase Bridge Rectifier in MSB

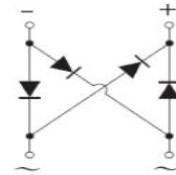
Features

- Ideal for automated placement
- Applicable for automative insertion
- High surge current capability
- Solder Dip 260°C, 10 seconds



Mechanical Data

- Case:MSB
- Epoxy meets UL-94V-0 Flammability rating
- Terminals: Matte tin plated leads, solderable per J-STD-002B and JESD22-B102D
- Polarity: As markde on body



Typical Applications

General purpose use in AC-to-DC bridge full wave rectifications for SMPS, Lighting Ballasters, Adapters, Battery Chargers, Home Appliances, Office Equipment and Telecommunication applications.

Maximum Ratings & Electrical Characteristics

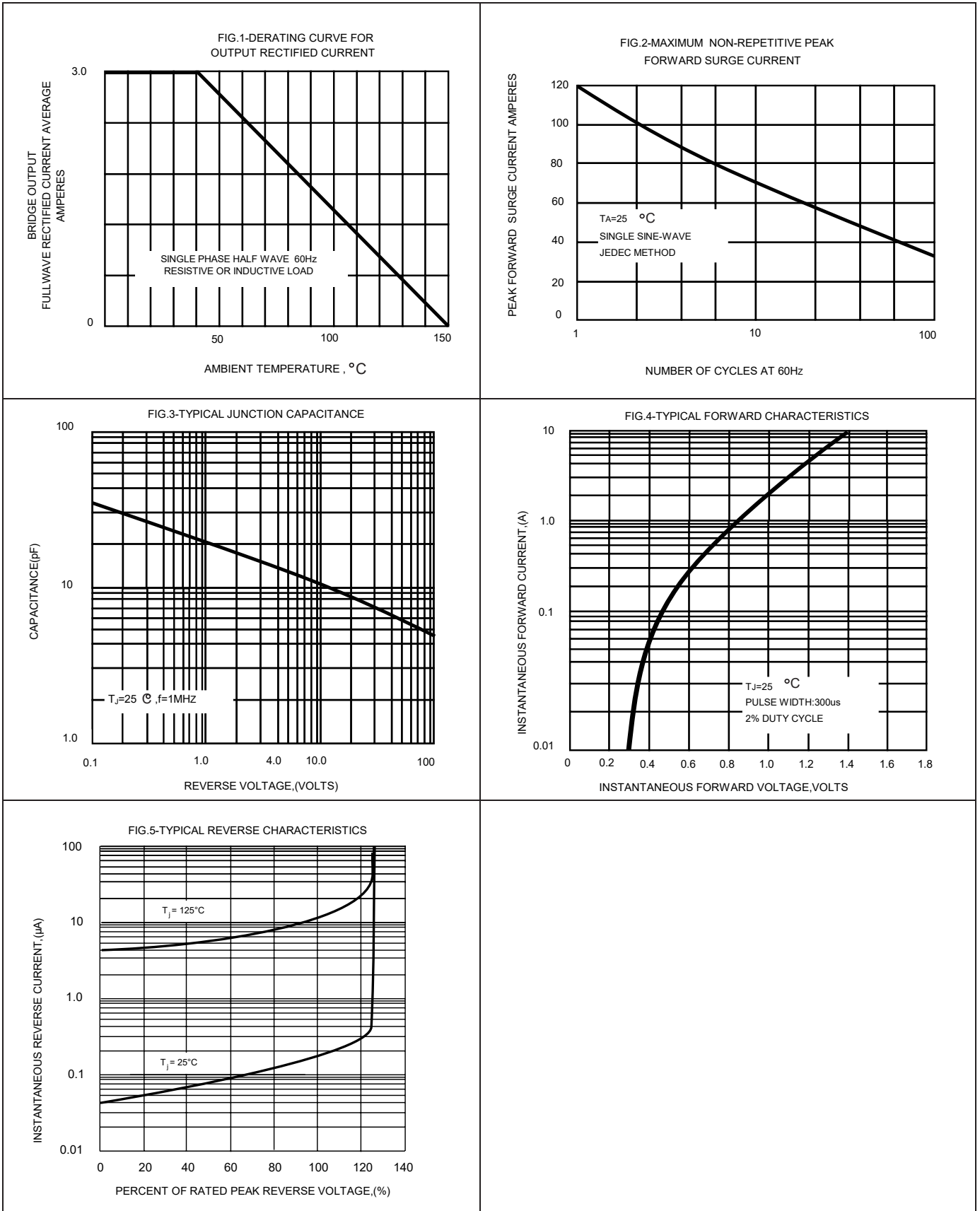
($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	MSB301	MSB302	MSB303	MSB304	MSB305	MSB306	MSB307	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current at $T_A=40$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120							A
Rating for Fusig ($t<8.3\text{ms}$)	I^2t	59.76							A^2sec
Maximum Instantaneous Forward Voltage Drop per Leg at 1.5A	V_F	1.10							V
Maximum DC Reverse Current at $T_A=25^\circ\text{C}$ Rated DC Blocking Voltage per Leg $T_A=125^\circ\text{C}$	I_R	5 500							μA
Typical Junction Capacitance per Element at 4.0V, 1MHz	C_j	33							pF
Typical Thermal Resistance per Leg (Note 1)	$R_{\theta JA}$	55							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

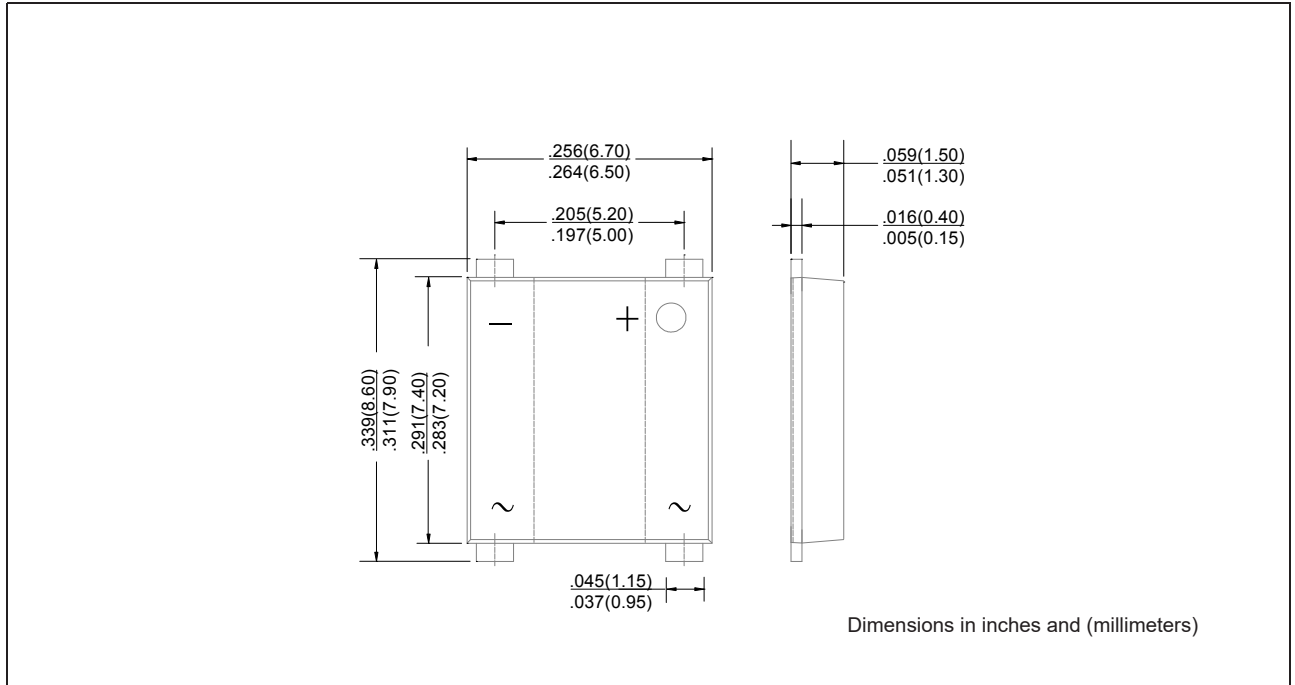
Notes: 1. Device mounted P.C.B with 0.5x0.5"(13mmx13mm) Copper Pads.

2. JEDEC registered values

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
MSB301 Thru MSB307	MSB	Tape/Reel	3000pcs	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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