

CREATEK Microelectronics

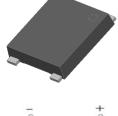
Single-Phase Bridge Rectifier in MSB

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 Idads, 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°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	٧
Maximum Average Forward Output Rectified Current at T _A =40	I _{F(AV)}				3.0				Α
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}				120				Α
Rating for Fusig (t<8.3ms)	l ² t				59.76				A ² sec
Maximum Instantaneous Forward Voltage Drop per Leg at 1.5A	VF				1.10				V
Maximum DC Reverse Current at Ta=25°C Rated DC Blocking Voltage per Leg Ta=125°C	lR				5 500				μΑ
Typical Junction Capacitance per Element at 4.0V,1MHz	Cj				33				pF
Typical Thermal Resistance per Leg (Note 1)	$R_{\theta JA}$	55				°C/W			
Operating Junction Temperature Range	TJ				-55 to +150				°C
Storage Temperature Range	T _{STG}	-55 to +150			°C				

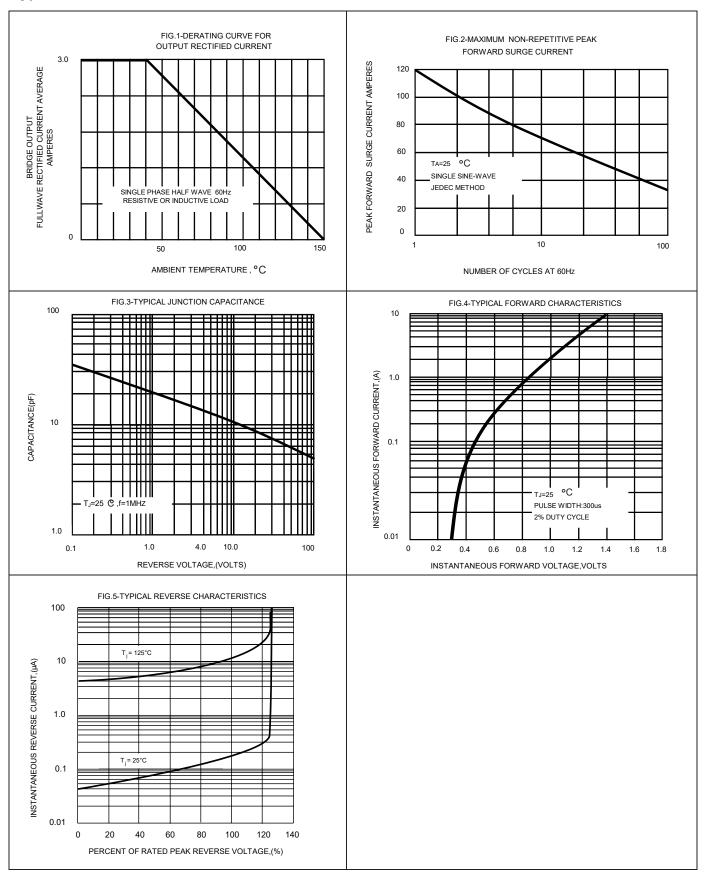
Notes: 1. Device mounted P.C.B with 0.5x0.5"(13mmx13mm) Copper Pads.

2. JEDEC registered values



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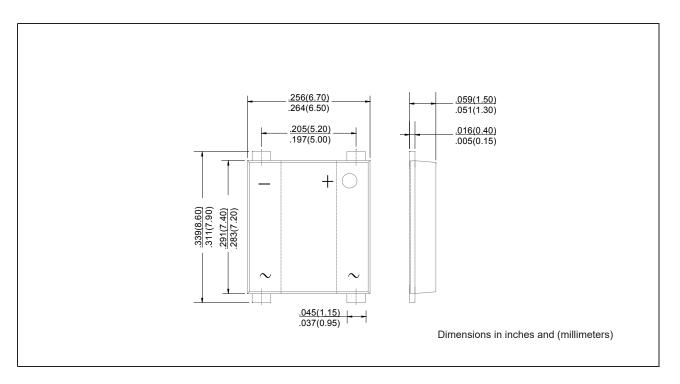
$\textbf{Typical Characteristics} \,\, (\text{T}_{\text{amb}} \, \text{=}\, 25\, \text{°C unless otherwise specified})$





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Package Dimensions



Ordering information

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

Revision history

Date	Revision	Changes
23-May-2016	1.0	Initial release

Rev. 1.0 www.crea-tek.com



MSB301 thur MSB307

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