

CREATEK Microelectronics

Single-Phase Bridge Rectifier in DBS

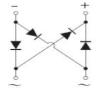
Features

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

Mechanical Data

- Case:DBS
- 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	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	>
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}				80				Α
Rating for Fusig (t<8.3ms)	l ² t				10.4				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				5 100				μΑ
Typical Junction Capacitance per Element at 4.0V,1MHz	Cj				60				pF
Typical Thermal Resistance per Leg (Note 1)	$R_{ heta JA}$ $R_{ heta JL}$				40 15				°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.

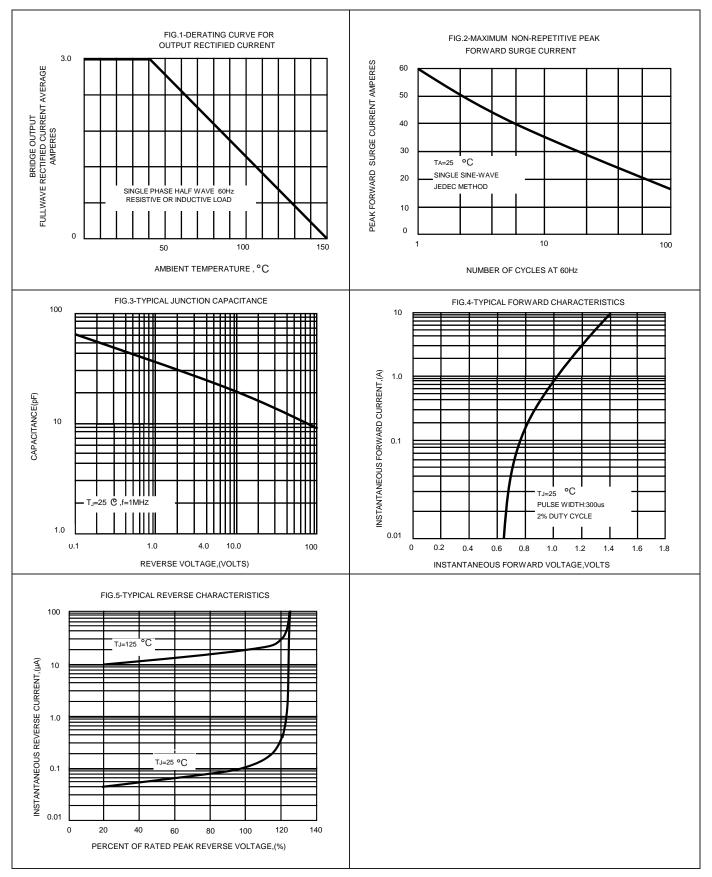
2. JEDEC registered values



DB301S thur DB307S

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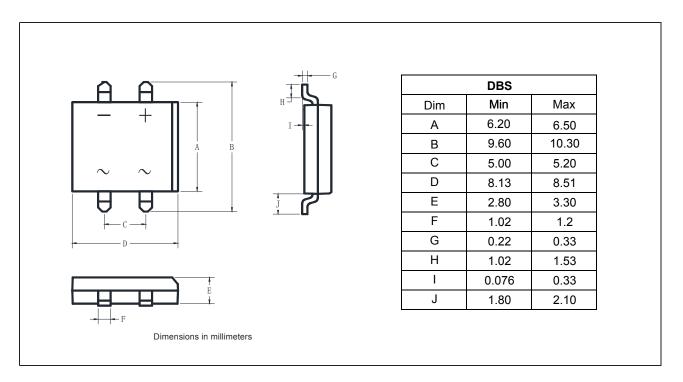
$\textbf{Typical Characteristics} \ (\textbf{T}_{amb} = 25 \ ^{\circ}\textbf{C} \ unless \ otherwise \ specified)$





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Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
DB301S Thur DB307S	DBS	Tape/Reel	1500pcs	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2017	1.0	Initial release

Rev. 1.0 www.crea-tek.com



DB301S thur DB307S

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