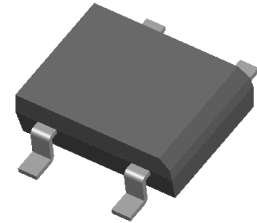


## Single-Phase Bridge Rectifier in DBS

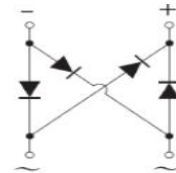
### Features

- Ideal for automated placement
- Applicable for automotive 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 leads, solderable per J-STD-002B and JESD22-B102D
- Polarity: As marked 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

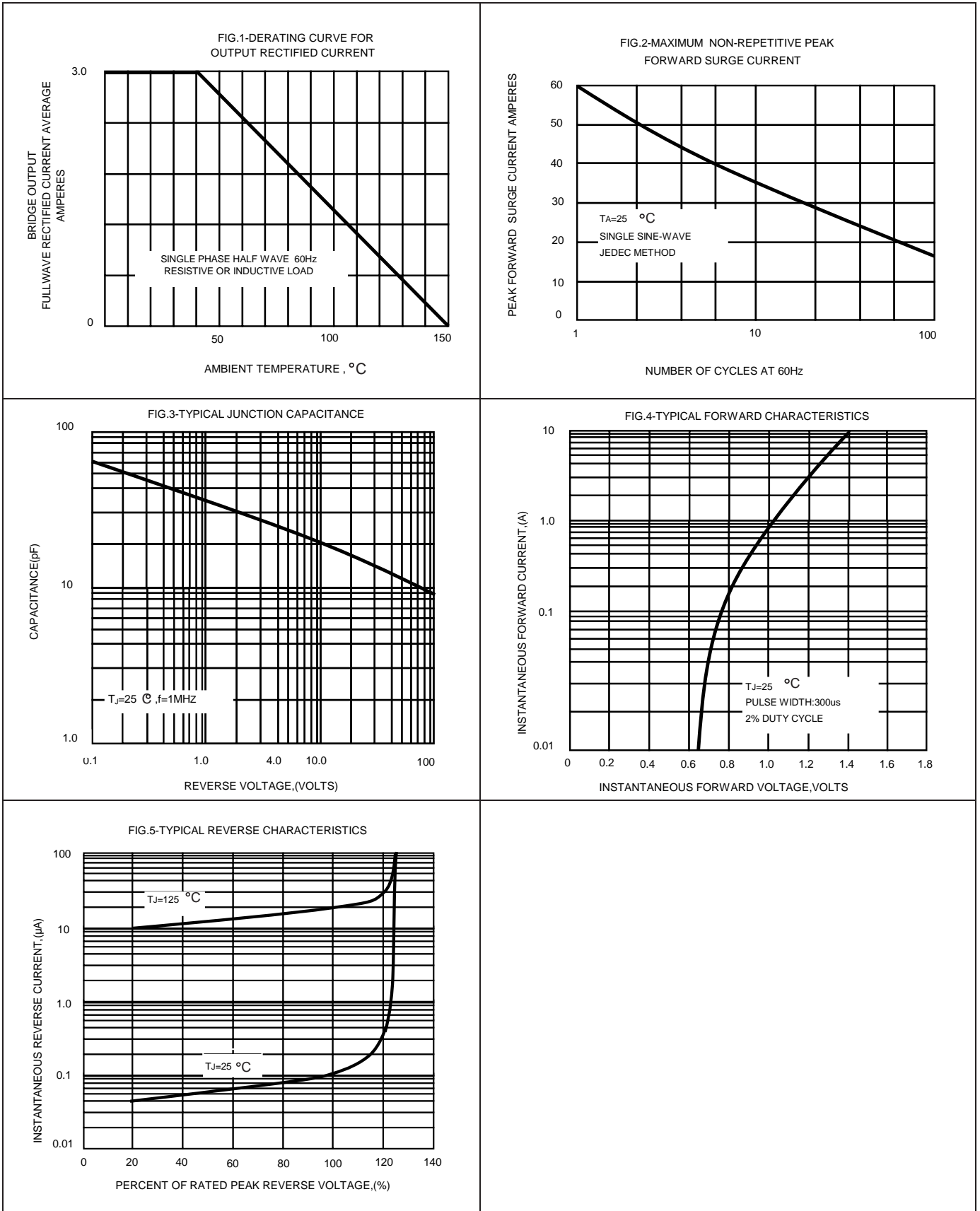
( $T_A=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	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)	$I_{FSM}$	80							A
Rating for Fusig ( $t < 8.3\text{ms}$ )	$I^2t$	10.4							$\text{A}^2\text{sec}$
Maximum Instantaneous Forward Voltage Drop per Leg at 1.5A	$V_F$	1.10							V
Maximum DC Reverse Current at $T_A=25^\circ\text{C}$	$I_R$	5							$\mu\text{A}$
Rated DC Blocking Voltage per Leg $T_A=125^\circ\text{C}$		100							
Typical Junction Capacitance per Element at 4.0V, 1MHz	$C_j$	60							pF
Typical Thermal Resistance per Leg (Note 1)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
	$R_{\theta JL}$	15							
Operating Junction Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

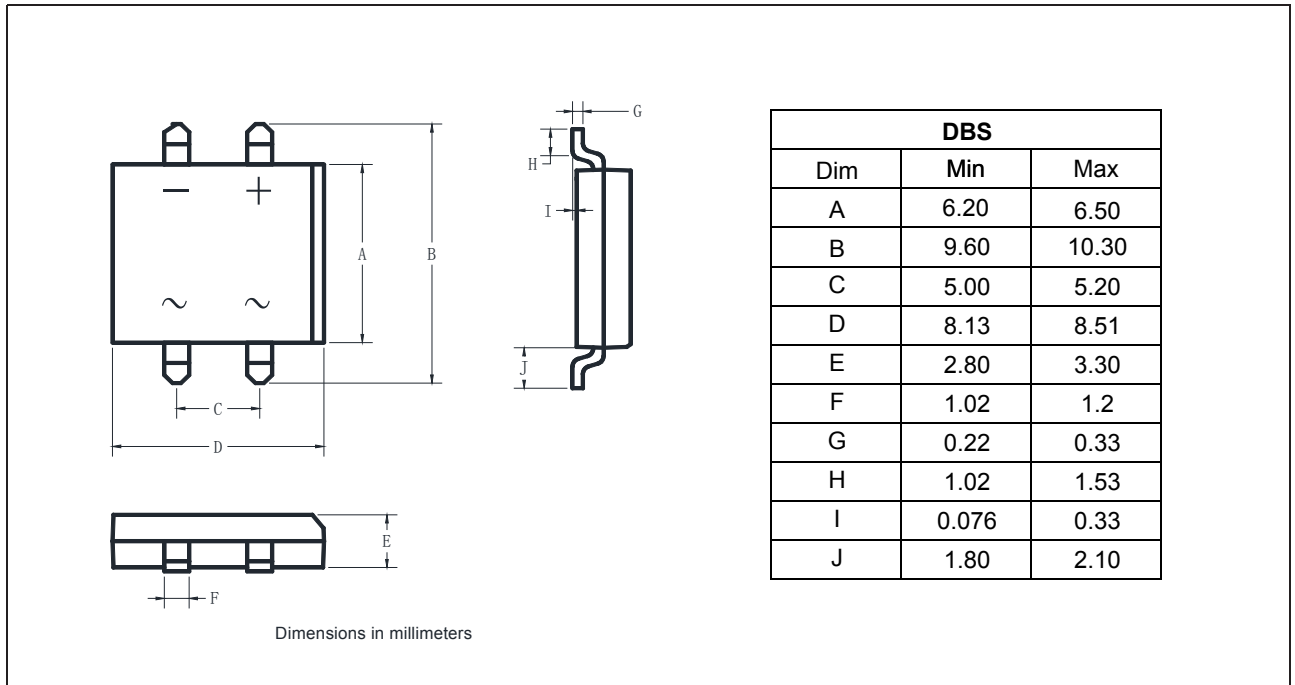
**Notes:** 1. Device mounted P.C.B with 0.5x0.5" (13mmx13mm) Copper Pads.

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
DB301S Thru DB307S	DBS	Tape/Reel	1500pcs	EIA STD RS-481

### Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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