



DB101S THRU DB107S

Surface Mount Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Amperes

Features

- Glass passivated chip
- Ideal for automatic placement
- High surge forward current capability
- Reliable low cost construction utilizing molded plastic technique
- Lead tin plated copper
- AEC-Q101 qualified

Mechanical Data

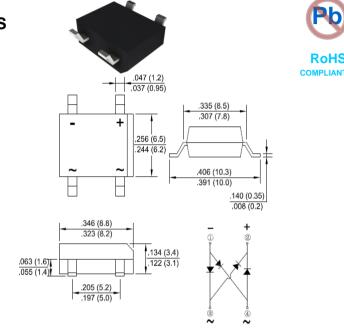
Polarity: Symbol marked on body

Mounting position: Any

Applications

 General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

DBS



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

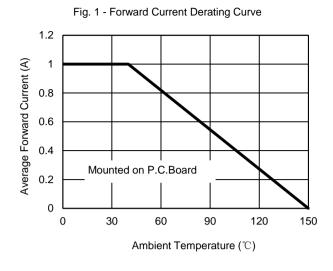
Characteristics	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Ta=40 $^{\circ}$ C	I(AV)	1.0							Α
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	30							А
I ² t Rating for Fusing (t<8.3mS)	l ² t	3.7						A^2s	
Peak Forward Voltage per Diode at 1.0A DC	VF	1.1							V
Maximum DC Reverse Current at Rated @TJ=25℃ DC Blocking Voltage per Diode @TJ=125℃	lr	10 500							μA
Typical Junction Capacitance (Note1)	CJ	25							pF
Typical Thermal Resistance Junction to Ambient (Note2)	Reja	40							°C/W
Operating Junction Temperature Range	TJ	-55 to +150							$^{\circ}$
Storage Temperature Range	Tstg	-55 to +150							$^{\circ}\!\mathbb{C}$

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

- 2. Thermal resistance from junction to ambient mounted on P.C.B ,with 0.5*0.5"(13*13mm) copper pads.
- 3. The typical data above is for reference only .

DB10*S-U-00-A001 Rev. 9, 22-Apr-2019





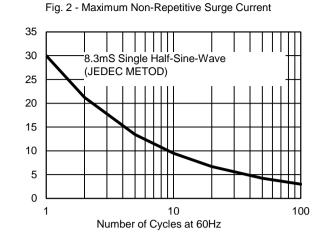


Fig. 3 - Typical Reverse Characteristics

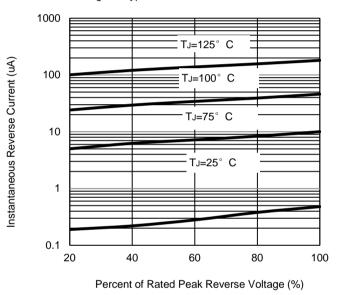


Fig. 4 - Typical Forward Characteristics

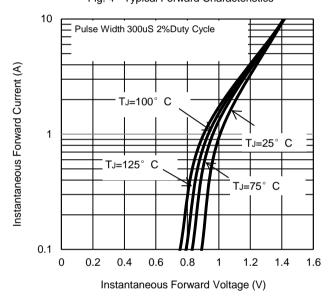
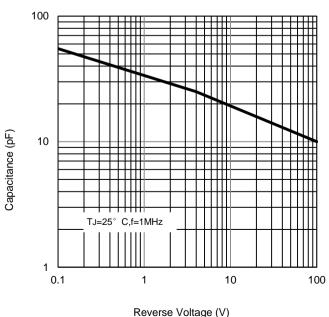


Fig. 5 - Typical Junction Capacitance

Peak Forward Surge Current (A)



The curve above is for reference only.

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Rev. 2, 16-Mar-2017