



Surface Mount Glass Passivated Bridge Rectifiers

DB101S~DB107S

50 to 1000 V

1.0A

DBS

Features

- Plastic package has Underwriters Laboratory
 Flammability Classification 94V-0
- u Glass passivated junction chip
- u Rating to 1000V PRV
- u Ideal for printed circuit board
- **u** High temperature soldering guaranteed: 260 $^{\circ}\mathrm{C}$ /10 seconds at terminals
- U Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



Mechanical Data

u Case: DBS molded plastic bodyu Epoxy: UL94V-0 rate flame retardant

u Terminals: Solder plated, solderable per MIL-STD-750,

Method 2026

u Mounting Position: Any

u Weight: 0.02 ounce, 0.38 grams

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half-wave, 60Hz,resistive or inductive load. For capacitive load, derate current by 20%.

Parameter		Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	٧
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 Rectified Current		I _(AV)	1.0						А	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	50					А		
Maximum Instantaneous Forward Voltage at 1.0 A DC		V _F	1.1						V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A = 25℃	- I _R	10							μA
	T _A = 125℃		500							
Typical Junction Capacitance (Note 1)		CJ	25					pF		
Typical Thermal Resistance (Note 2)		R _{0JA}	40					K/W		
Operating Junction and Storage Temperature Range		T _J , T _{STG}	-55 to +150						$^{\circ}$	

 $\textbf{Notes:} \ 1. \\ \text{Measured at 1MHz and applied reverse voltage of 4.0V}.$

2.Thermal resistance junction to ambient mounted on P.C.B with 0.5*0.5 inches (1.3*1.3mm) copper pads.





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Rating and Characteristic Curves

Fig1. Typical Forward Current Derating Curve

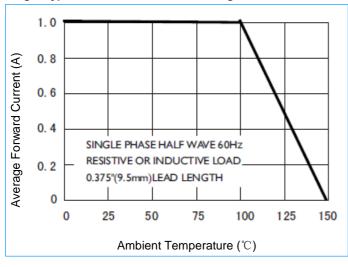


Fig2. Maximum Non-repetitive Forward Surge Current

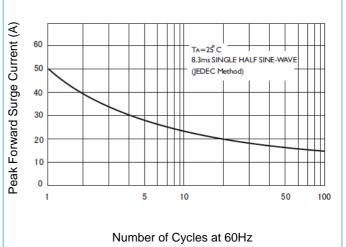


Fig3. Typical Junction Capacitance

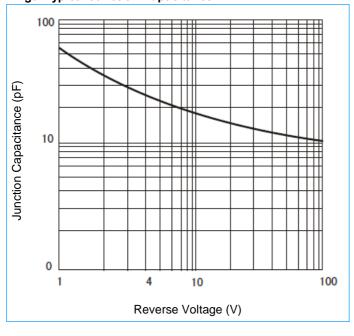
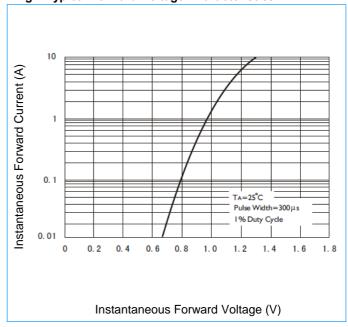


Fig4. Typical Forward Voltage Characteristics





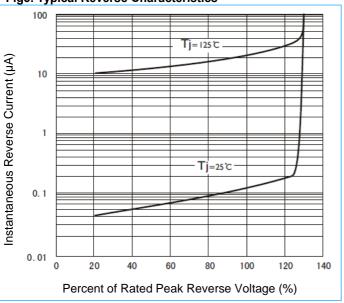


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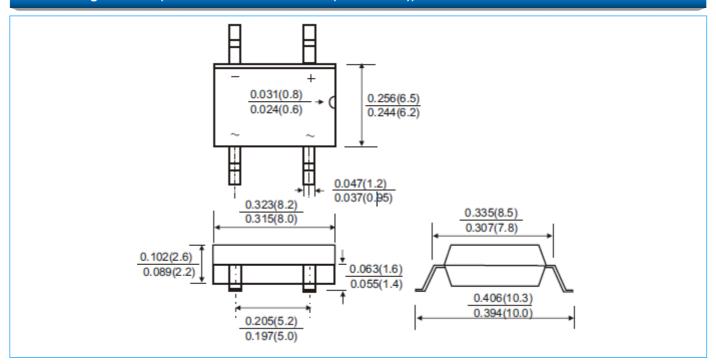
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Rating and Characteristic Curves (Continue)





DBS Package Outline (Dimensions in inches and (millimeters))



Packaging Information

Part Number	Component Package	Quantity		
DB101S~DB107S	DBS	3000 PCS		