

3A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

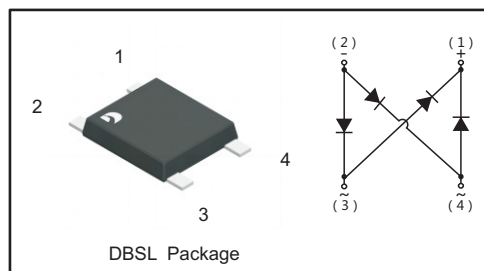
- Glass Passivated Chip Junction
- Reverse Voltage - 50 to 1000 V
- Forward Current - 3.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: DBSL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.234g / 0.00825oz

PINNING

PIN	DESCRIPTION
1	Output Anode (+)
2	Output Cathode (-)
3	Input Pin (~)
4	Input Pin (~)



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	DBS301L	DBS302L	DBS303L	DBS304L	DBS305L	DBS306L	DBS307L	Units
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
Average Rectified Output Current @Fig. 1	I_O	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	75							A
Peak Forward Surge Current 1.0 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150							A
I^2t Rating for Fusing (3ms≤t<8.3ms)	I^2t	23.3							A ² S
Maximum Forward Voltage at 3.0 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _A =25 °C @T _A =125 °C	I_R	5 100							μA
Typical Junction Capacitance (Note1)	C_j	20							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	35 8 20							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.



Fig.1 Average Rectified Output Current Derating Curve

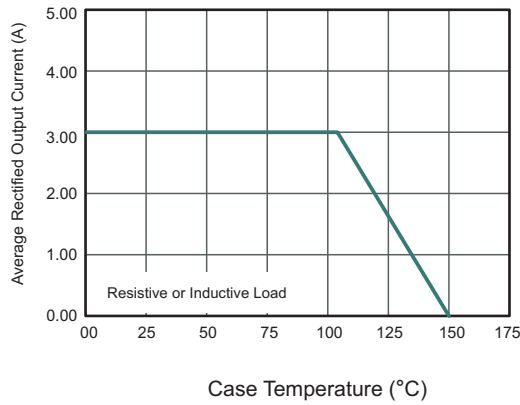


Fig.2 Typical Instaneous Reverse Characteristics

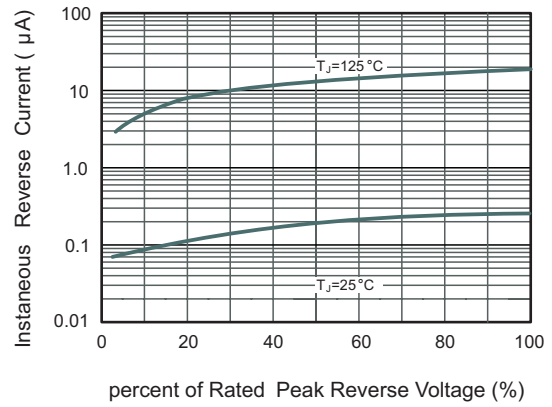


Fig.3 Typical Instaneous Forward Characteristics

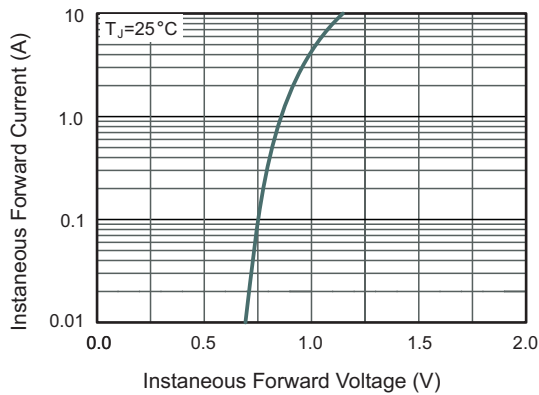


Fig.4 Typical Junction Capacitance

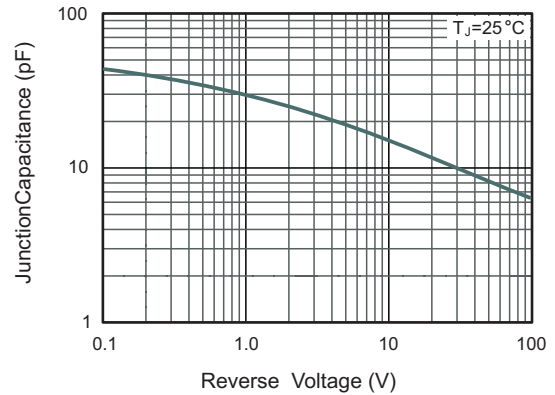
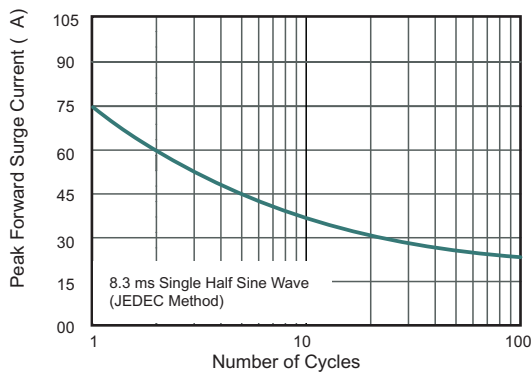


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

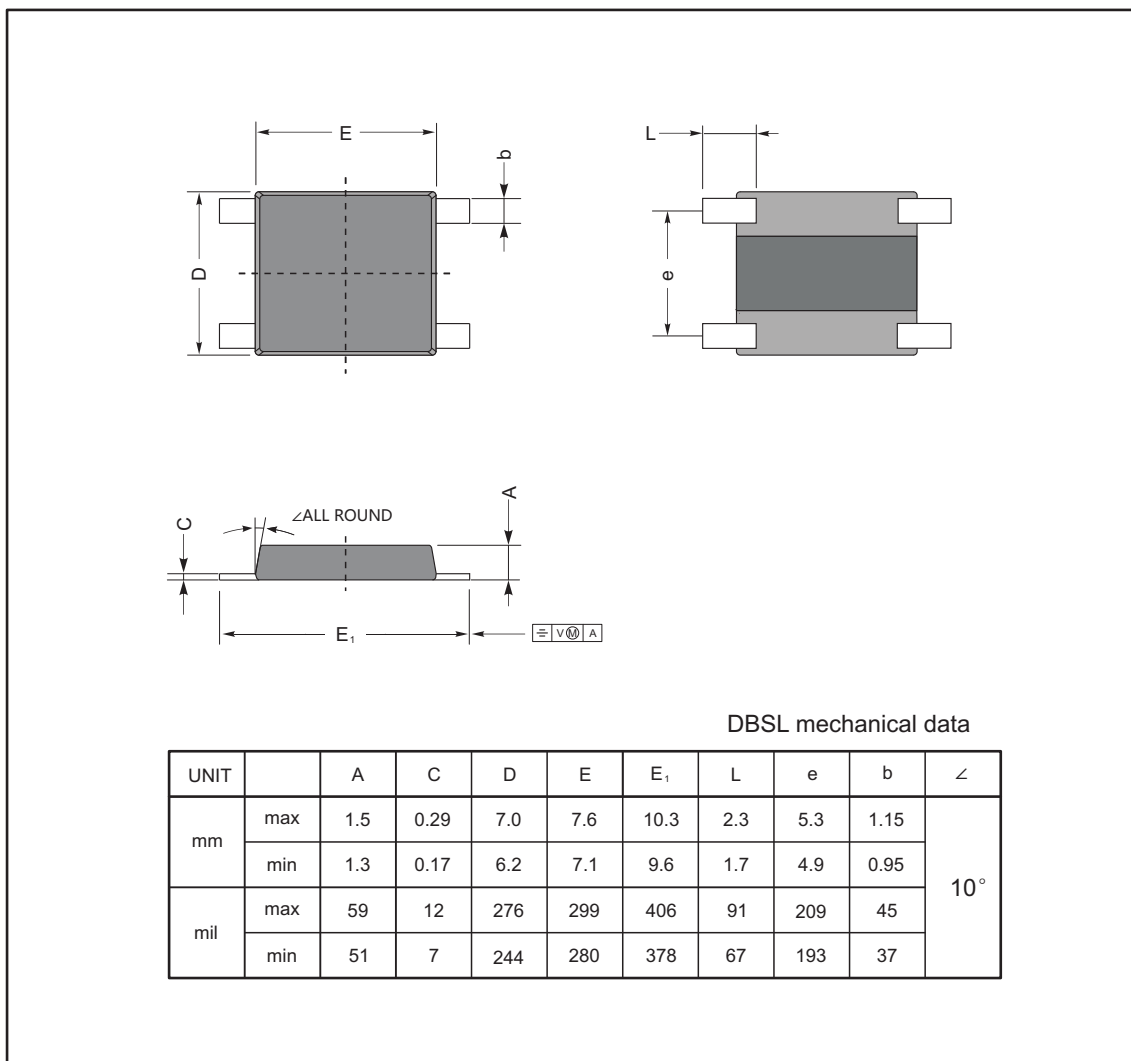




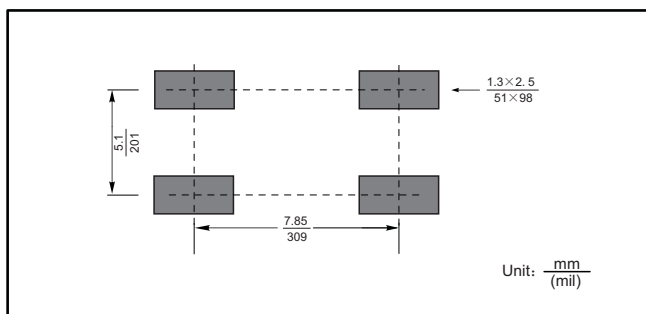
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

DBSL



The recommended mounting pad size



Marking

Type number	Marking code
DBS301L	DBS301
DBS302L	DBS302
DBS303L	DBS303
DBS304L	DBS304
DBS305L	DBS305
DBS306L	DBS306
DBS307L	DBS307



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