



4A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

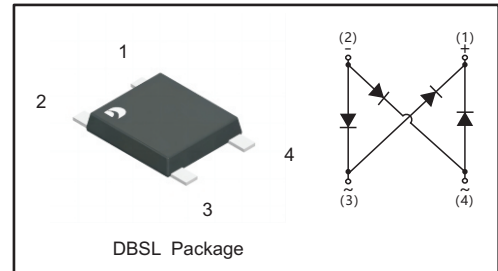
- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 4.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

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	DBS401LG	DBS402LG	DBS403LG	DBS404LG	DBS405LG	DBS406LG	DBS407LG	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	4.0							A
Peak Forward Surge Current 10.0 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120							A
Peak Forward Surge Current 1.0 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	240							A
I^2t Rating for Fusing (3ms ≤ t < 10ms)	I^2t	72							A ² S
Maximum Forward Voltage at 4.0 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25\text{ }^\circ\text{C}$ @ $T_A=125\text{ }^\circ\text{C}$	I_R	5 100							μA
Typical Junction Capacitance (Note1)	C_j	35							pF
Typical Thermal Resistance (Note2)	R_{GJA} R_{GJC} R_{GJL}	35 8 20							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^\circ\text{C}$

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

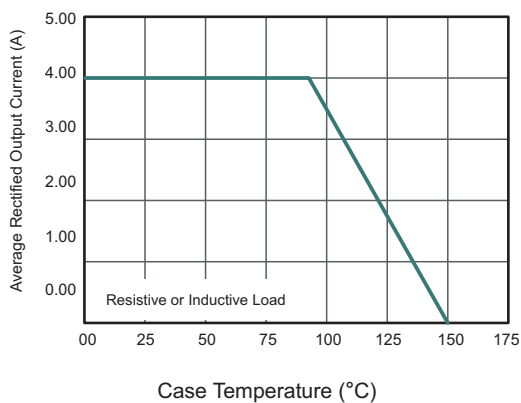


Fig.2 Typical Instaneous Reverse Characteristics

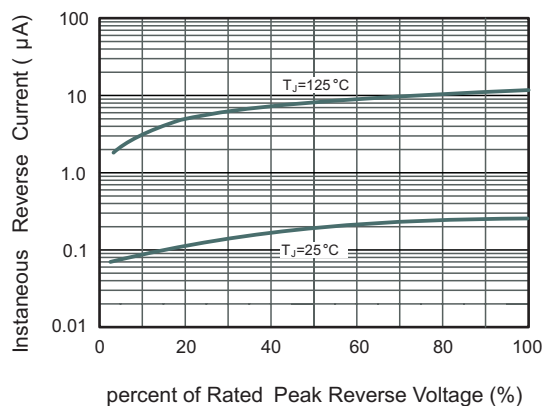


Fig.3 Typical Instaneous Forward Characteristics

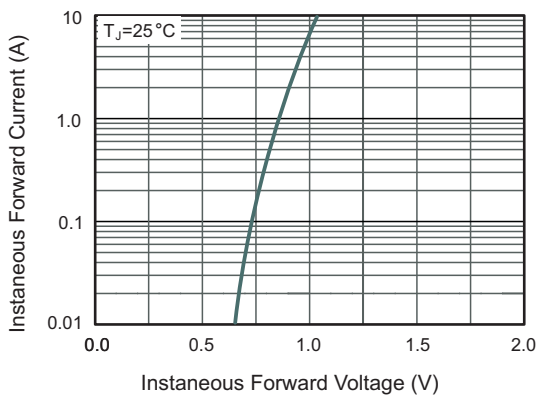


Fig.4 Typical Junction Capacitance

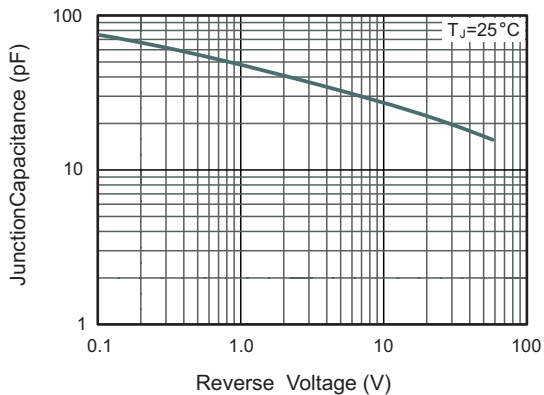
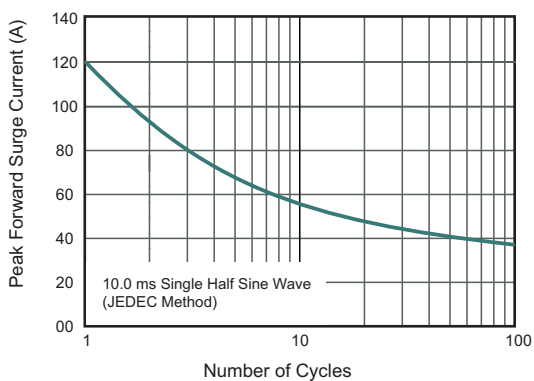


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

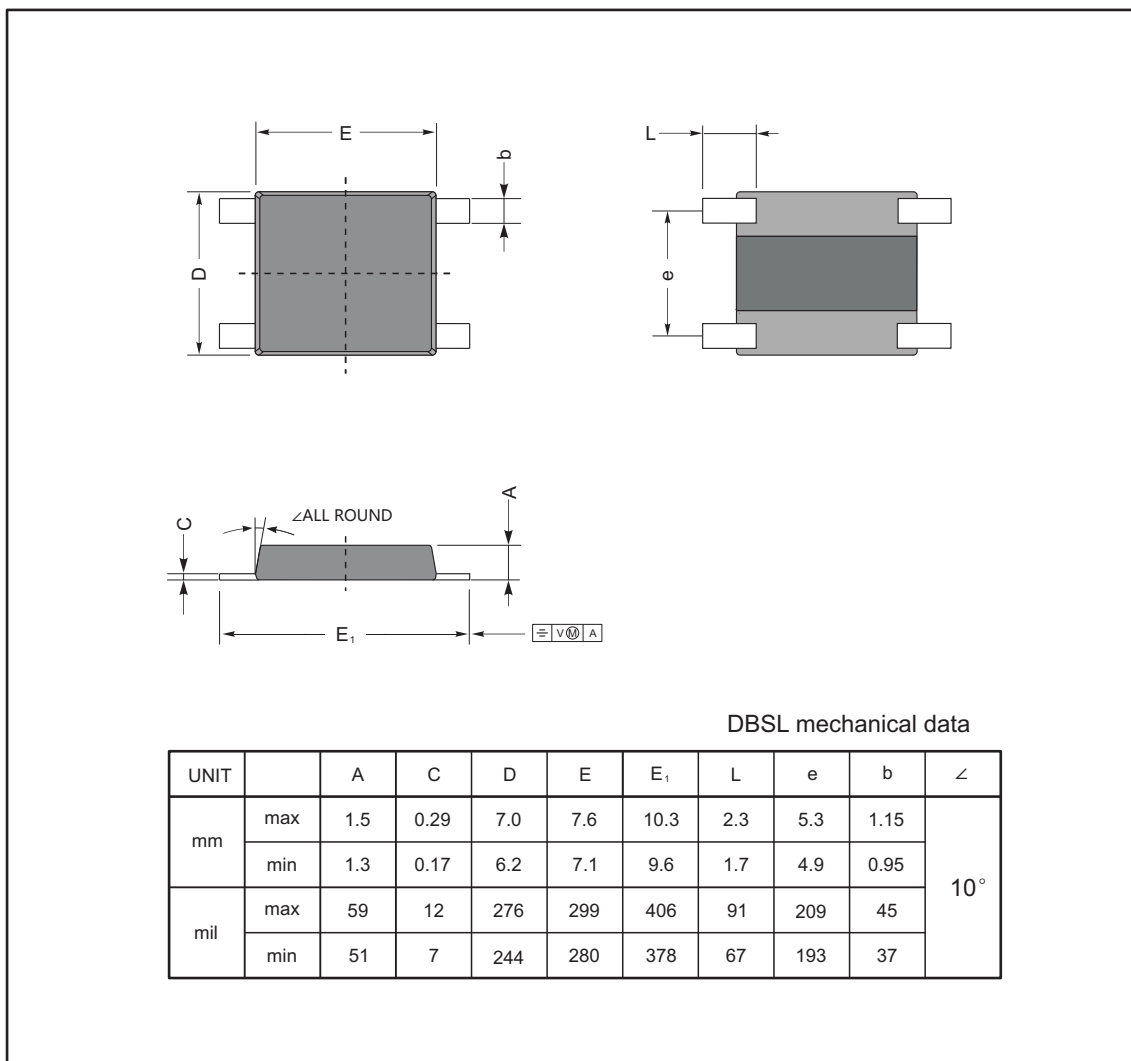




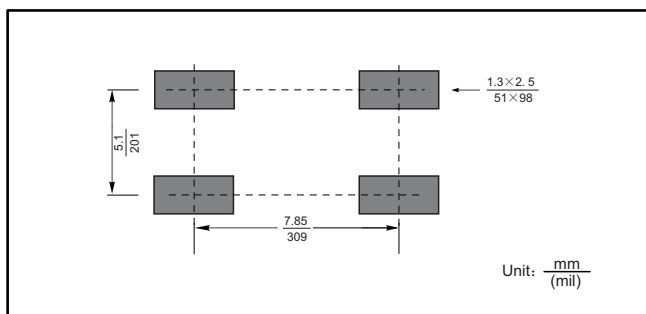
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

DBSL



The recommended mounting pad size



Marking

Type number	Marking code
DBS401LG	DBS401G
DBS402LG	DBS402G
DBS403LG	DBS403G
DBS404LG	DBS404G
DBS405LG	DBS405G
DBS406LG	DBS406G
DBS407LG	DBS407G



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