

**FEATURES:**

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 1 A
- High Surge Current Capability
- Designed for Surface Mount Application

**MECHANICAL DATA**

- Case: DBS
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 380 mg 0.02 oz

**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

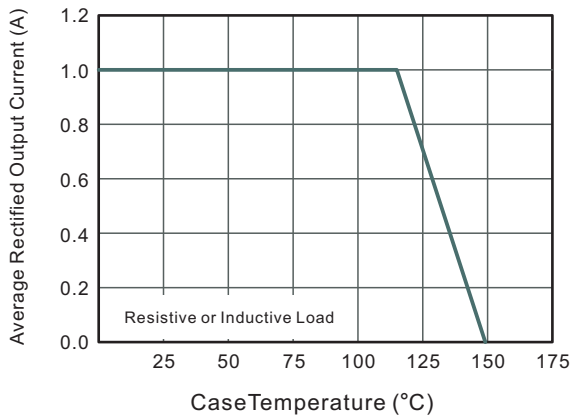
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	DB107S	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Average Rectified Output Current at $T_c = 118\text{ }^\circ\text{C}$	$I_o$	1.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30	A
Forward Voltage per element @ $I_F = 1.0\text{A}$	$V_F$	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$	$I_R$	5.0 100	$\mu\text{A}$
Typical Junction Capacitance ( Note1 )	$C_j$	20	pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$ $R_{\theta JC}$	40 8.0	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^\circ\text{C}$

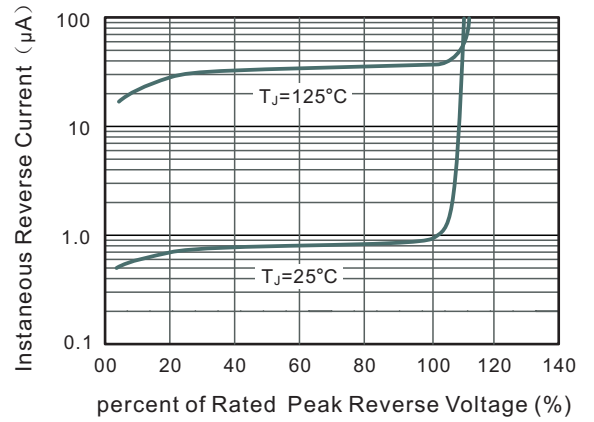
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

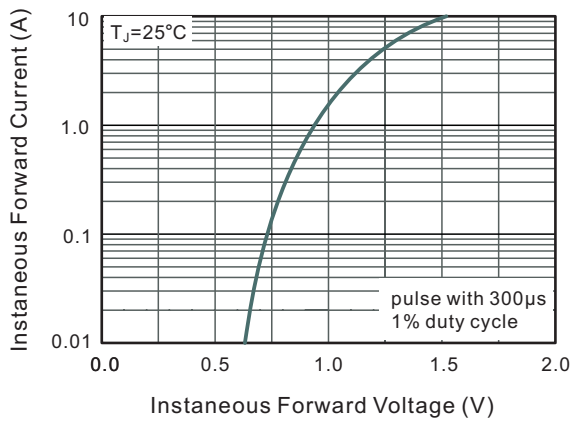
**Fig.1 Average Rectified Output Current Derating Curve**



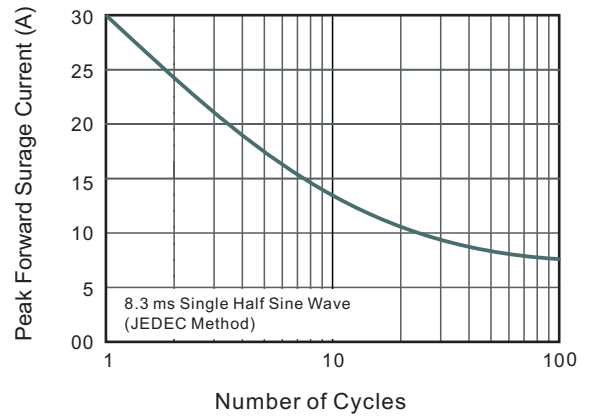
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



## PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

Dimensions in inches and (millimeters)

