

FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 4 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	DB407S	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 $T_c = 105\text{ }^\circ\text{C}$	I_o	4.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100	A
Forward Voltage per element @ $I_F = 2.0\text{A}$	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	μA
Typical Junction Capacitance (Note1)	C_j	28	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$	33 7.2	$^\circ\text{C/W}$
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

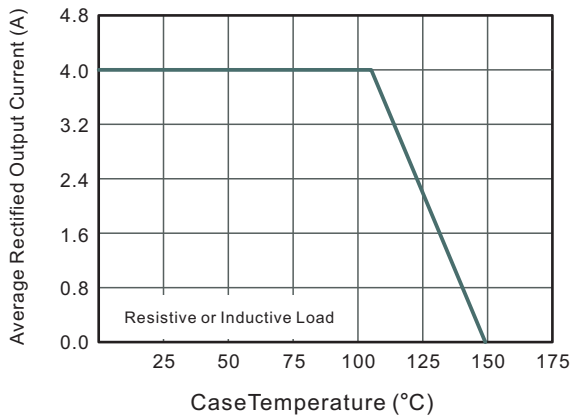


Fig.2 Typical Reverse Characteristics

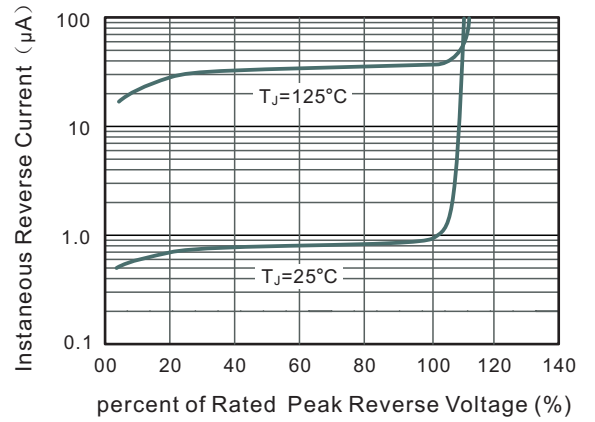


Fig.3 Typical Instantaneous Forward Characteristics

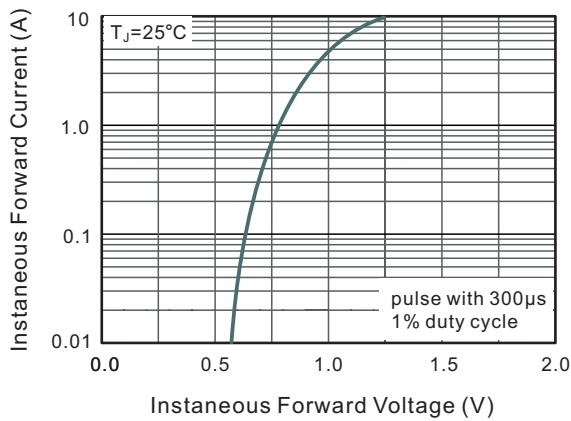
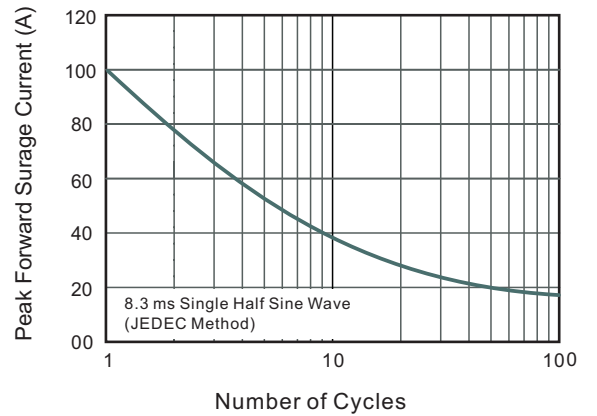


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

Dimensions in inches and (millimeters)

