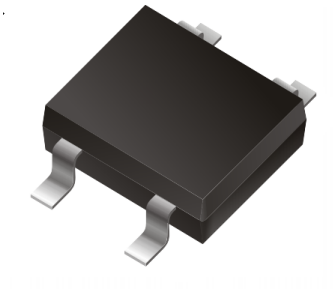
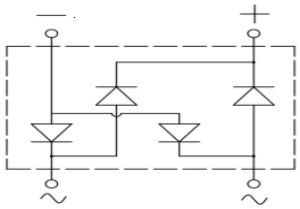
DB307S

SURFACE MOUNT BRIDGE RECTIFIER





FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 3 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	DB307S	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 °C	I_O	3.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80	A
Forward Voltage per element @I_F=3.0A	V_F	1.0	V
Maximum DC Reverse Current @T_A=25 °C at Rated DC Blocking Voltage @T_A=125 °C	I_R	5.0 100	μA
Typical Junction Capacitance (Note1)	C_j	25	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$	35 7.5	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°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

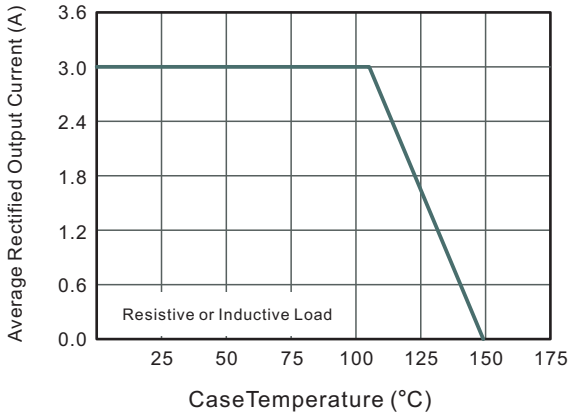


Fig.2 Typical Reverse Characteristics

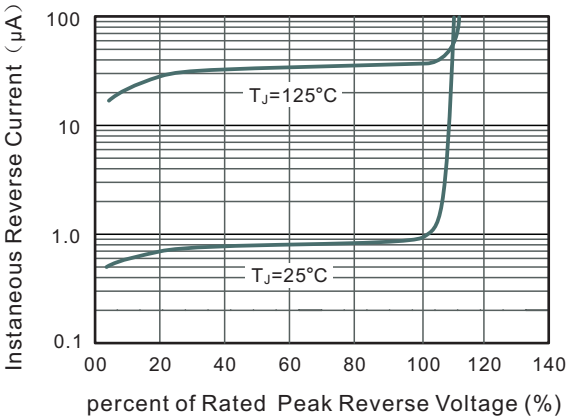


Fig.3 Typical Instaneous Forward Characteristics

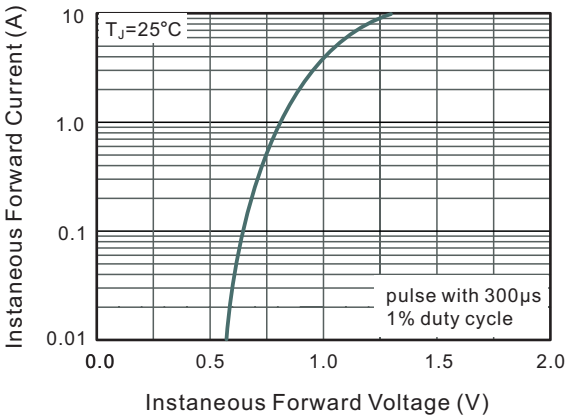
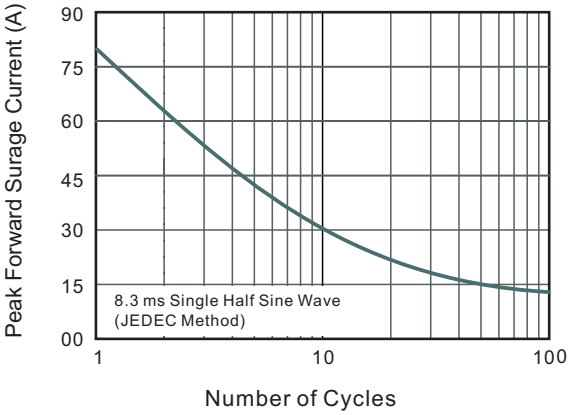


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

Dimensions in inches and (millimeters)

