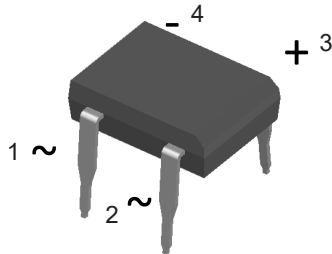


1A Glass Passivated Single-Phase Bridge Rectifier



PINNING DB Package

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

Features

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

Benefits

- Case: DB
- Terminals: Solderable per MIL-STD-750
- Approx. Weight: 100mg / 0.0035oz

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	DB107	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	I_O	1	A
Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	T_{rr}	10	us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30	A
$I^2 t$ rating for fusing ($1ms < t < 10ms$)	$I^2 t$	3.7	A ² S
Maximum Forward Voltage at 0.5A	V_F	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25^\circ C$ @ $T_A=125^\circ C$	I_R	5 500	μA
Typical Junction Capacitance (Note1)	C_j	32	pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C
Typical thermal resistance (Note 2)	R_{thJC} R_{thJA}	16 60	°C/W

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

2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG1:Io-Ta Curve

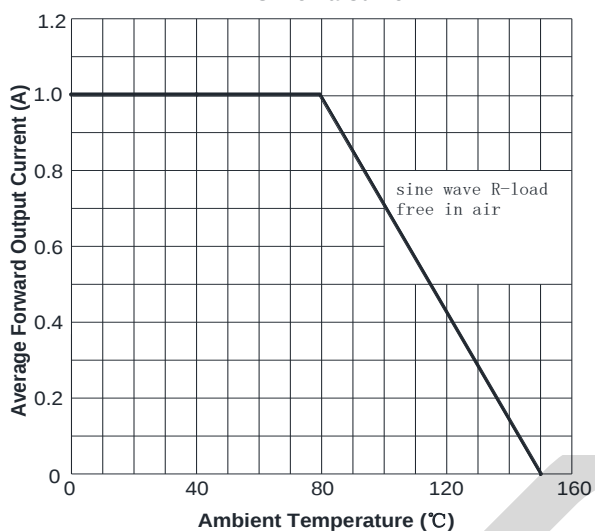


FIG2: Surge Forward Current Capability

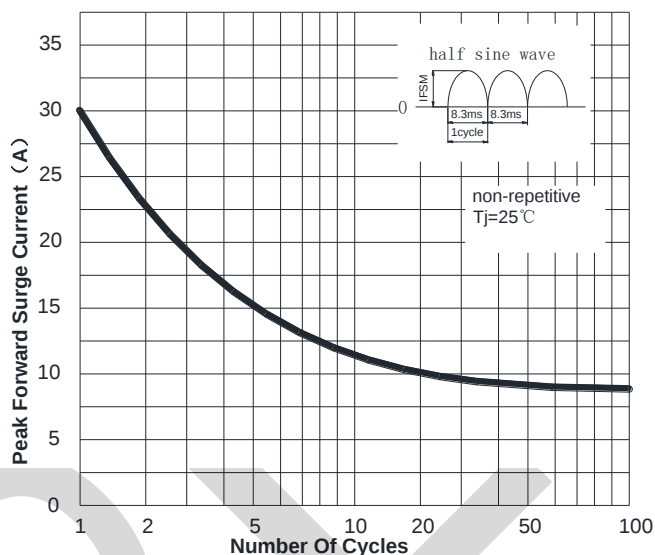


FIG3: Forward Voltage

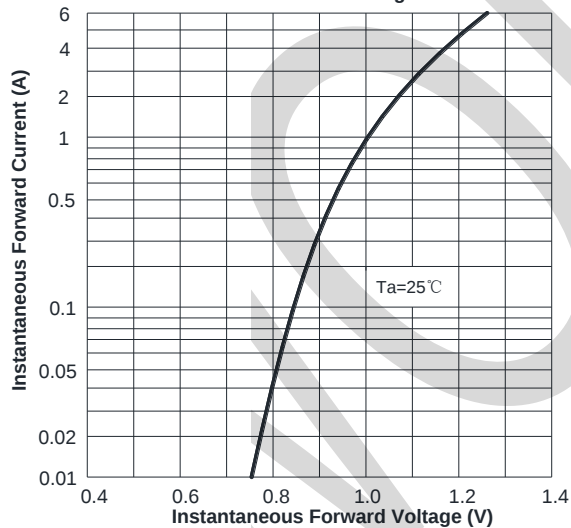
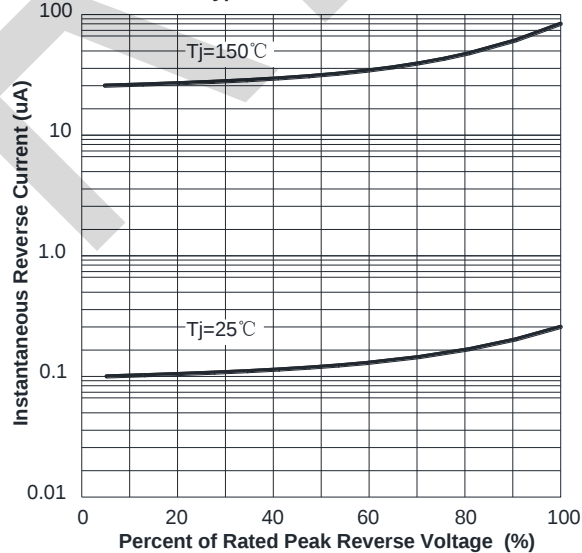
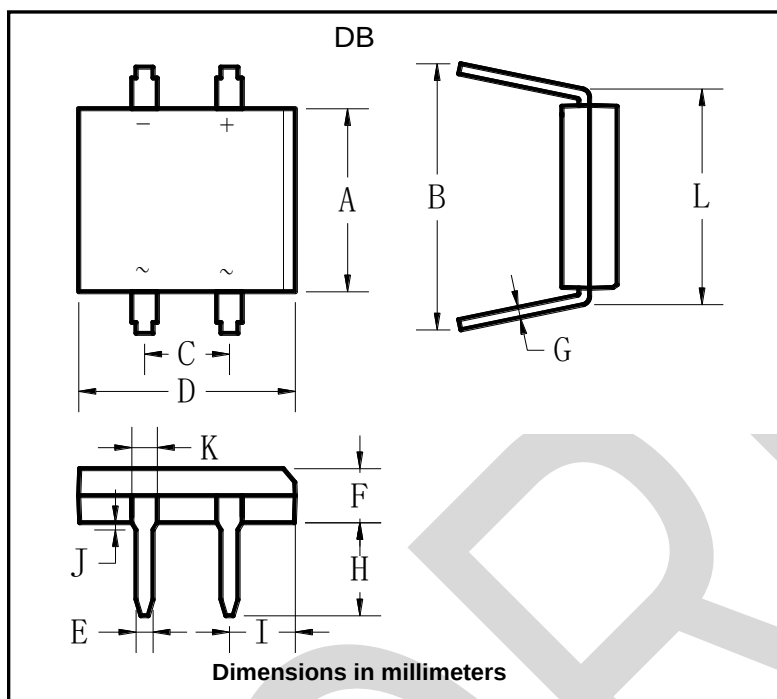


FIG4: Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS



DB		
Dim	Min	Max
A	6.20	6.50
B	7.60	8.90
C	5.00	5.20
D	8.13	8.51
E	0.46	0.58
F	2.80	3.30
G	0.22	0.33
H	3.81	4.69
I	1.39	1.90
J	1.27	2.03
K	0.89	1.14
L	7.24	8.00