

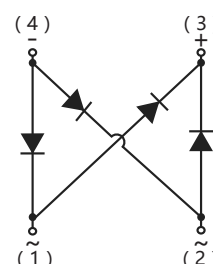
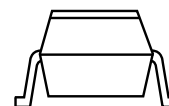
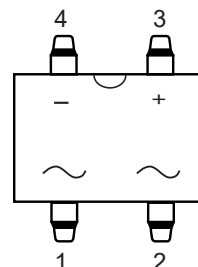
SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ This series is UL listed under the Recognized
- ◆ Component Index, file number E142814
- ◆ The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- ◆ Surge overload ratings to 50 amperes
Ideal for printed circuit board application
- ◆ High temperature soldering guaranteed 265 °C /10 seconds at 5 lbs (2.3kg) tension

DBS

RoHS
COMPLIANT



Mechanical Data

- ◆ Case: Molded plastic
- ◆ Terminals: Plated leads solderable per MIL-STD-202, Method 208
- ◆ Polarity: Marked on body
- ◆ Mounting Position: Any

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	DB 101S	DB 102S	DB 103S	DB 104S	DB 105S	DB 106S	DB 107S	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)	1.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							A
Rating for fusing (t<8.3ms)	I ² t	10							A ² sec
Typical thermal resistance per element (1)	ReJA	110							°C / W
Typical junction capacitance per element (2)	C	25.0							pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	DB 101S	DB 102S	DB 103S	DB 104S	DB 105S	DB 106S	DB 107S	Unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF	1.1							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 500							μA

Notes: (1) Thermal resistance from Junction to Ambient on P.C. board mounting.
(2) Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

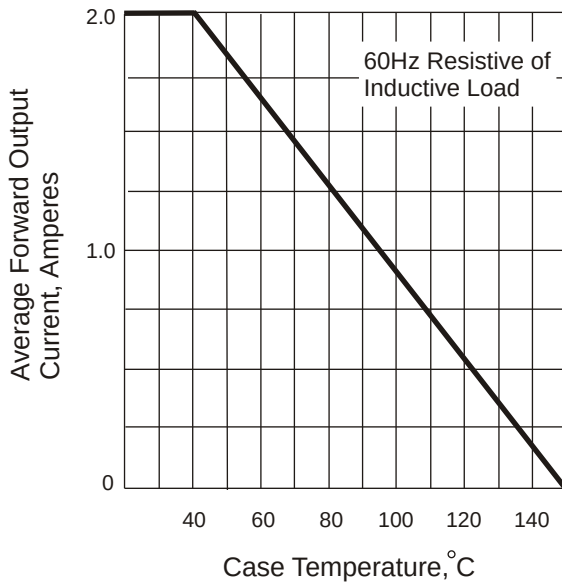


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

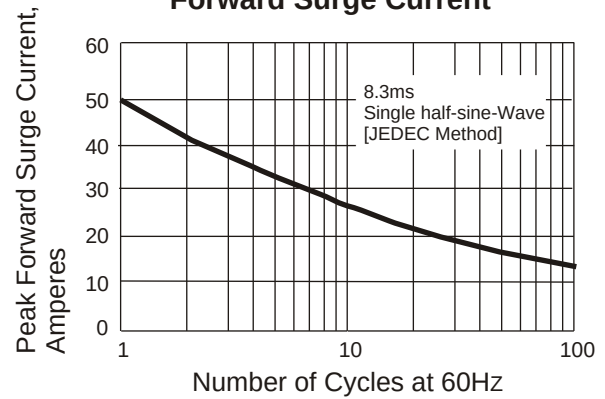


Fig. 4 Typical Revers Characteristics

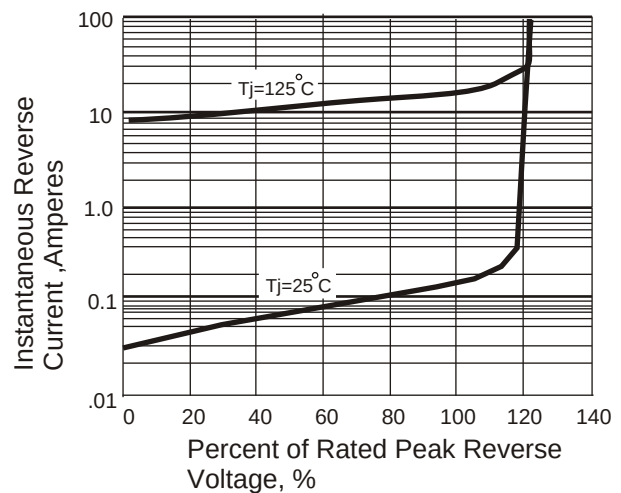


Fig. 3 Typical Instantaneous Forward Characteristics

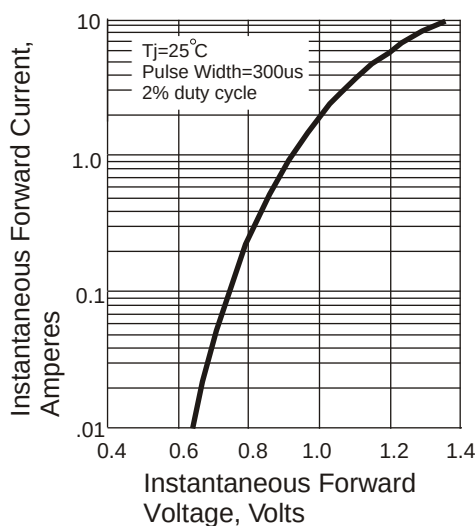
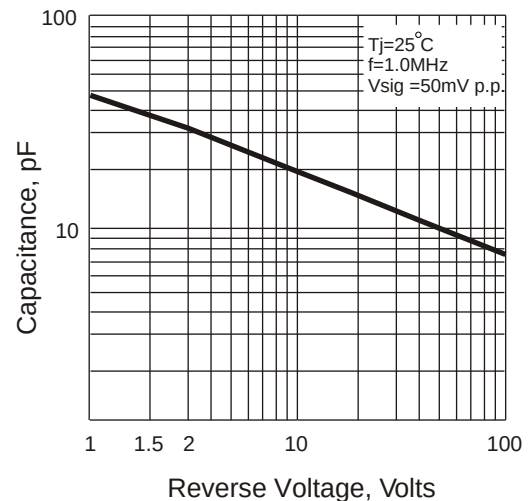


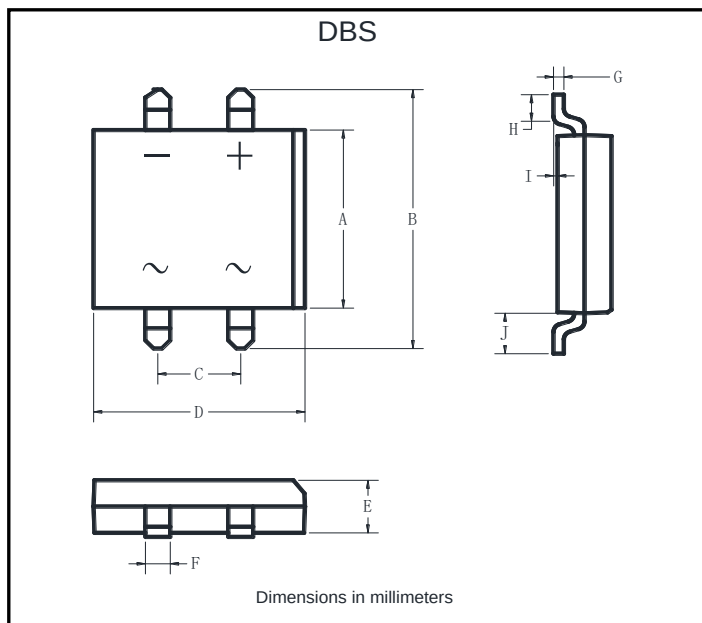
Fig. 5 Typical Junction Capacitance



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

DBS



DBS		
Dim	Min	Max
A	6.20	6.50
B	9.60	10.30
C	5.00	5.20
D	8.13	8.51
E	2.80	3.30
F	1.02	1.2
G	0.22	0.33
H	1.02	1.53
I	0.076	0.33
J	1.80	2.10