



DB101S-DB107S

SURFACE MOUNT BRIDGE RECTIFIERS

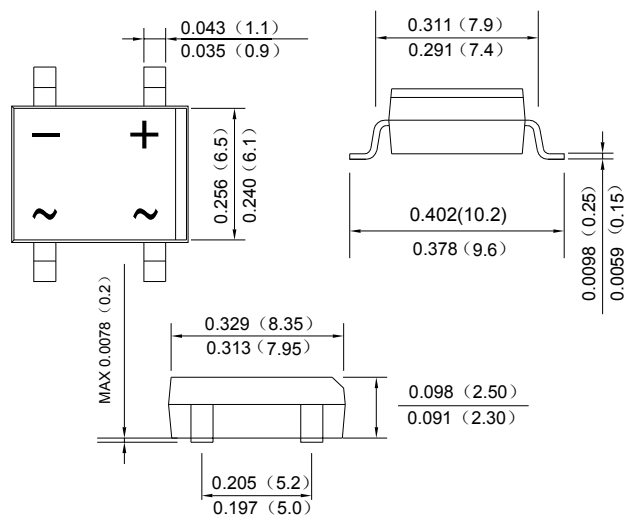
Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-30A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0
- UL Recognized File E476623

Mechanical Data

- Case:Reliable low cost construction utilizing molded plastic technique
- Terminals:Plated Leads Solderable per MIL-STD-202, Method208
- Polarity:As Marked on Case
- Mounting Position:Any
- Marking:Type Number

DB-S



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average forward output rectified current @TA=40℃	I (AV)	1							A
Peak forward surge current 8.3ms single sine-wave superimposed on rated load(JEDEC Method)	IFSM	35							A
Maximum instantaneous forward voltage drop per diode @1.0A	V _F	1.1							V
Maximum DC reverse current at TA=25℃ rated DC blocking voltage per leg TA=125℃	I _R	5.0 500							uA
Typical thermal resistance per leg (Notel)	R θ JA	40							℃/W
	R θ JL	15							
Operating junction temperature range	T _J	-55 to +150							℃
storage temperature range	T _{stg}	-55 to +150							℃

Note:

1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm² solder pad.
3. Measured at 1.0MHz and applied reverse of 4.0V D.C.



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

FIG.1 - FORWARD CURRENT DERATING CURVE

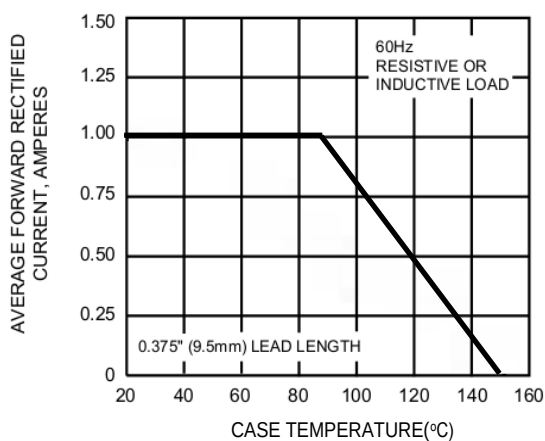


Fig. 2 Maximum Peak Forward Surge Current (per leg)

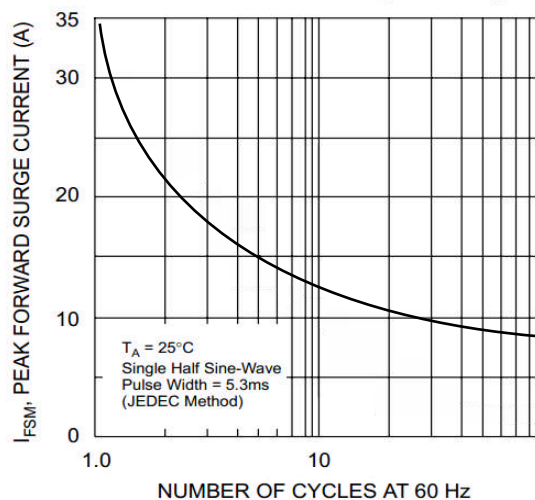


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

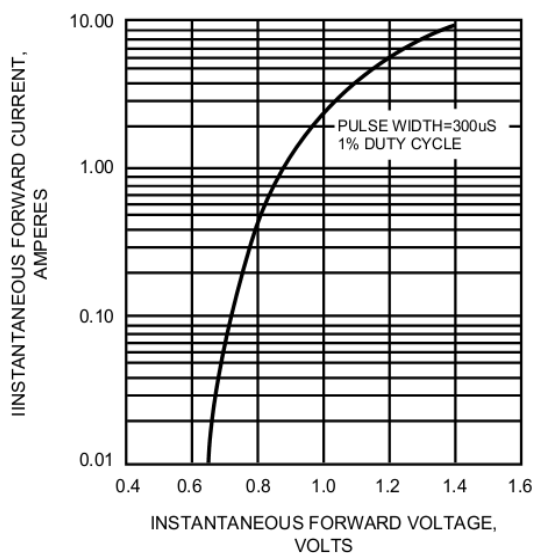


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

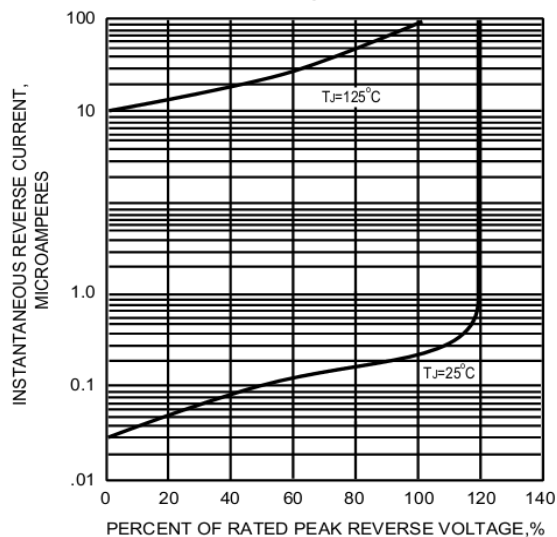


FIG.5 - TYPICAL JUNCTION CAPACITANCE

