



DB101-DB107

BRIDGE RECTIFIERS

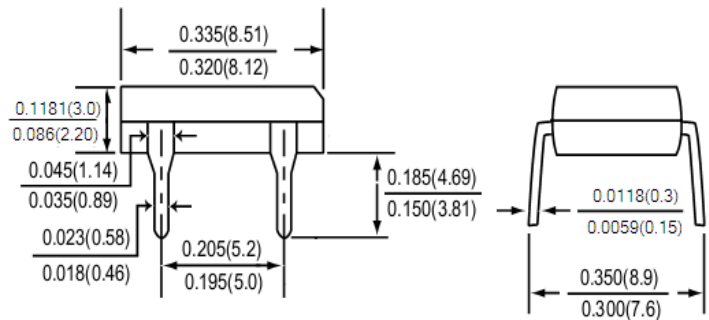
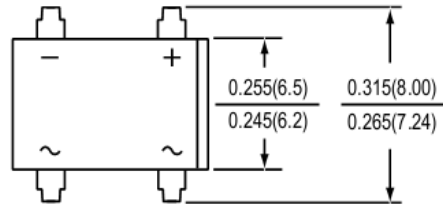
Features

- 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

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-1



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	DB101	DB102	DB103	DB104	DB105	DB106	DB107	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°C	$I(AV)$	1							A
Peak forward surge current 8.3ms single sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	30							A
Maximum instantaneous forward voltage drop per diode @1.0A	V_F	1.1							V
Maximum DC reverse current at TA=25°C rated DC blocking voltage per leg TA=125°C	I_R	5.0 500							uA
Typical thermal resistance per leg (Notel)	$R_{\theta JA}$	40							°C/W
	$R_{\theta JL}$	15							
Operating junction temperature range	T_J	-55 to +150							°C
storage temperature range	T_{stg}	-55 to +150							°C

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

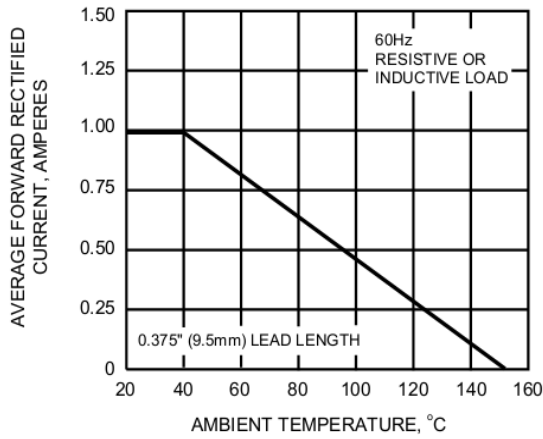


Fig. 2 Maximum Peak Forward Surge Current (per leg)

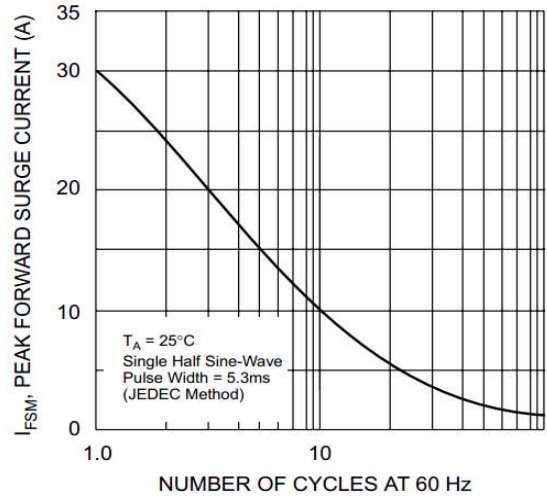


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

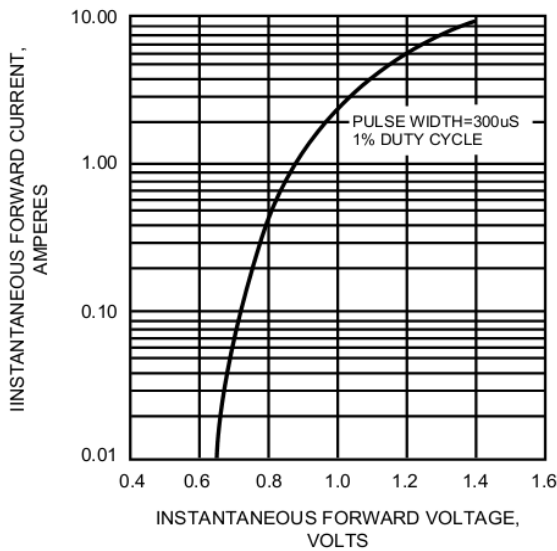


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

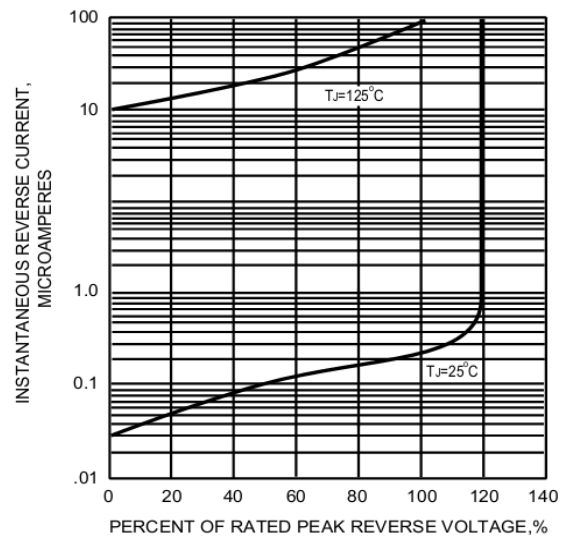


FIG.5 - TYPICAL JUNCTION CAPACITANCE

