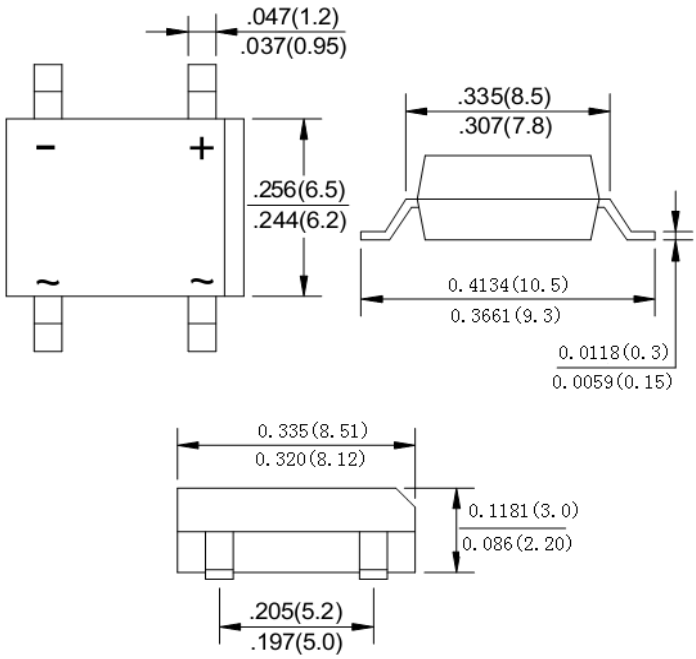
DB101S-DB107S

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



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

Maximum Ratings and Electrical Characteristics @TA=25℃ 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	30							A
Maximum instantaneous forward voltage drop per diode @1.0A	VF	1.1							V
Maximum DC reverse current at TA=25℃ rated DC blocking voltage per leg TA=125℃	IR	5.0 500							uA
Typical thermal resistance per leg (Note1)	RθJA RθJL	40 15							℃/W
Operating junction temperature range	TJ	-55 to +150							℃
storage temperature range	Tstg	-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.

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

FIG.1 - FORWARD CURRENT DERATING CURVE

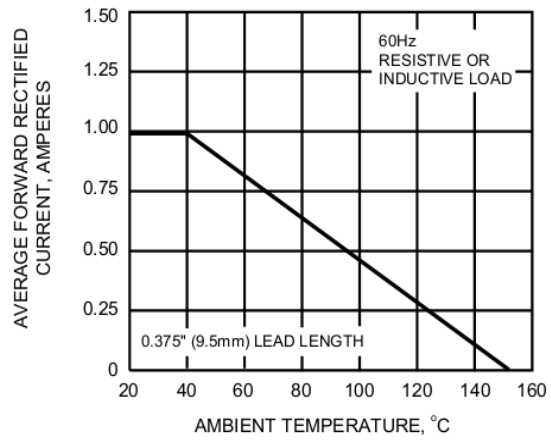


Fig. 2 Maximum Peak Forward Surge Current (per leg

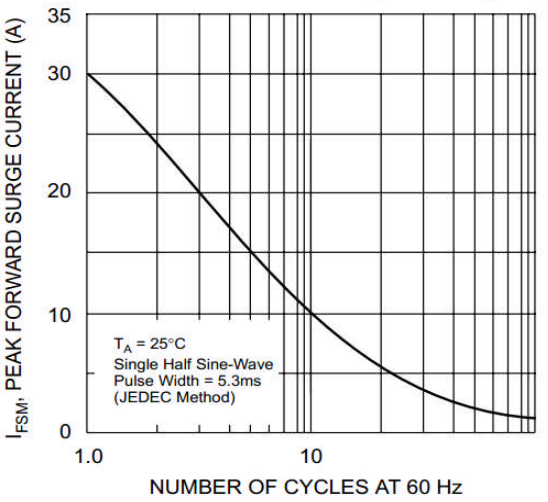


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

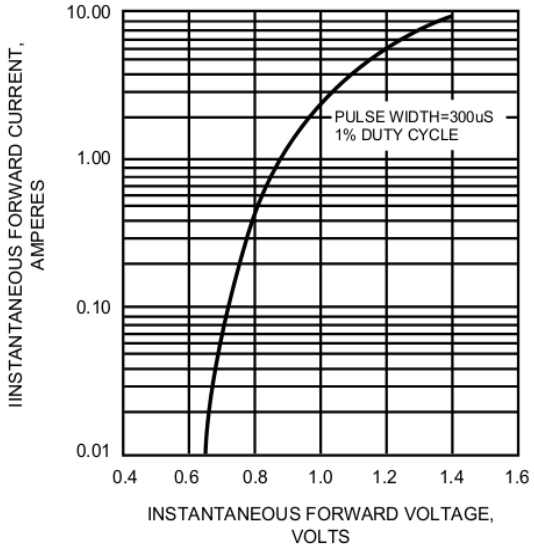


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

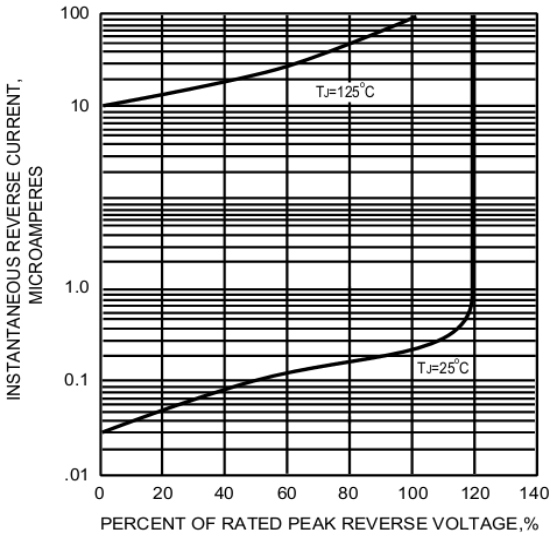


FIG.5 - TYPICAL JUNCTION CAPACITANCE