DB101S-E THRU DB107S-E

SINGLE PHASE GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE: 50 to 1000V CURRENT: 1.0A

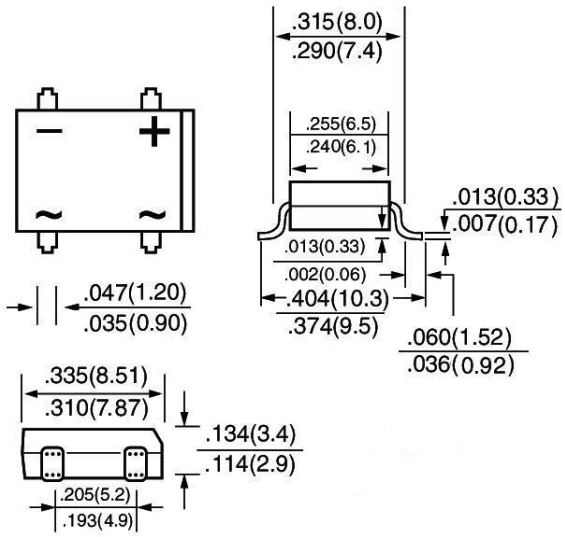
FEATURE

Glass passivated junction
Ideal for printed circuit board
Reliable low cost construction utilizing molded plastic technique
Surge overload rating: 50A peak
Halogen Free

MECHANICAL DATA

Terminal: Plated leads solderable per J-STD-002
Case:UL-94 Class V-0 recognized Halogen Free Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any

DBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	DB 101S -E	DB 102S -E	DB 103S -E	DB 104S -E	DB 105S -E	DB 106S -E	DB 107S -E	Units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS 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 Current at Ta =40°C	If(av)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50.0							A
Maximum Instantaneous Forward Voltage at forward current 1.0A	Vf	1.1							V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	10.0 500.0							μA
Typical Junction Capacitance (Note1)	Cj	25.0							Pf
Typical Thermal Resistance (Note2)	Rth(ja) Rth(jc) Rth(jl)	40 10 15							℃/W
Operating Temperature Range	Tj	-55 to +150							°C
Storage Temperature	Tstg	-55 to +150							°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0 volt
2. Thermal Resistance from Junction to Ambient and to Lead Mounted on P.C.B. with 0.51″ ×0.51″ (13mm×13mm) Copper Pads

FIG.1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

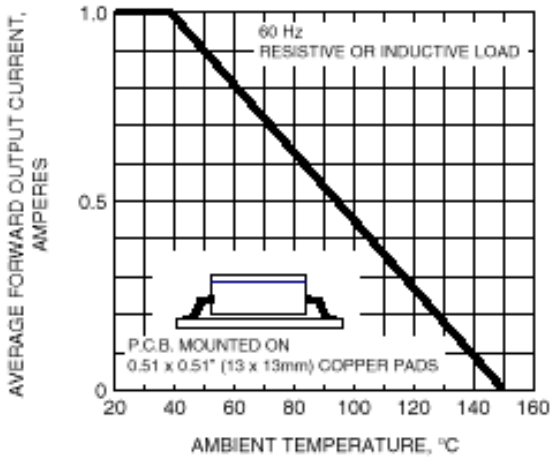


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

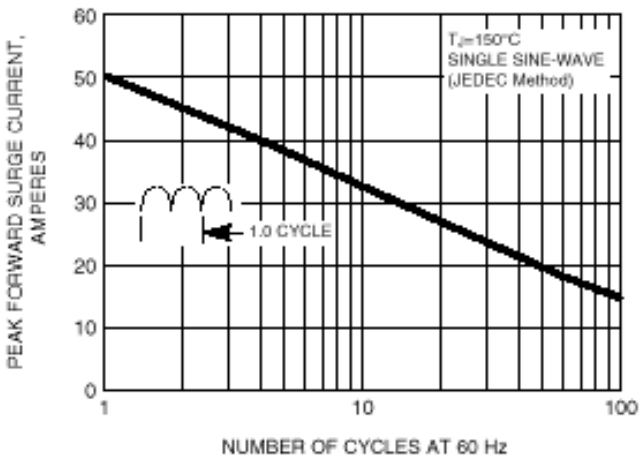


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

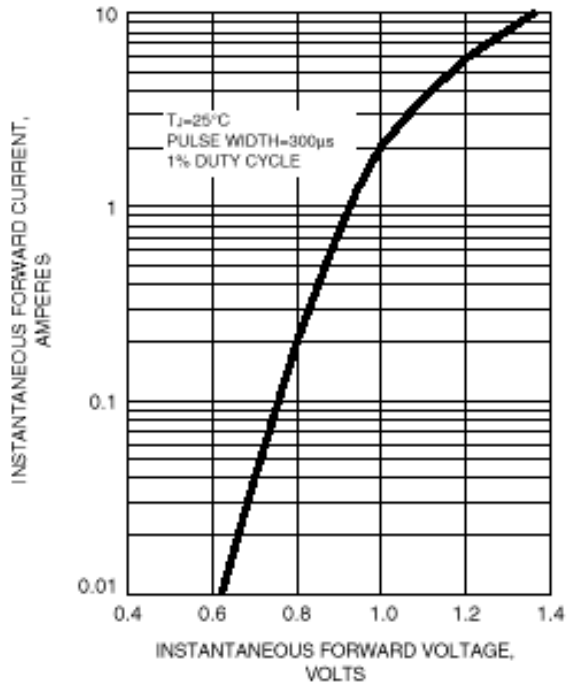


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

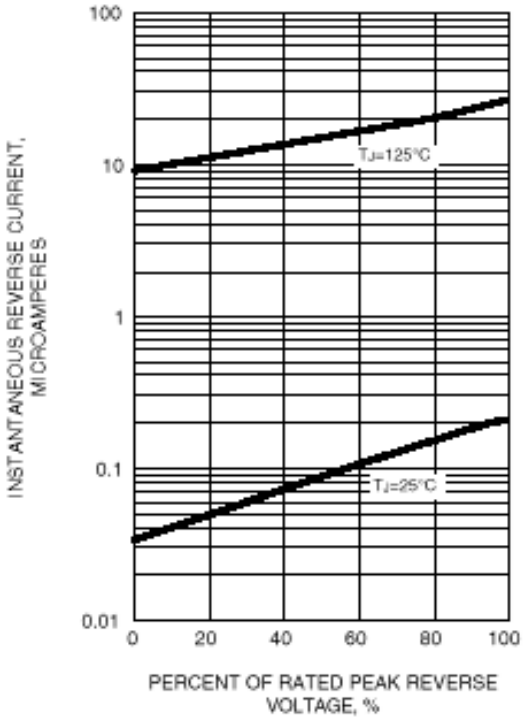


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

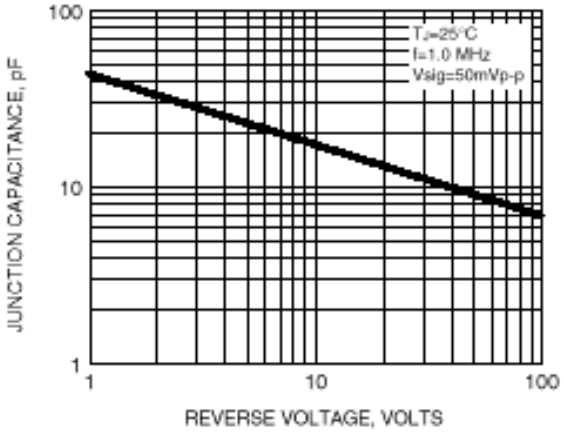


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE