DB101S THRU DB107S

SINGLE PHASE GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE: 50 to 1000V **CURRENT: 1.0A**

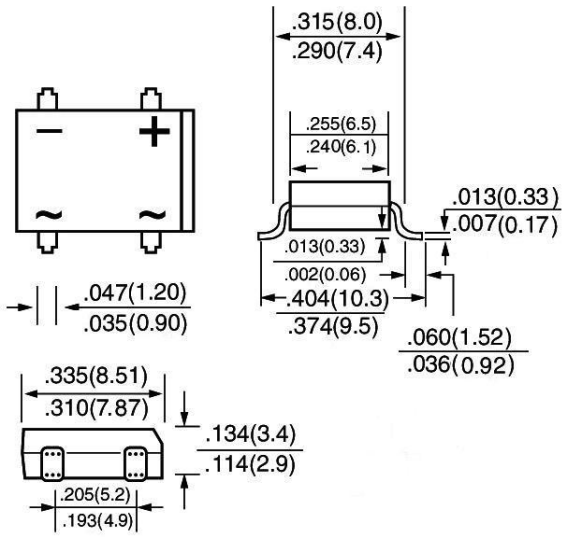
FEATURE

For surface mount application
Reliable low cost construction utilizing molded plastic Technique
Surge overload rating:50 A peak

MECHANICAL DATA

Terminal: Plated leads solderable perJ-STD-002
Case: UL-94 Class V-0 recognized Flame Retardant 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	DB 102S	DB 103S	DB 104S	DB 105S	DB 106S	DB 107S	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 Junction Temperature Range	Tj	-55 to +125							℃
Storage Temperature	Tstg	-55 to +150							℃

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

RATINGS AND CHARACTERISTIC CURVES DB101S THRU DB107S

FIG.1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

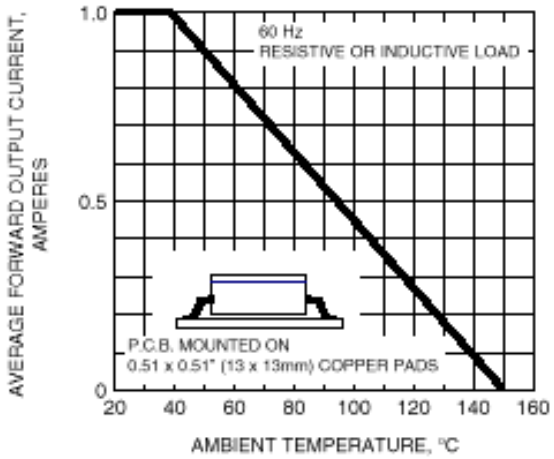


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

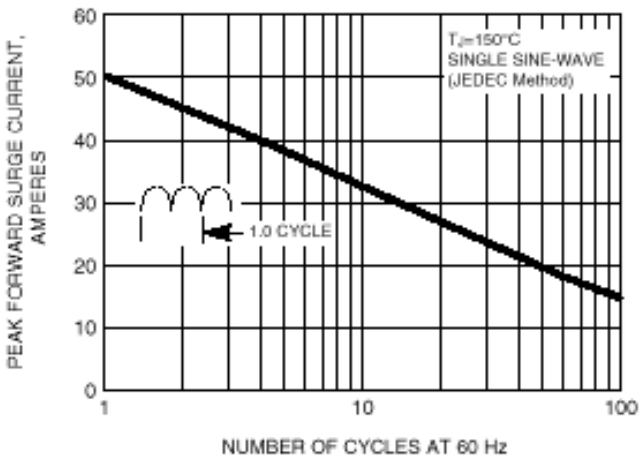


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

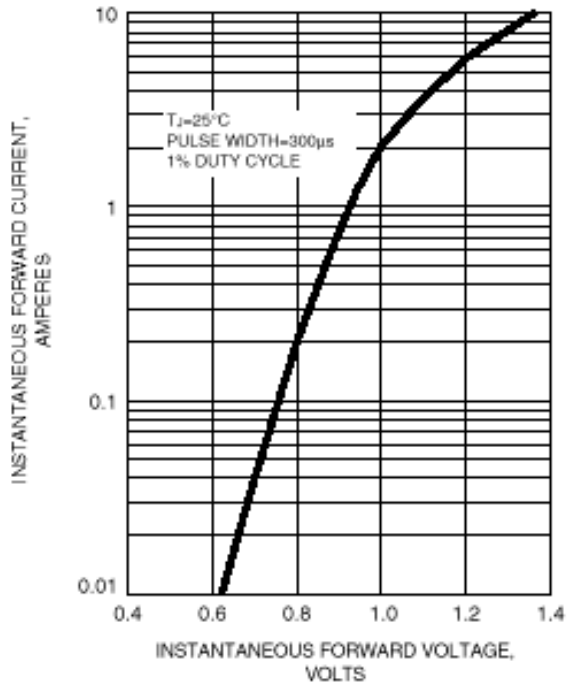


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

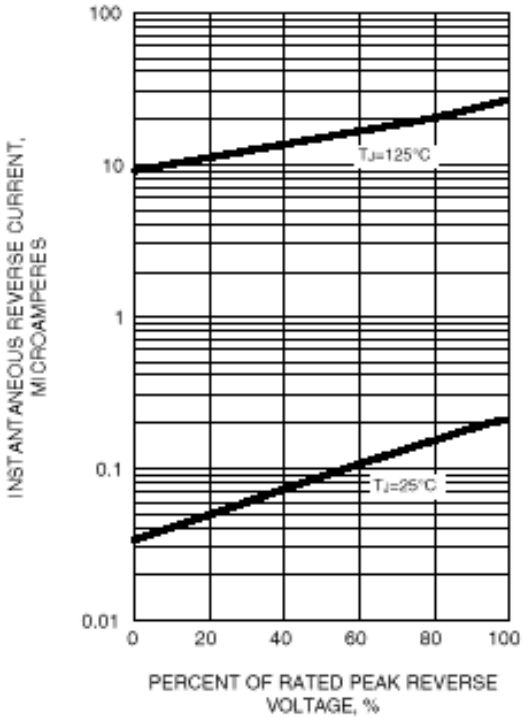


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

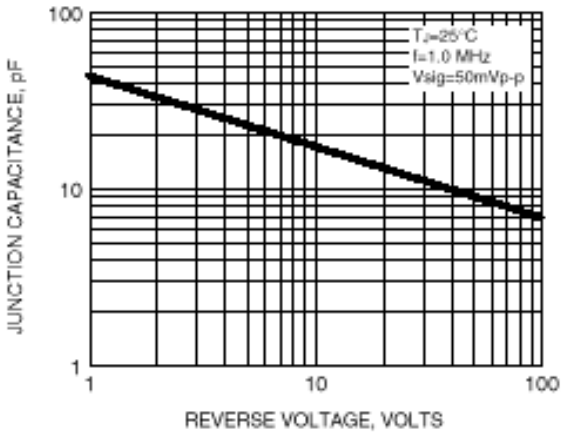


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE