SURFACE MOUNT BRIDGE

DB101S THRU DB107S	DF005S THRU DF10S

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.0 Ampere

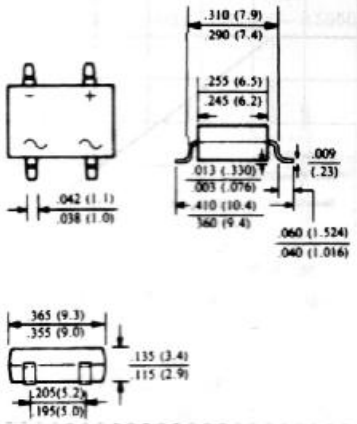
FEATURES

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability.
- High temperature soldering guaranteed: 260℃/10 seconds at terminals.

MECHANICAL DATA

- Case: Molded plastic body
- Epoxy: UL94V—0 rate flame retardant.
- Polarity: Molded on body.
- LeadP: Plated terminals solderable per MIL—STD—202E method 208C
- Weight: 0.04 ounce, 1.0gram

DB—S



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load derate current by 20%.

	SYMBOLS	DB101S DF005S	DB102S DF01S	DB103S DF02S	DB104S DF04S	DB105S DF06S	DB106S DF08S	DB107S DF10S	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, 0.06"(1.5mm) lead length at T_A=40℃ (Note 2)	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current 8.3ms single half sine—wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							Amps
Rating for Fusing(t<8.3ms)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 1.0A	V_F	1.1							Volts
Maximum Reverse Current at rated DC blocking voltage per element T_A=25℃	I_R	10							μAmps
Maximum Reverse Current at rated DC blocking voltage per element T_A=125℃	I_R	0.5							mAmps
Typical Junction Capacitance (NOTE 1)	C_J	25							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	40							℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	−65 to +150							℃

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C.B. with 0.51" ×0.51" (13×13mm)copper pads.

RATINGS AND CHARACTERISTIC CURVES DF005S THRU DF10S / DB101S THRU DB107S

FIG.1–DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

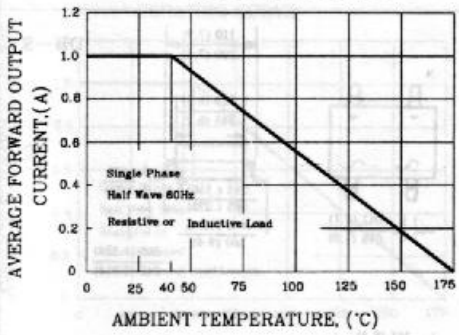


FIG.2–MAXIMUM NON–REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

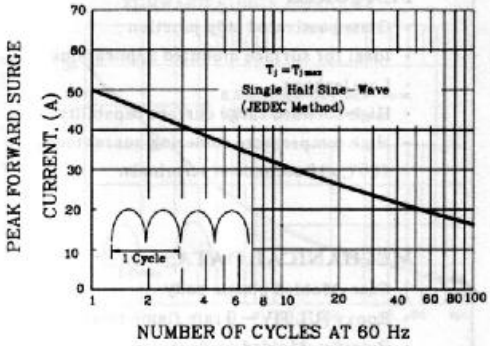


FIG.3–TYPICAL FORWORD CHARACTERISTICS PER BRIDGE ELEMENT

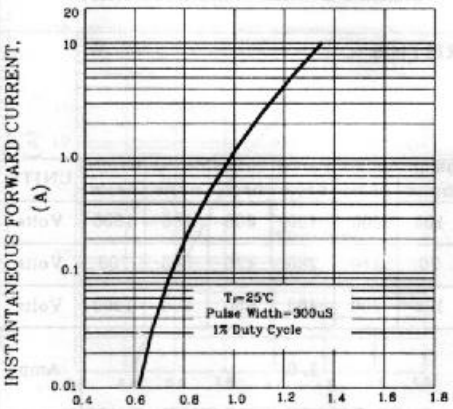


FIG.4–TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

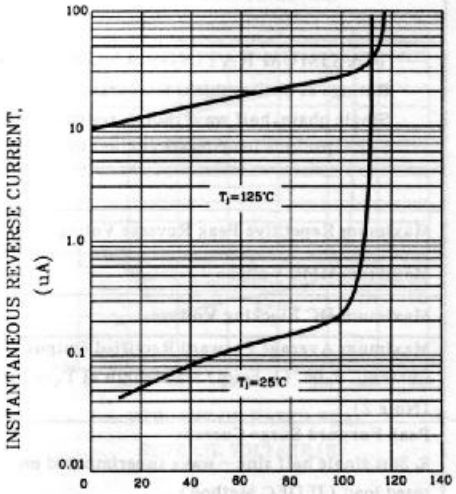


FIG.5–TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT