

DB151-E THRU DB157-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE: 50 to 1000V

CURRENT: 1.5A

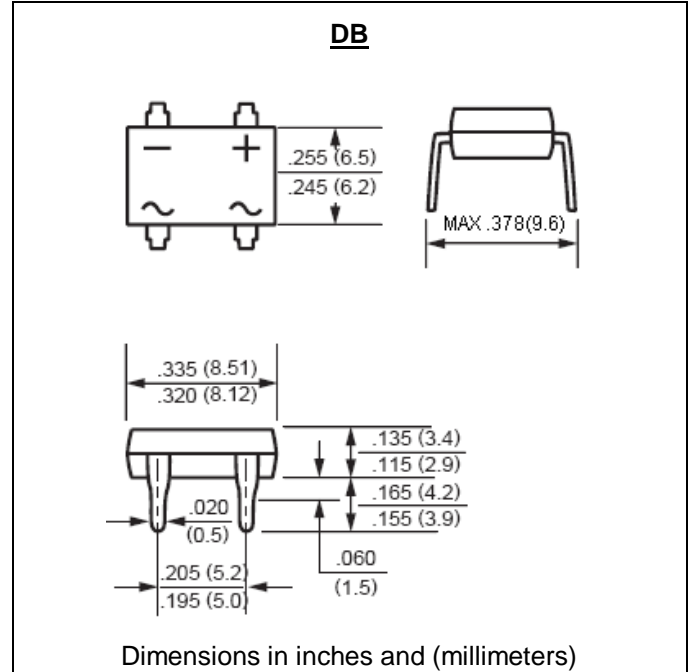


FEATURE

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	DB15 1-E	DB15 2-E	DB15 3-E	DB15 4-E	DB15 5-E	DB15 6-E	DB15 7-E	units
Maximum Recurrent 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 Rectified Current at Ta =40°C	I _{f(av)}	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	50.0							A
Maximum Instantaneous Forward Voltage at rated Forward Current	V _f	1.1							V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =125°C	I _r	10.0 500.0							μA
Typical Thermal Resistance (Note1)	R _{th(ja)} R _{th(jl)}	40 15							°C/W
Typical Junction Capacitance (Note2)	C _j	25.0							pF
Storage and Operation Junction Temperature	T _{stg} , T _j	-55 to +150							°C

Note:

1. Thermal resistance from Junction to Ambient and from Junction to Lead mounted on P.C.B. with 0.51 × 0.51" (13 × 13mm) copper pads
2. Measured at 1.0 MHz and applied voltage of 4.0 volt

RATINGS AND CHARACTERISTIC CURVES DB151-E THRU DB157-E

FIG.1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

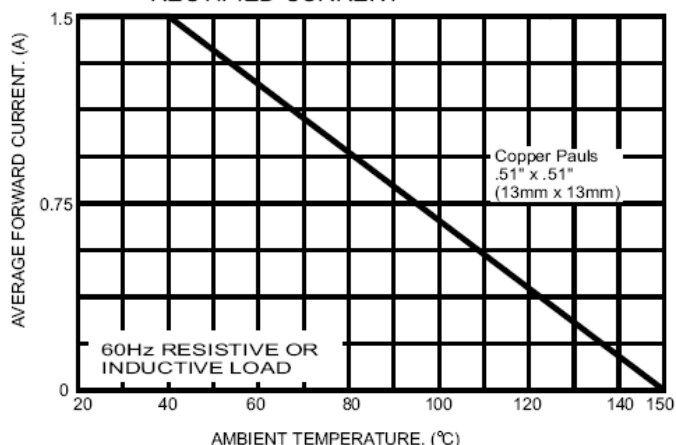


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

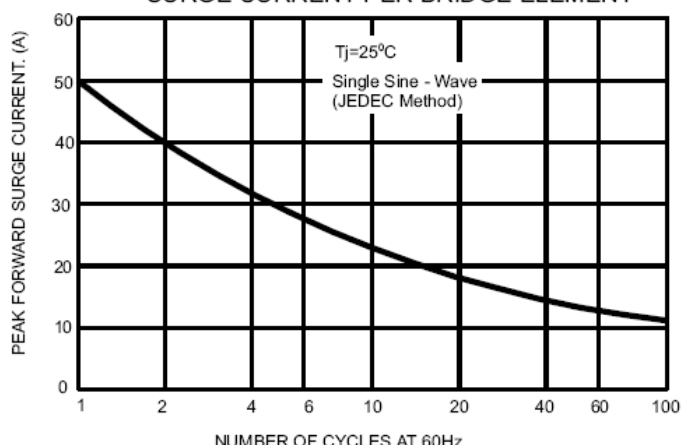


FIG.3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

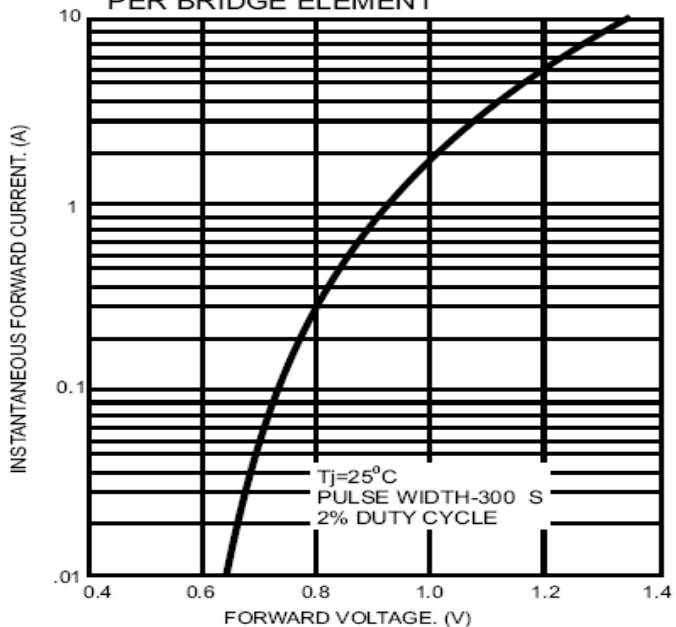


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

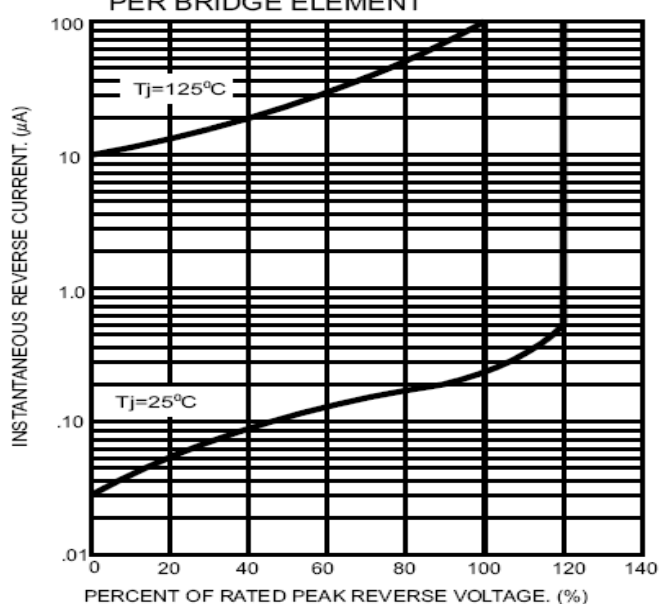


FIG.5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

