

## DB151S THRU DB157S

**SINGLE PHASE GLASS PASSIVATED  
SURFACE MOUNT BRIDGE RECTIFIER**  
VOLTAGE: 50 to 1000V      CURRENT: 1.5A

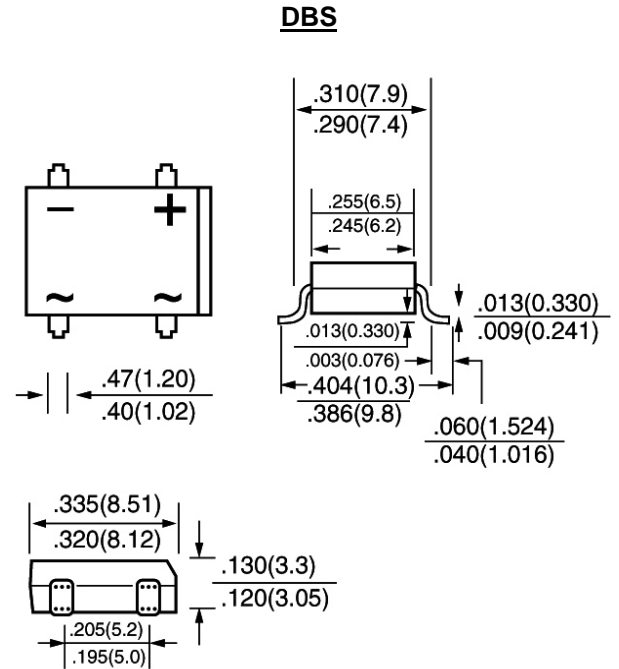


### FEATURE

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

### MECHANICAL DATA

Terminal: Plated leads solderable per MIL-STD 750, method 2026  
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Polarity symbol marked on body  
Mounting position: any



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 151S	DB 152S	DB 153S	DB 154S	DB 155S	DB 156S	DB 157S	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T <sub>a</sub> = 40°C	I <sub>f(av)</sub>	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	50.0							A
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	10							A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage at rated Forward Current	V <sub>f</sub>	1.1							V
Maximum DC Reverse Current T <sub>a</sub> = 25°C at rated DC blocking voltage T <sub>a</sub> = 125°C	I <sub>r</sub>	10.0 500.0							μA
Typical Thermal Resistance (Note1)	R <sub>th(ja)</sub> R <sub>th(jl)</sub>	40 15							°C/W
Typical Junction Capacitance (Note2)	C <sub>j</sub>	25.0							pF
Storage and Operation Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-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 DB151S THRU DB157S

FIG.1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

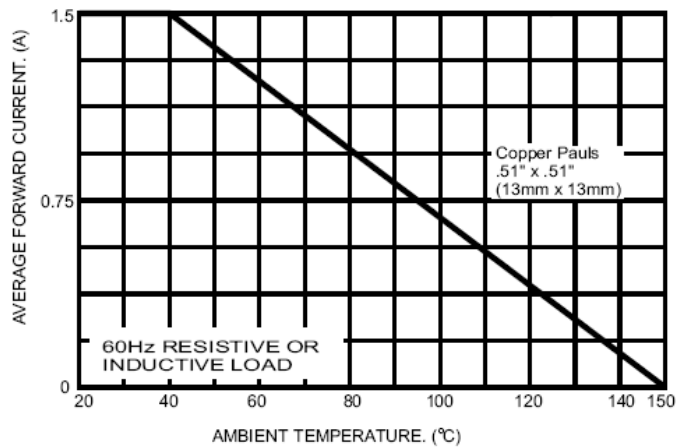


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

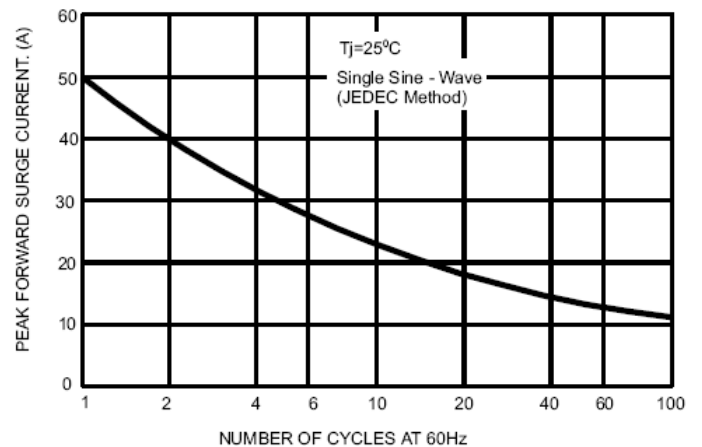


FIG.3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

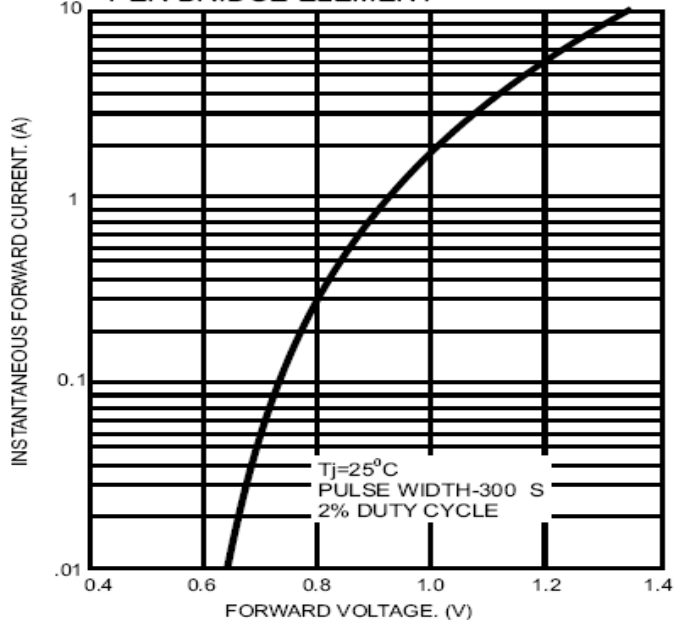


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

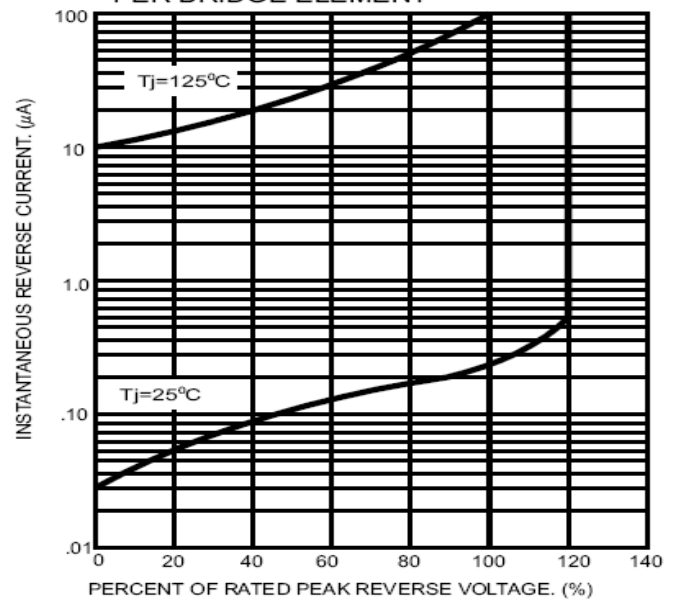


FIG.5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

