

# DB101(DF005) THRU DB107(DF10)



## GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage: 50 to 1000 Volts  
Forward Current: 1.0 Amps

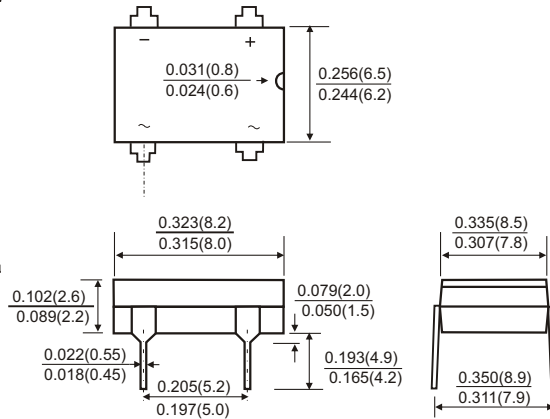
### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

### MECHANICAL DATA

- Case: DB molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any
- Weight: 0.02ounce, 0.38 gram

### DB



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

	Symbols	DB101 DF005	DB102 DF01	DB103 DF02	DB104 DF04	DB105 DF06	DB106 DF08	DB107 DF10	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	I(AV)					1.0			Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>					50			Amps
Maximum Instantaneous Forward Voltage at 1.0 A DC	V <sub>F</sub>					1.1			Volts
Maximum DC Reverse Current at rated DC blocking voltage	T <sub>A</sub> =25 °C					10			μA
	T <sub>A</sub> =125 °C					500			
Typical junction capacitance(Note 1)	C <sub>J</sub>					25			pF
Typical thermal resistance(Note 2)	R <sub>θJA</sub>					40			K/W
Operating junction and storage temperature range	T <sub>J</sub> T <sub>STG</sub>					-55 to +150			°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

2. Thermal resistance junction to ambient mounted on P.C.B. With 05\*0.5 inches(1.3\*1.3mm) copper pads

# RATINGS AND CHARACTERISTIC CURVES DB101 (DF005) THRU DB107 (DF10)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

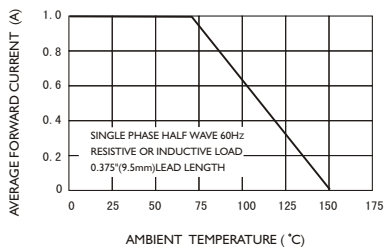


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

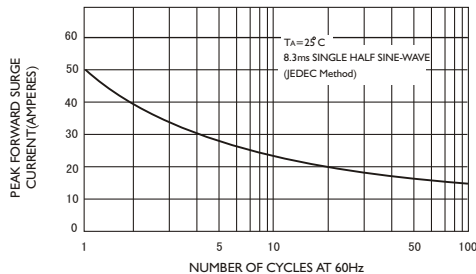


FIG3-TYPICAL JUNCTION CAPACITANCE

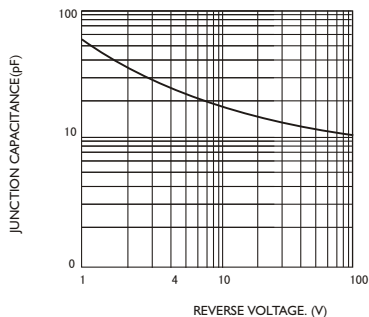


FIG4-TYPICAL FORWARD CHARACTERISTICS

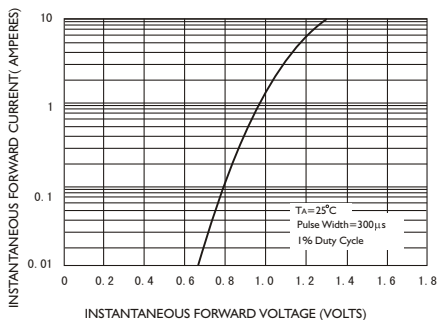


FIG.5-TYPICAL REVERSE CHARACTERISTICS

