



# DB151 THRU DB157

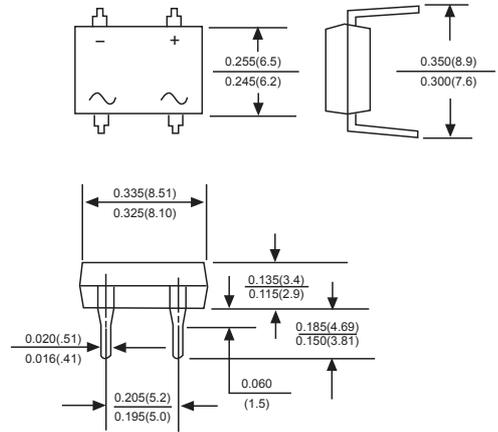
Voltage Range - 50 to 1000 Volts Current - 1.5 Ampere

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

### Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability

**DB** **ROHS COMPLIANT**



Dimensions in inches and (millimeters)

### Mechanical Data

**Case** : JEDEC DB Molded plastic body

**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity** : Polarity symbol marking on body

**Mounting Position** : Any

**Weight** : 0.02 ounce, 0.4 grams

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	DB151	DB152	DB153	DB154	DB155	DB156	DB157	UNITS
		MDD DB151	MDD DB152	MDD DB153	MDD DB154	MDD DB155	MDD DB156	MDD DB157	
Maximum repetitive 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 $T_C=40^\circ C$	$I_{F(AV)}$	1.5							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A
Maximum instantaneous forward voltage drop per leg at 1.5A	$V_F$	1.1							V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=100^\circ C$	$I_R$	10 500							$\mu A$ $\mu A$
Operating temperature range	$T_J$	-55 to +150							$^\circ C$
storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4x1.5" x 1.5" ( 3.81x3.81 cm ) copper pad.

## Ratings And Characteristic Curves

FIG. 1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

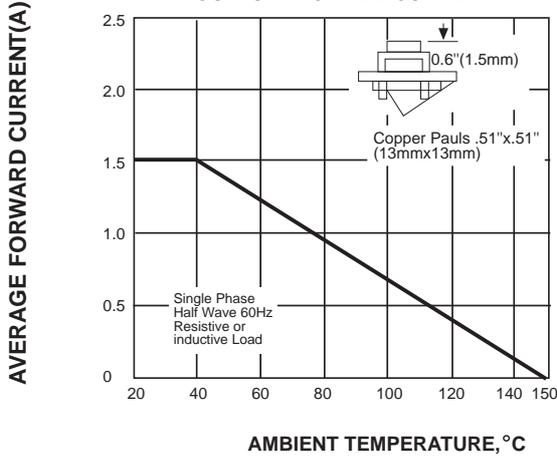


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

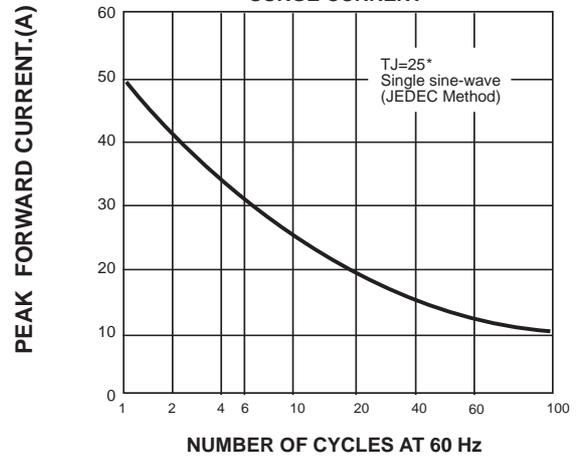


FIG. 3-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

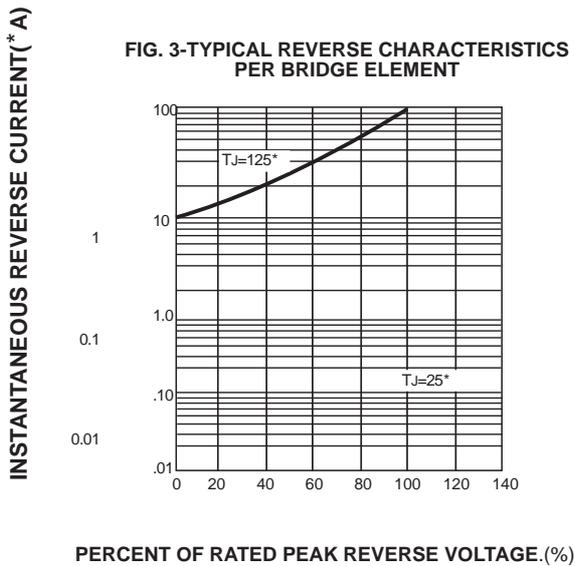


FIG. 4-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

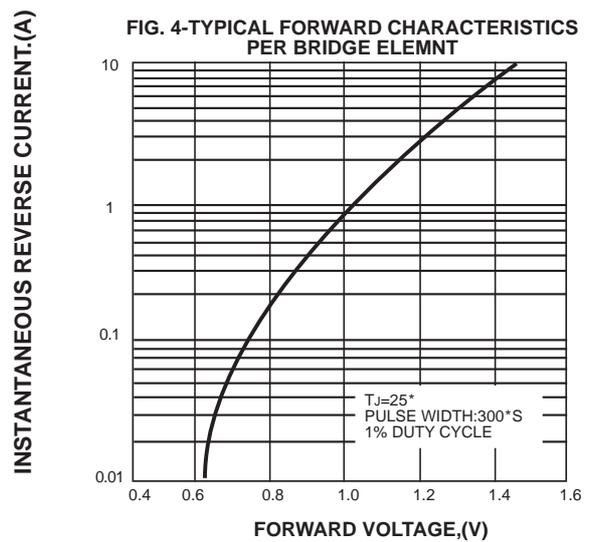
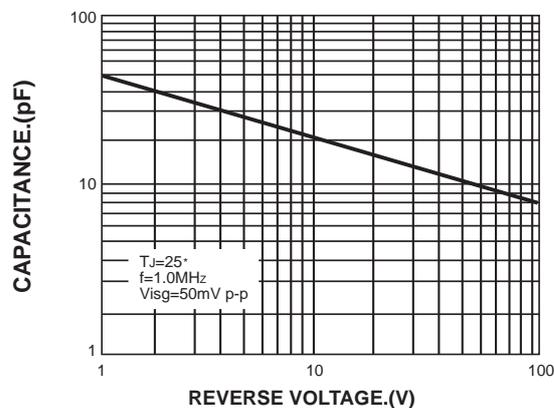


FIG. 3-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



The curve above is for reference only.