

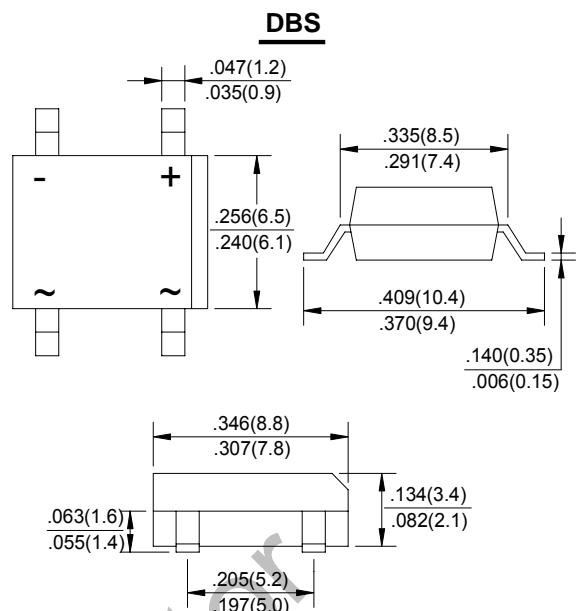
## BRIDGE RECTIFIERS

Voltage Range - 50 to 1000 Volts Current -1.0 Ampere

## FEATURES

- ♦ Rating to 1000V PRV
- ♦ Ideal for printed circuit board
- ♦ Low forward voltage drop, high current capability
- ♦ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ♦ The plastic material has UL flammability classification 94V-0

## MECHANICAL DATA

**Case:** Molded plastic body**Polarity:** As marked**Mounting position:** Any**Weight:** 0.02 ounces, 0.38 grams

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%

CHARACTERISTICS	SYMBOL	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNIT
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 @T <sub>A</sub> =40°C	I <sub>(AV)</sub>					1.0			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave	I <sub>FSM</sub>					30			A
Super Imposed on Rated Load (JEDEC Method)									
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>					1.1			V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>					10			μA
I <sup>2</sup> t Rating for Fusing(t<8.3ms)	I <sup>2</sup> t					500			A <sup>2</sup> s
Typical Junction Capacitance Per Element(Note1)	C <sub>J</sub>					25			pF
Typical Thermal Resistance (Note2)	R <sub>θJA</sub>					40			°C/W
Operating Temperature Range	T <sub>J</sub>					-55 to +150			°C
Storage Temperature Range	T <sub>STG</sub>					-55 to +150			°C

Note:1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

2. Thermal resistance from junction to ambient mounted on P.C.B with 0.5\*0.5"(13\*13mm)copper pads.

## RATINGS AND CHARACTERISTIC CURVES DB101S THRU DB107S

FIG.1-FORWARD CURRENT DERATING CURVE

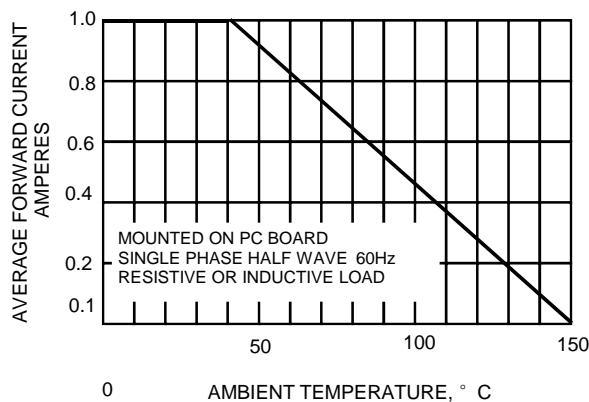


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

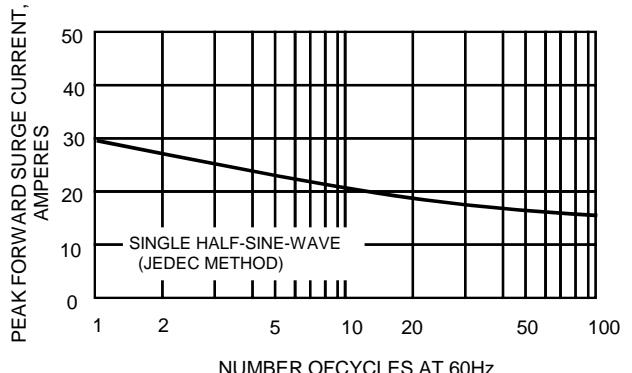


FIG.3-TYPICAL JUNCTION CAPACITANCE

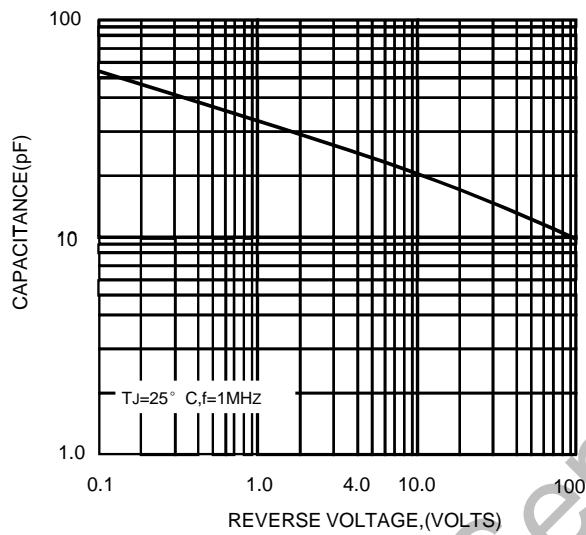


FIG.4-TYPICAL FORWARD CHARACTERISTICS

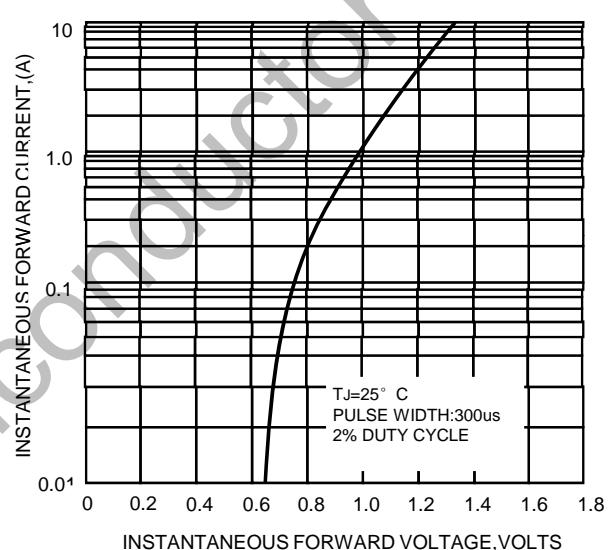


FIG.5-TYPICAL REVERSE CHARACTERISTICS

