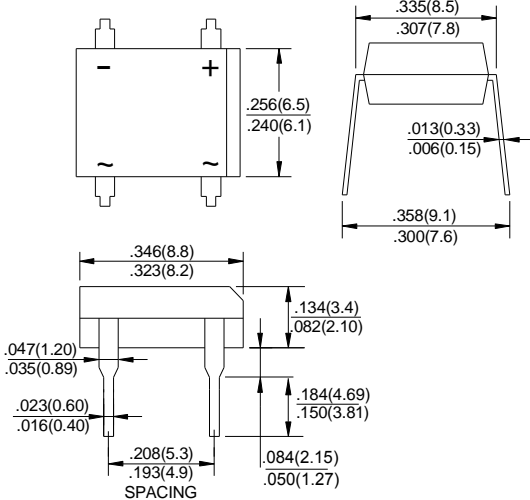


DB101 THRU DB107

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 50 to 1000 Volts Current - 1.0 Ampere

DB



Dimensions in inches and (millimeters)

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

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Mounting Position: Any

Weight: 0.02 ounce, 0.38 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25* ambient temperature unless otherwise specified.

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

CHARACTERISTICS	SYMBOL	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNIT
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 @ T _A =40°C	I _(AV)	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	30							A
Maximum Forward Voltage at 1.0A DC	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J =25°C @ T _J =125°C	I _R	10 500							μA
I ² t Rating for Fusing (t<8.3ms)	I ² t	10.4							A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	25							pF
Typical Thermal Resistance (Note2)	R _{θJA}	40							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-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 DB101THRU DB107

FIG.1-FORWARD CURRENT DERATING CURVE

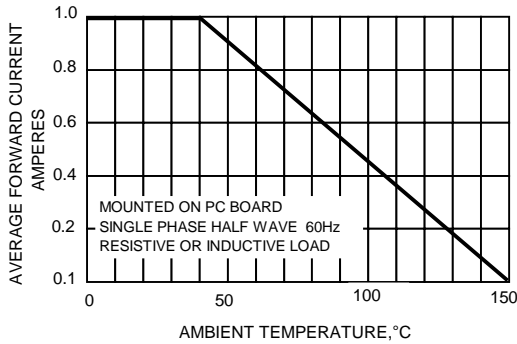


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

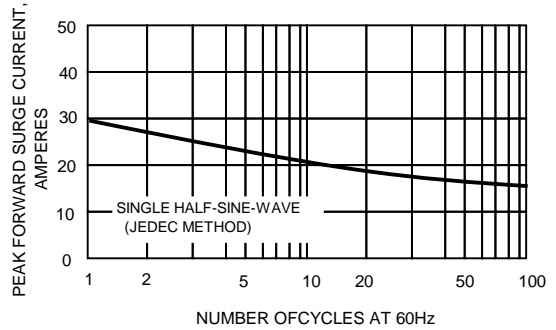


FIG.3-TYPICAL JUNCTION CAPACITANCE

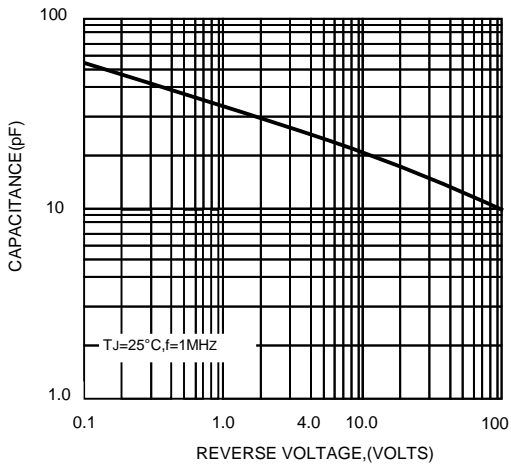


FIG.4-TYPICAL FORWARD CHARACTERISTICS

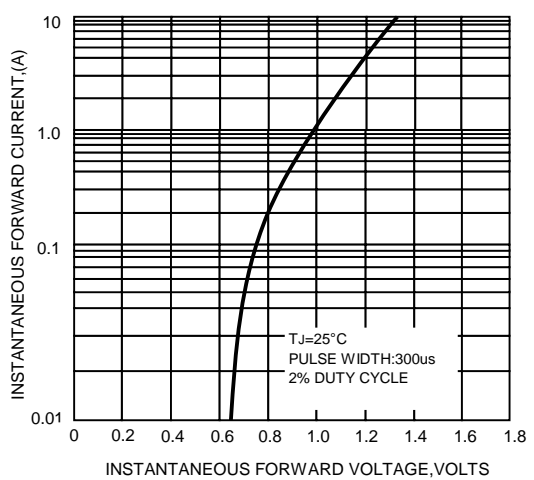


FIG.5-TYPICAL REVERSE CHARACTERISTICS

