GM GarboMicro Semiconductor

DB101S thru DB107S

SURFACE MOUNT
GLASS PASSIVATED
BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50** to **1000**Volts
FORWARD CURRENT - **1.0** Ampere

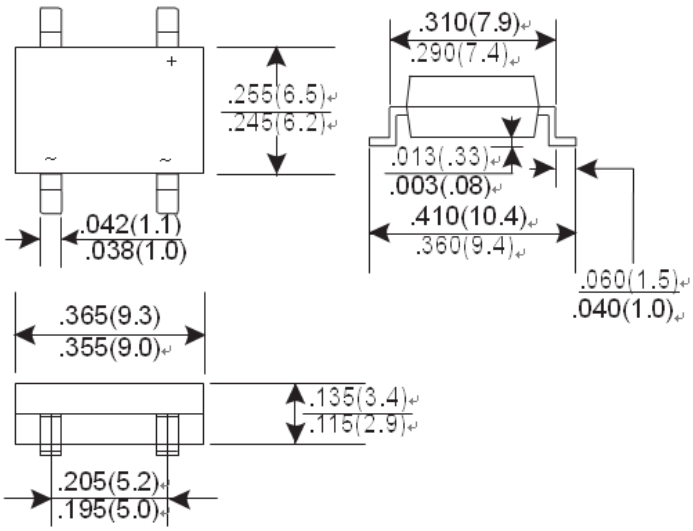
FEATURES

- 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

- Polarit:As marked on Body
- Weight:0.02 ounces,0.38 grams
- Mounting position:Any

DBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	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℃	$I_{(AV)}$	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 @T_J=25℃ at Rated DC Bolcking Voltage @T_J=125℃	I_R	10 500							μA
I^2t Rating for Fusing (t<8.3ms)	I^2t	10.4							A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	25							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	40							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

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.

FIG.1-FORWARD CURRENT DERATING CURVE

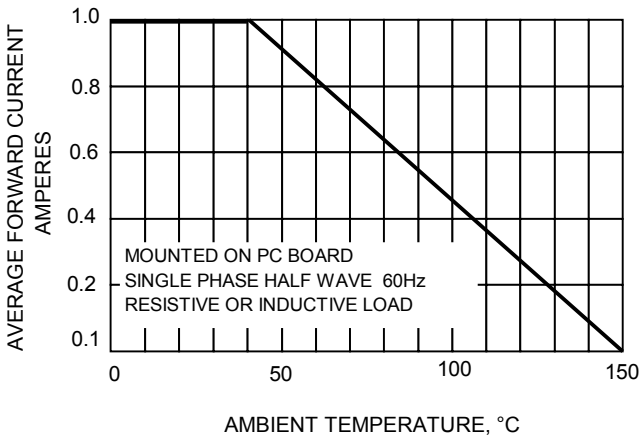


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

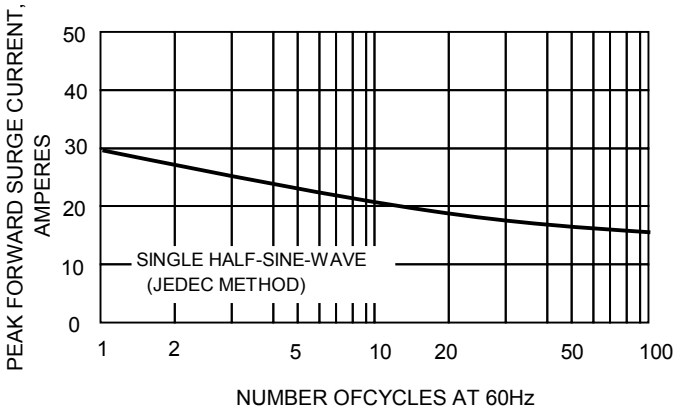


FIG.3-TYPICAL JUNCTION CAPACITANCE

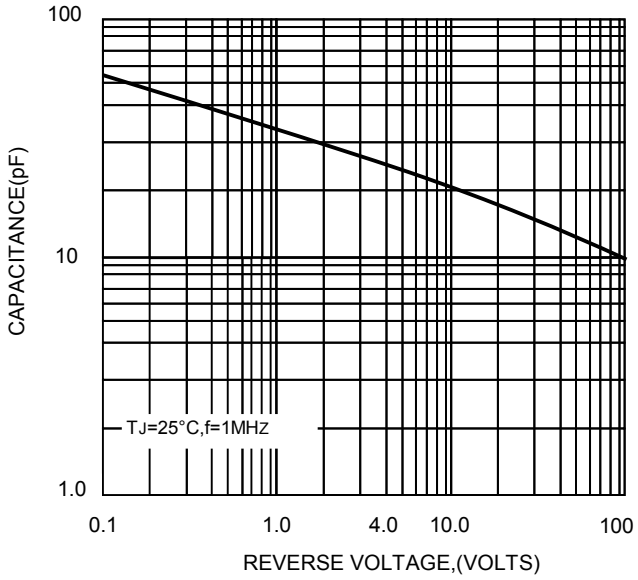


FIG.4-TYPICAL FORWARD CHARACTERISTICS

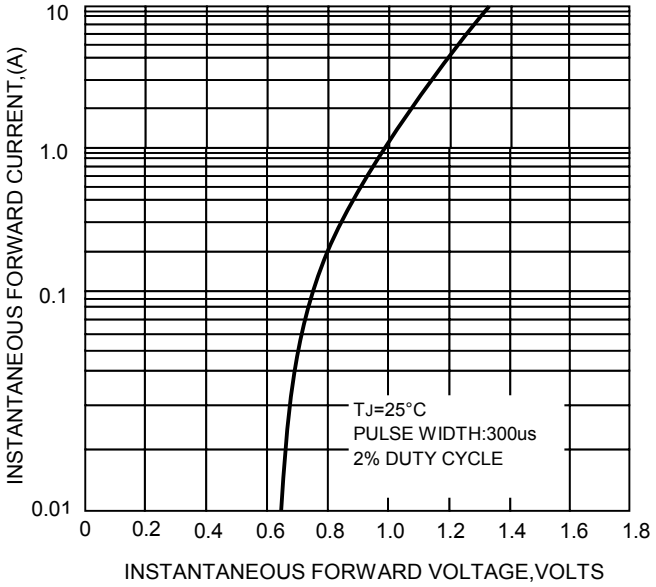


FIG.5-TYPICAL REVERSE CHARACTERISTICS