SEP ELECTRONIC CORP.

DB301 thru DB310

SURFACE MOUNT
GLASS PASSIVATED
BRIDEG RECTIFIERS

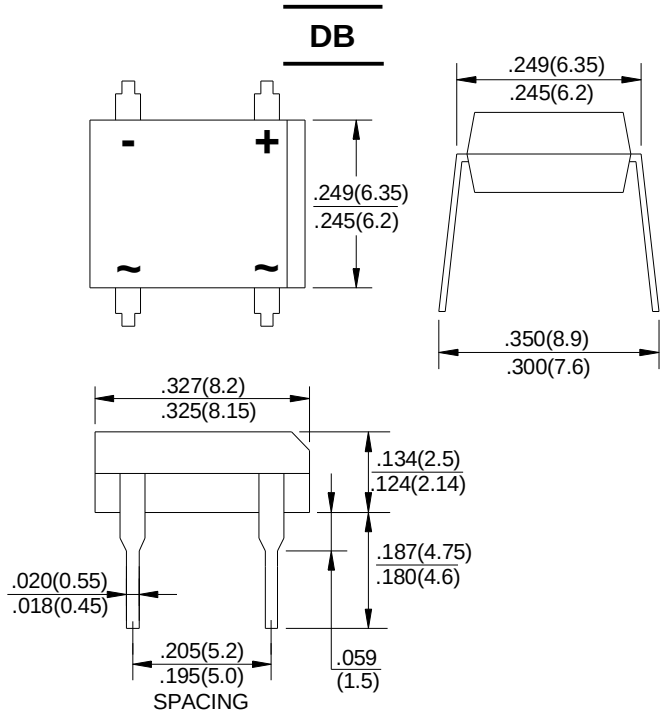
REVERSE VOLTAGE **- 50** to **1000**Volts
FORWARD CURRENT **- 3.0** Amperes

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
- Lead tin Pb/Sn copper
- The plastic material has UL flammability classification 94V-0

MECHANICAL DATA

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



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	DB301	DB302	DB303	DB304	DB305	DB306	DB310	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℃	$I_{(AV)}$	3.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC .Method)	I_{FSM}	90							A
Maximum Forward Voltage at 2.0A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃	I_R	10							uA
at Rated DC Blocking Voltage @T_J=125℃		500							
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)	$R_{\theta JC}$	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.

RATING AND CHARACTERISTIC CURVES
DB301 thru DB310

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

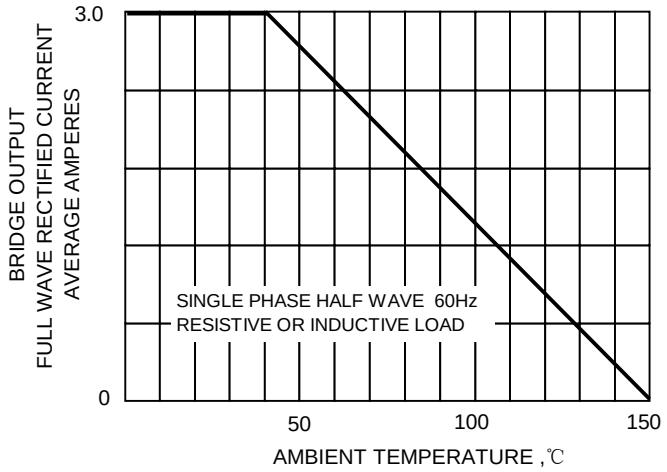


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

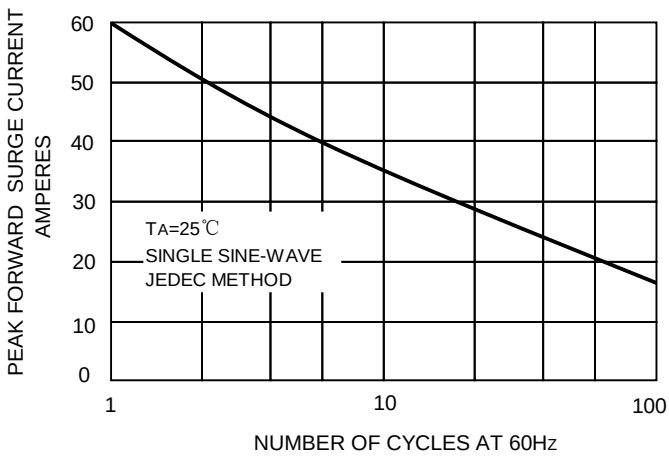


FIG.3-TYPICAL JUNCTION CAPACITANCE

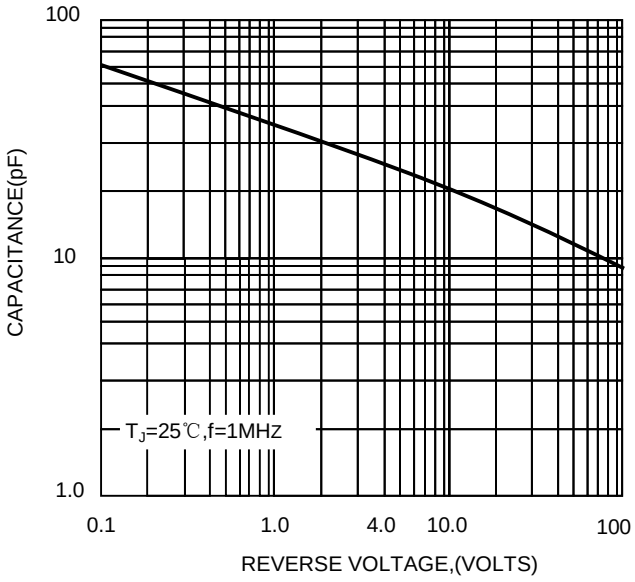


FIG.4-TYPICAL FORWARD CHARACTERISTICS

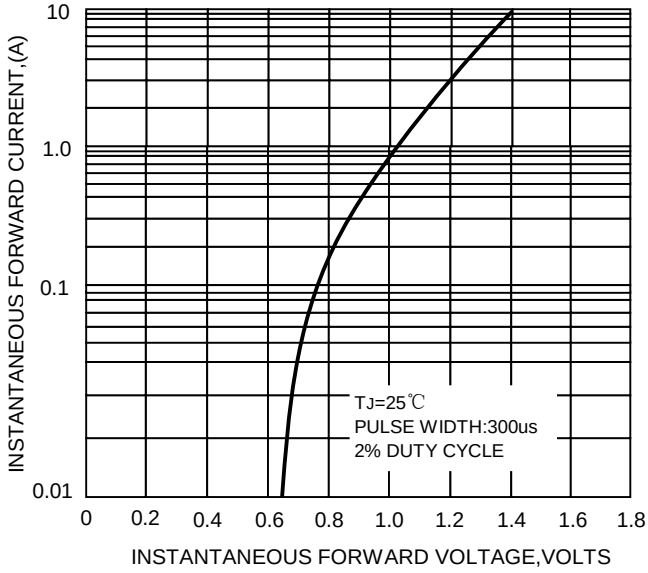


FIG.5-TYPICAL REVERSE CHARACTERISTICS