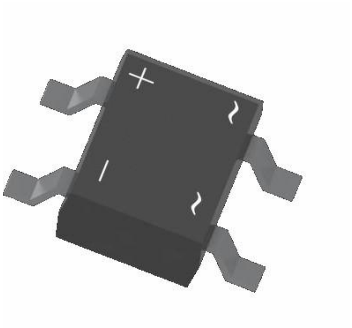
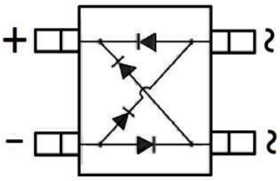
3A Surface Mount Glass Passivated Bridge Rectifier

Features

- Glass Passivated Chip Junction
- Low Reverse voltage leakage current
- Low Forward Voltage Drop
- High forward surge current capability
- Reverse Voltage : 50 to 1000V
- Forward Current : 3A
- High temperature soldering : 260°C/10s at terminals



DBS



Applications

- Switching power supply

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	DB 301S	DB 302S	DB 303S	DB 304S	DB 305S	DB 306S	DB 307S	Unit
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 @T_A=40℃	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)	I_{FSM}	80							A
Rating for fusing (t<8.3ms,Tj=25℃)	I^2t	26.35							A^2s
Maximum Instantaneous Forward Voltage @3.0A	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=25℃	I_R	10							μA
T_A=125℃		500							
Typical Junction Capacitance(Note 1)	C_J	25							pF
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	45							°C/ W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	(-55 to+150)							°C

Notes:
1. Measured at 2MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×1.5" ×1.5"（3.81 ×3.81 cm ）copper pad.

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

FIG.1 - Typical forward current derating curve

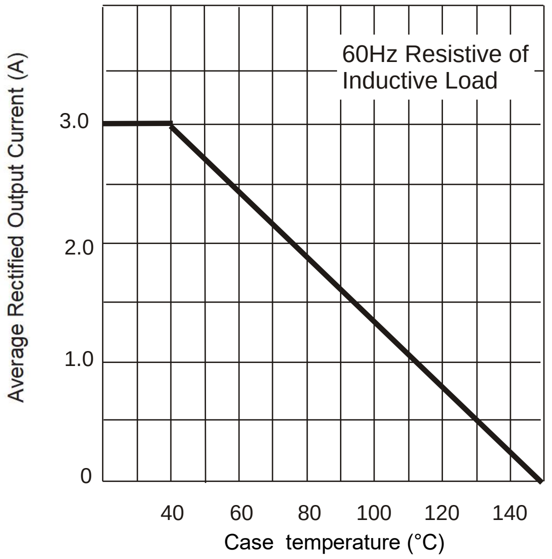


FIG.2 - Maximum Non-Repetitive Peak Forward Surage Current

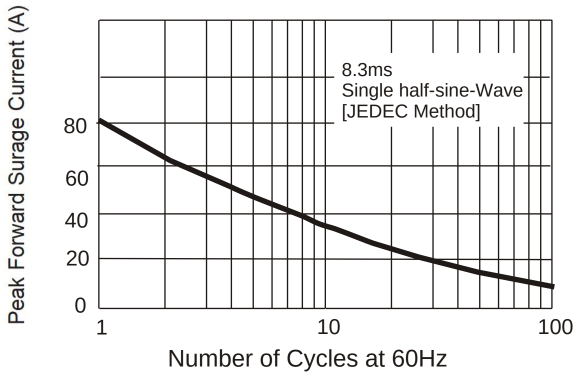


FIG.3 - Typical Junction Capacitance

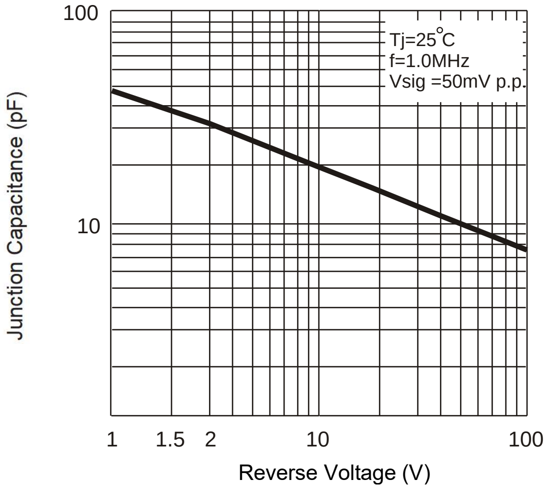


FIG.4 - Typical Instaneous Forward Characteristics

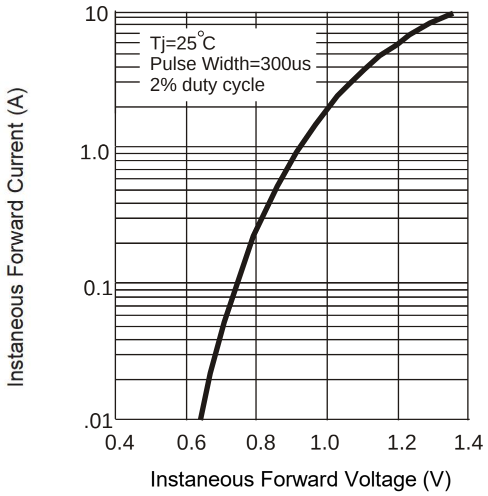
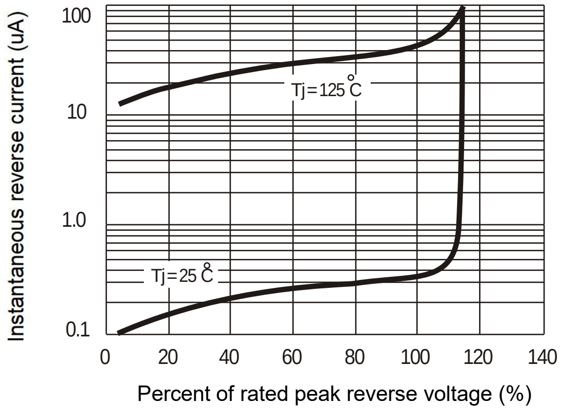
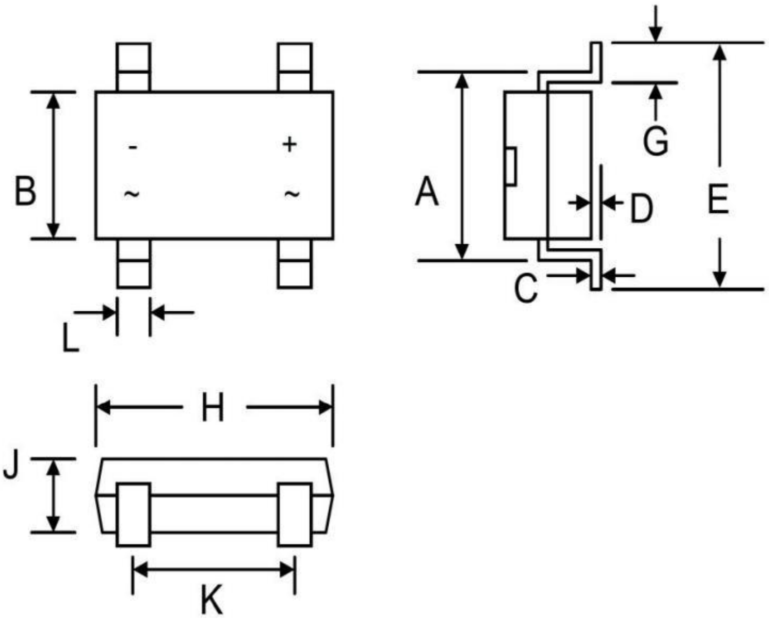


FIG.5 - Typical reverse Characteristics



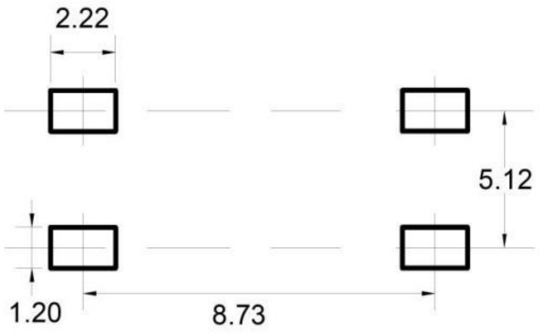
Package Outlines (Dimensions in mm)

Plastic surface mounted package(DBS)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	**Max.**	**Min.**	**Max.**
A	7.40	7.90	0.189	0.209
B	6.20	6.50	0.165	0.181
C	0.25	------	0.006	0.010
D	0.08	0.33	------	0.008
E	9.30	10.30	0.236	0.268
G	1.02	1.53	0.012	0.028
H	8.00	8.51	0.035	0.043
J	2.15	3.40	------	0.059
K	5.00	5.20	0.150	0.165
L	0.90	1.20	0.048	0.068

The recommended mounting pad size



Note:

1.Controlling dimension: in millimeters

2.General tolerance: ±0.05mm

3.The pad layout is for reference purposes only

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