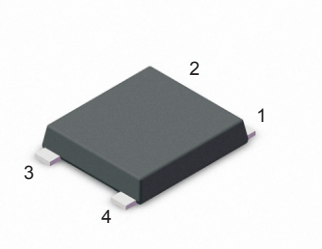
MSB35B Series

BRIDGE RECTIFIER

FEATURES

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 3.5 A
- High Surge Current Capability
- Designed for Surface Mount Application

UMSB

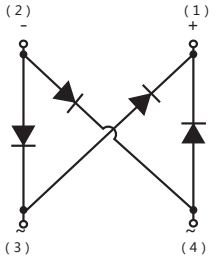


PIN	DESCRIPTION
1	Output Anode (+)
2	Output Cathode (-)
3	Input Pin (~)
4	Input Pin (~)

MECHANICAL DATA

- Case: UMSB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.234g / 0.00825oz

CIRCUIT DIAGRAM



MARKING

Type number	Marking code
MSB35B	MB35B
MSB35D	MB35D
MSB35G	MB35G
MSB35J	MB35J
MSB35K	MB35K
MSB35M	MB35M

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	Symbols	MSB35B	MSB35D	MSB35G	MSB35J	MSB35K	MSB35M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current	I_O	3.5						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	90						A
Maximum Forward Voltage at 3.0 A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_A=25 °C @T_A=125 °C	I_R	5 100						μA
Typical Junction Capacitance (Note1)	C_j	50						pF
Typical Thermal Resistance (Note2) 	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 25						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°C

Note: 1. Measured at 1MHz 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.

TYPICAL CHARACTERISTICS

Fig.1 Average Rectified Output Current Derating Curve

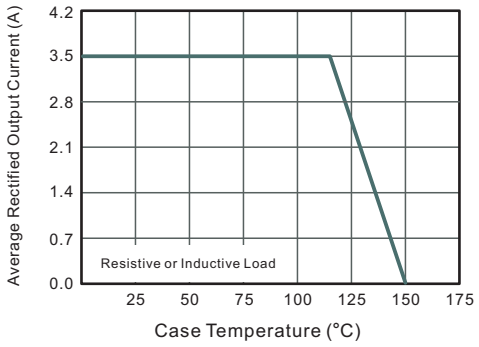


Fig.2 Typical Reverse Characteristics

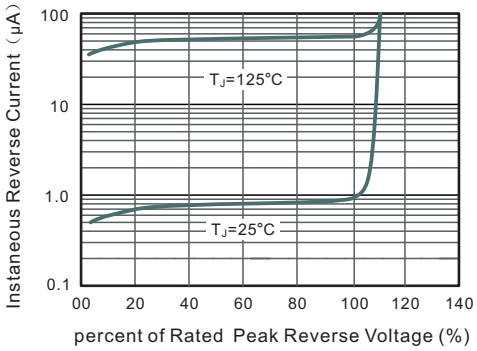


Fig.3 Typical Instaneous Forward Characteristics

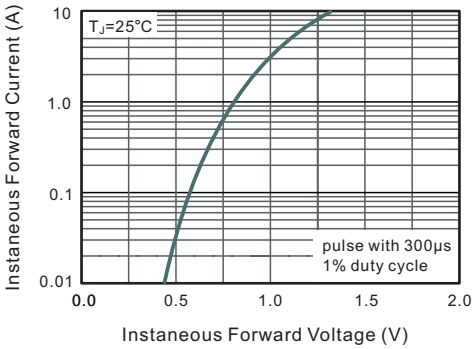


Fig.4 Typical Junction Capacitance

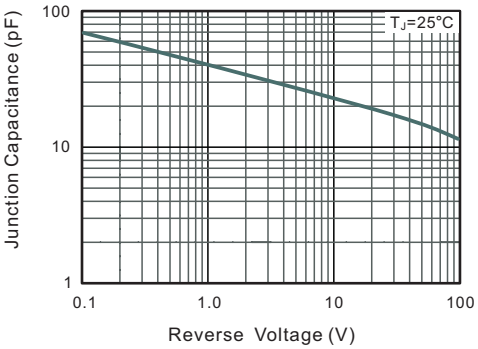


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

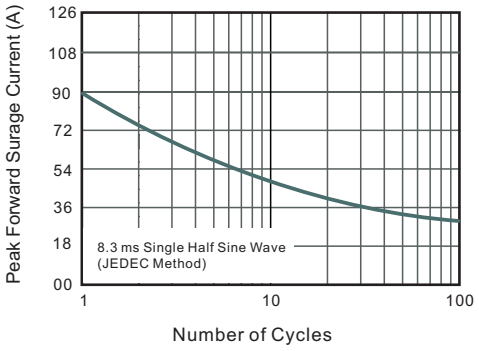
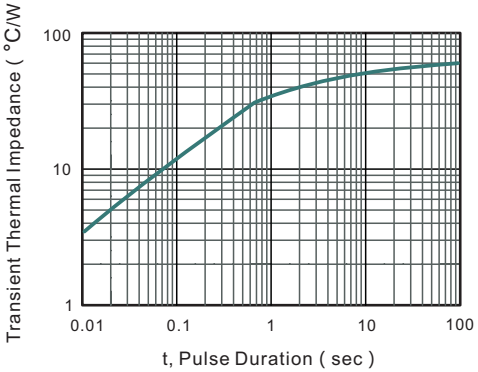
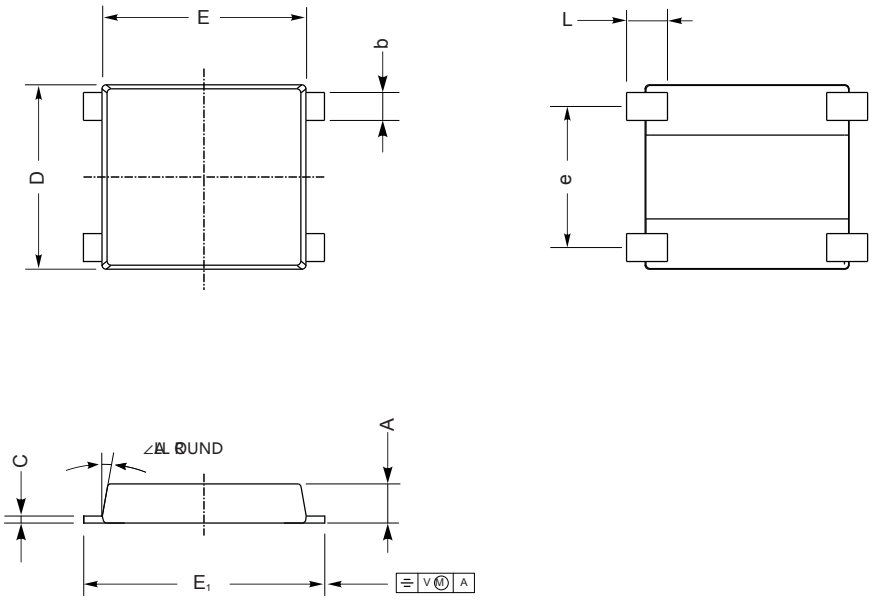


Fig.6- Typical Transient Thermal Impedance



UMSB PACKAGE OUTLINE DRAWING



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.3	1.5	0.051	0.059
C	0.17	0.29	0.007	0.012
D	6.2	7.0	0.244	0.276
E	7.1	7.6	0.280	0.299
E_1	8.4	8.9	0.331	0.350
L	1.0	1.6	0.0315	0.055
e	4.9	5.3	0.193	0.209
b	0.95	1.15	0.037	0.045
∠	10°		10°	