

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

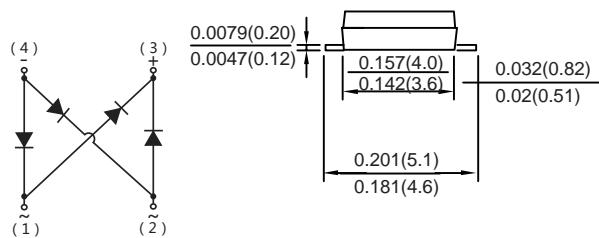
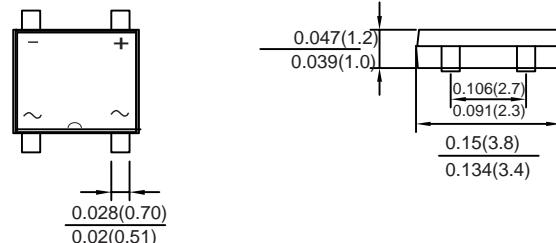
Features

- ◆ Glass passivated die construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High surge current capability

Designed for surface mount application
Plastic material-UL flammability 94V-0

UMB

ROHS
COMPLIANT



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	Symbol	MDD UM1B	MDD UM2B	MDD UM4B	MDD UM6B	MDD UM8B	MDD UM10B	Units
Marking Code								
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 at T _c = 115 °C	I _o					1		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}					35		A
Maximum Forward Voltage at 1.0A	V _F				1.1			V
Maximum DC Reverse Current @T _a =25 °C at Rated DC Blocking Voltage @T _a =125 °C	I _R				5 40			µA
Typical Junction Capacitance (Note3)	C _j				13			pF
Typical Thermal Resistance	R _{θJA}				85			°C/W
Operating and Storage Temperature Range	T _j , T _{stg}				-55 ~ +150			°C

NOTES:1.On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads

2.On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad

3.Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

Typical Characteristics

Fig.1 Average Rectified Output Current Derating Curve

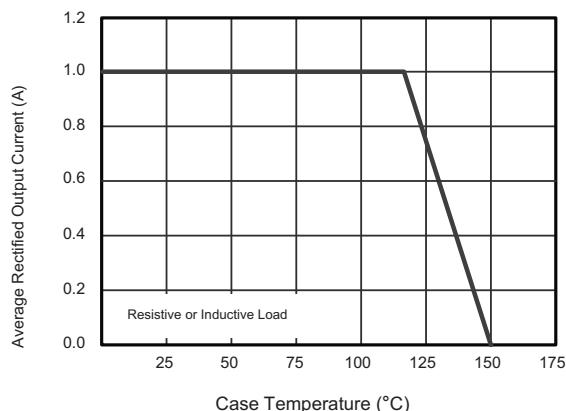


Fig.2 Typical Reverse Characteristics

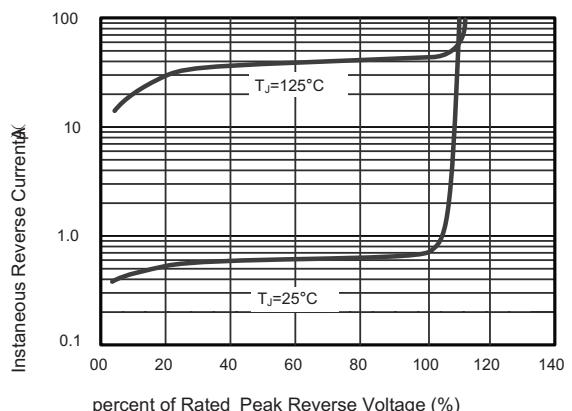


Fig.3 Typical Instantaneous Forward Characteristics $T_J=25^\circ$

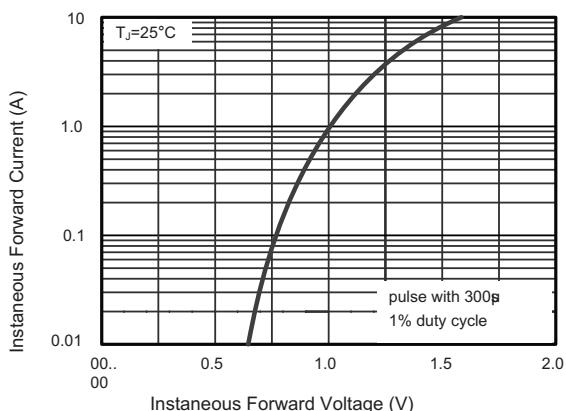


Fig.4 Typical Junction Capacitance

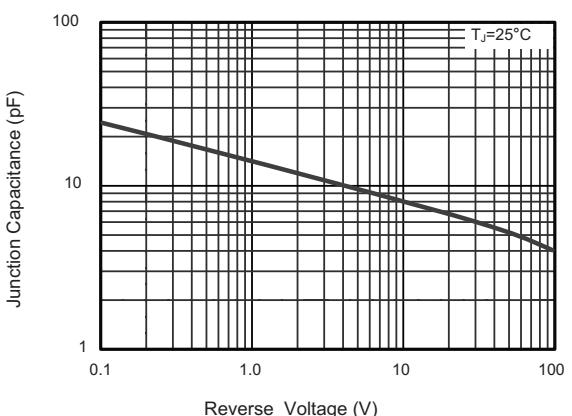
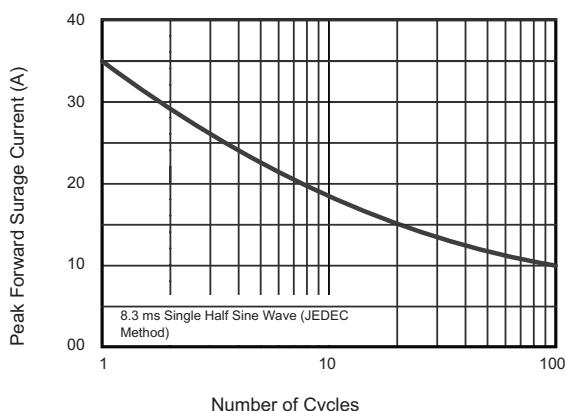
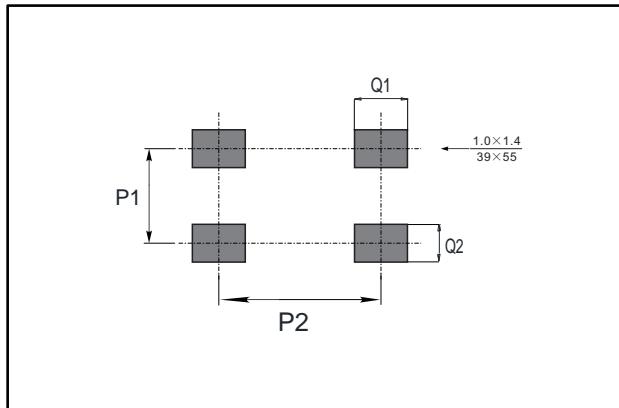


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.

Suggested Pad Layout

Dim	Min
P1	2.5
P2	4.3
Q1	1.4
Q2	1.0