

## GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 4 Amperes

### GENERAL DESCRIPTION

Suitable for AC-to-DC bridge full wave rectification for SMPS, LED lighting, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

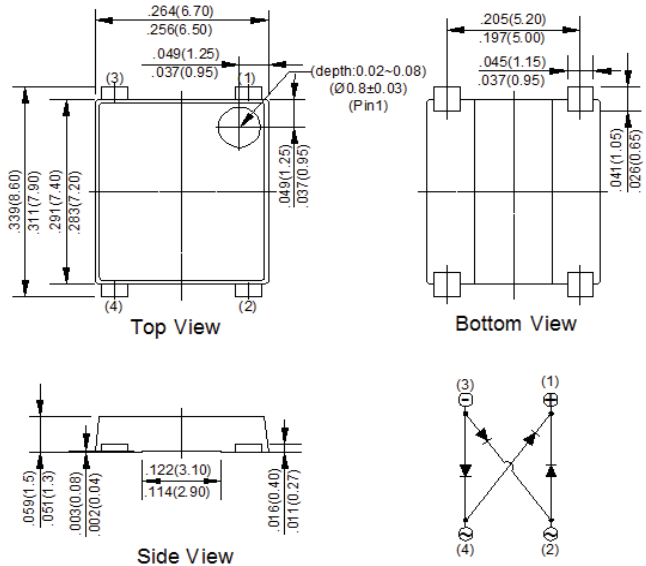
### FEATURES

- Compact, thin profile package design
- Ideal for SMT manufacturing
- Reliable robust construction
- UL recognized file#E364304

### MECHANICAL DATA

- Molding compound meets UL 94 V-0 flammability rating, Halogen-free, RoHS-compliant, and commercial grade
- Polarity indicator: As marked on body

### MSBL



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

CHARACTERISTICS	SYMBOL	RMSB40A	RMSB40B	RMSB40D	RMSB40G	RMSB40J	RMSB40K	RMSB40M	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>C</sub> = 120°C	I <sub(av)< sub=""></sub(av)<>	4							A
Peak Forward Surge Current @ 8.3ms single half sine-wave @ 1.0ms	I <sub>FSM</sub>	115							A
Maximum Forward Voltage @ T <sub>J</sub> = 25°C @ 2.0A DC @ 4.0A DC	V <sub>F</sub>	1.4							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =125°C	I <sub>R</sub>	5							µA
Maximum Reverse Recovery Time	T <sub>RR</sub>	150				250	500		ns
Typical junction Capacitance per element (Note 1)	C <sub>J</sub>	35							pF
I <sup>2</sup> t Rating for fusing (1ms < t < 8.3ms)	I <sup>2</sup> t	23.3							I <sup>2</sup> t
Typical Thermal Capacitance (Note 2)	R <sub>θJC</sub> R <sub>θJL</sub> R <sub>θJA</sub>	8 15 25							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal Resistance test performed in accordance with JESD-51. Unit mounted on 15 mm\*12 mm\*1.6 mm AL pad attach 195 mm\*110 mm\*10 mm steel plate

3. The typical data above is for reference only(典型值仅供参考).

FIG. 1 – FORWARD CURRENT DERATING CURVE

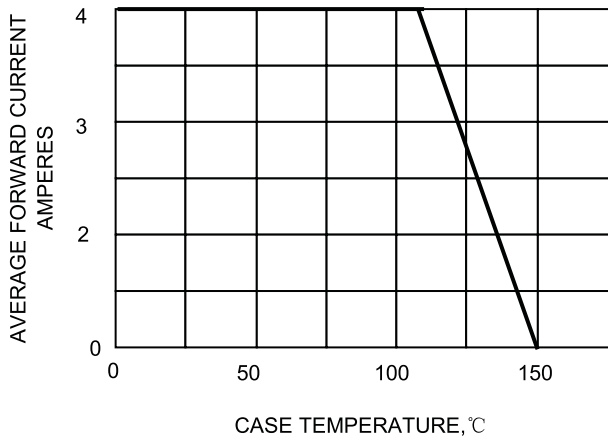


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

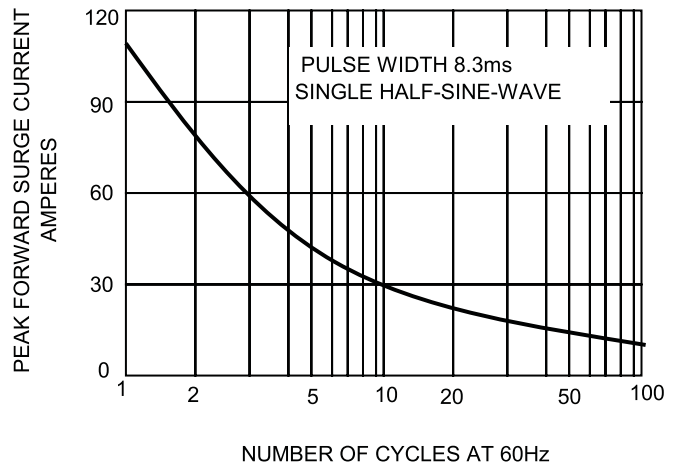


FIG.3-TYPICAL FORWARD CHARACTERISTICS

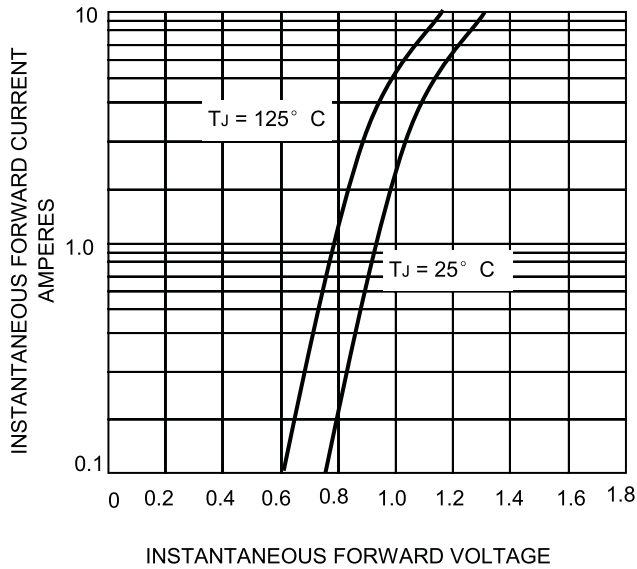


FIG.4 – TYPICAL JUNCTION CAPACITANCE

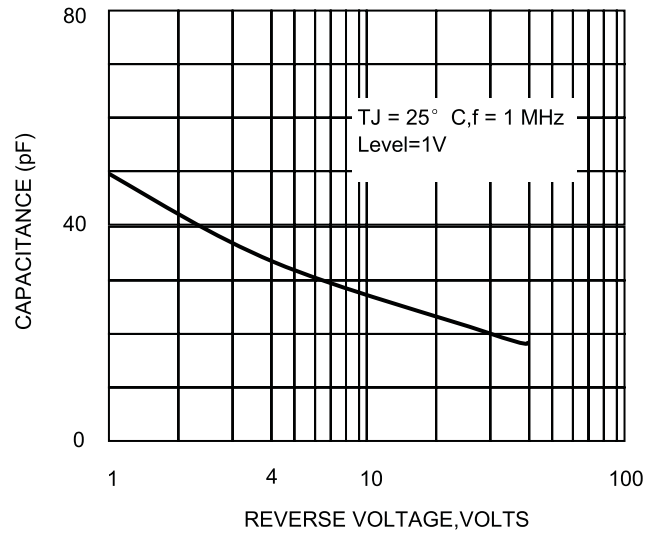
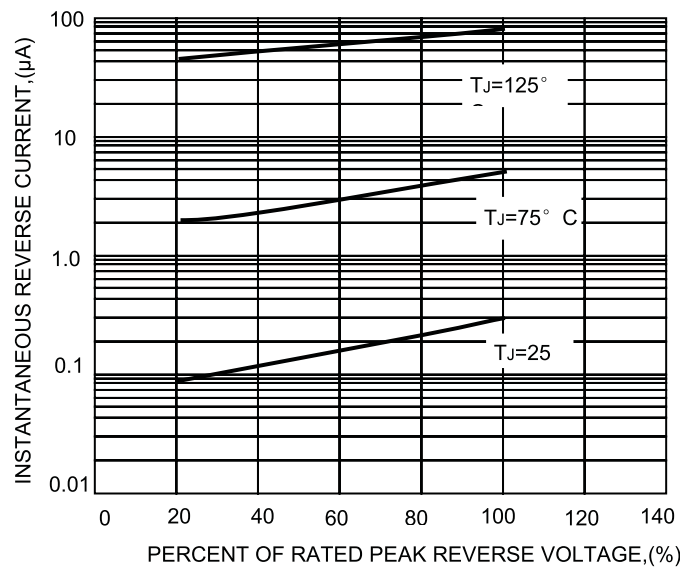


FIG.5- TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!