

GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 2.0 Amperes

GENERAL DESCRIPTION

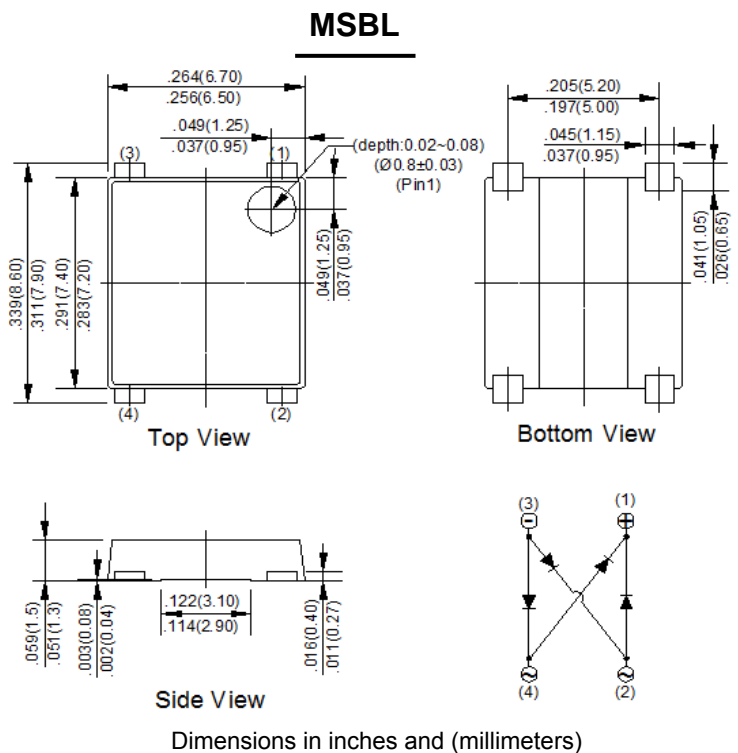
Suitable for AC-to-DC bridge full wave rectification for SMPS, LED lighting, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

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
- Weight: 216 mg



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	MSB20A	MSB20B	MSB20D	MSB20G	MSB20J	MSB20K	MSB20M	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 _C = 110°C	I _(AV)	2.0							A
Peak Forward Surge Current @ 8.3ms single half sine-wave @ 1.0ms	I _{FSM}	75 150							A
Maximum Forward Voltage @ T _J = 25°C @ 1.0A DC @ 2.0A DC	V _F	0.98 1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =125°C	I _R	5 500							μA
Typical junction Capacitance per element (Note 1)	C _J	30							pF
I ² t Rating for fusing (1ms < t < 8.3ms)	I ² t	23.3							I ² t
Typical Thermal Capacitance (Note 2)	R _{θJC}	10							°C/W
	R _{θJL}	15							
	R _{θJA}	55							
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-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 glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin.

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

FIG. 1 – FORWARD CURRENT DERATING CURVE

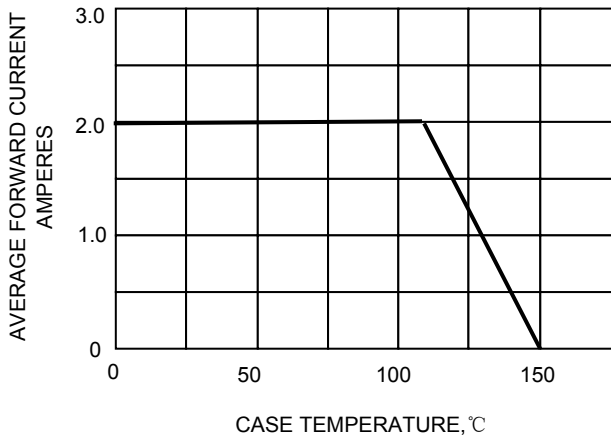


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

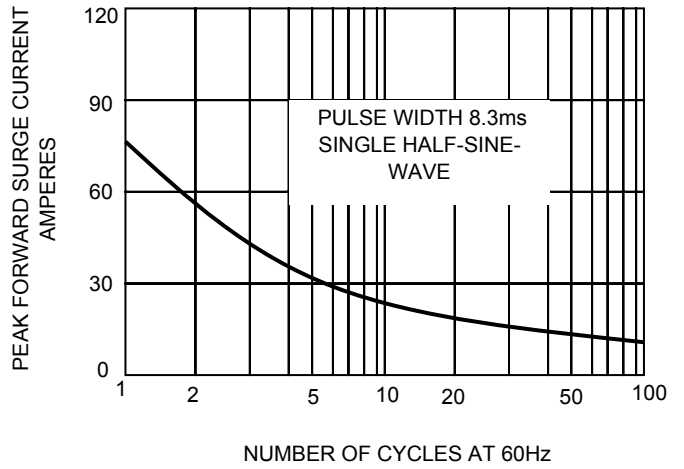


FIG.3-TYPICAL FORWARD CHARACTERISTICS

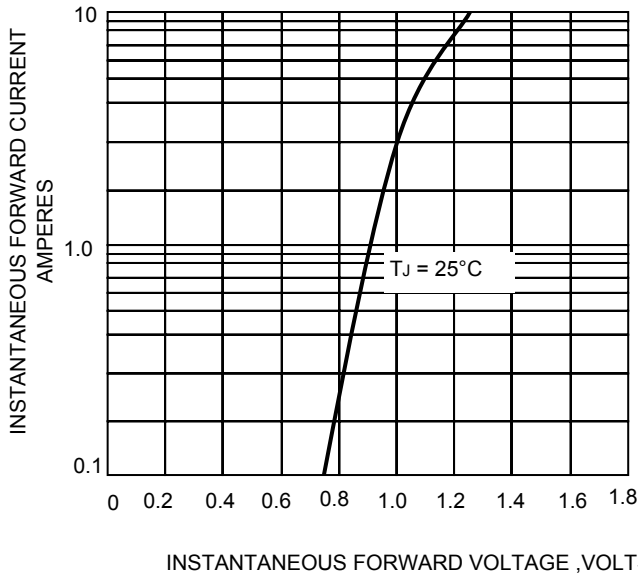


FIG.4 – TYPICAL JUNCTION CAPACITANCE

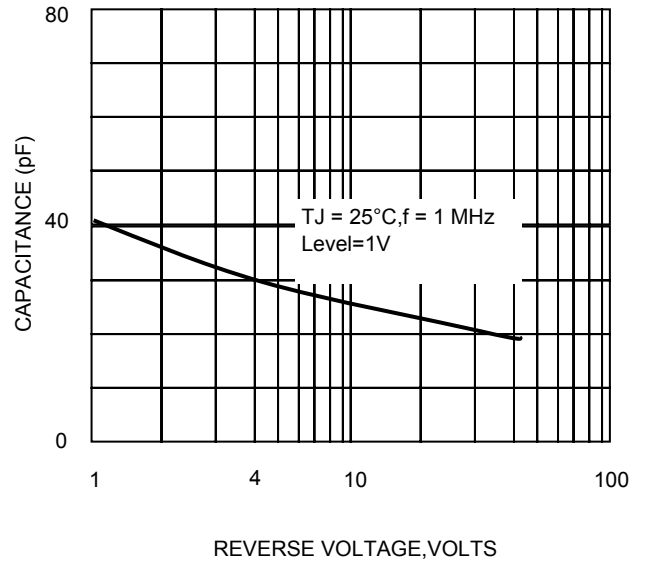
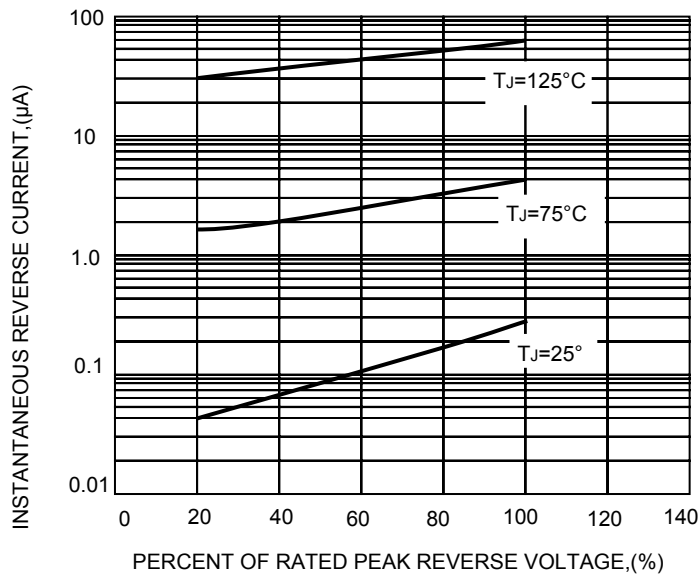


FIG.5- TYPICAL REVERSE CHARACTERISTICS





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