

DB107S

Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers



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

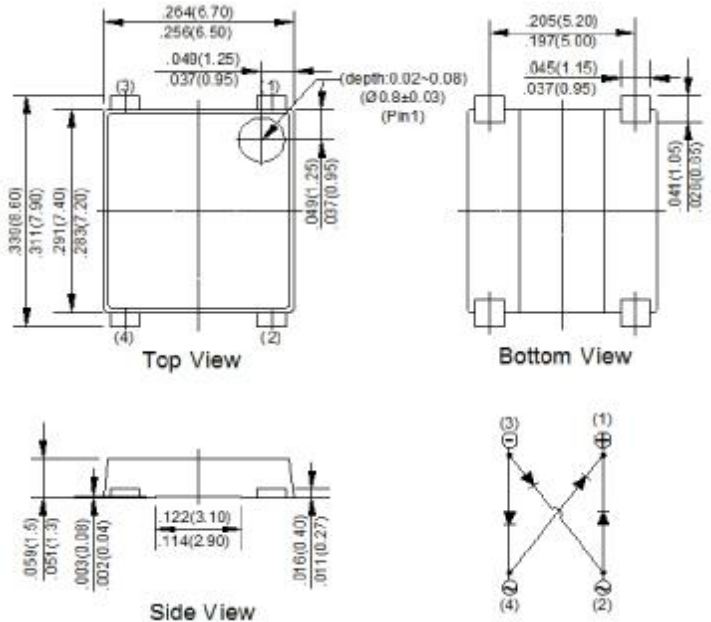
- Compact, thin profile package design
- Ideal for SMT manufacturing
- Reliable robust construction
- UL recognized file#E364304

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

REVERSE VOLTAGE - **1000** Volts
FORWARD CURRENT - **1.0** Amperes

MSBL



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	DB107S	JNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1000	V
Maximum RMS Voltage	V _{RMS}	700	V
Maximum DC Blocking Voltage	V _{DC}	1000	V
Maximum Average Forward Rectified Current @ T _c = 110°C	I _(AV)	1.0	A
Peak Forward Surge Current @ 8.3ms single half sine-wave	I _{FSM}	30	A
Maximum Forward Voltage @ T _J = 25°C @ 1.0A DC	V _F	1.1	V
Maximum DC Reverse Current @ T _J = 25°C at Rated DC Blocking Voltage @ T _J = 125°C	I _R	10 500	μA
Typical junction Capacitance per element (Note 1)	C _J	25	pF
I ² t Rating for fusing (1ms < t < 8.3ms)	I ² t	10.4	I ² t
Typical Thermal Capacitance (Note 2)	R _{θJA}	40	
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 from junction to ambient mounted on P.C.B with 0.5*0.5"(13*13mm) copper pads.

(3). The typical data above is for reference only.

RATING AND CHARACTERISTIC CURVES

DB107S

FIG.1-FORWARD CURRENT DERATING CURVE

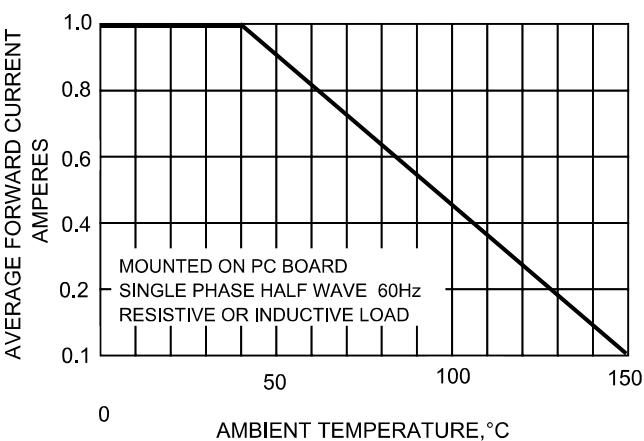


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

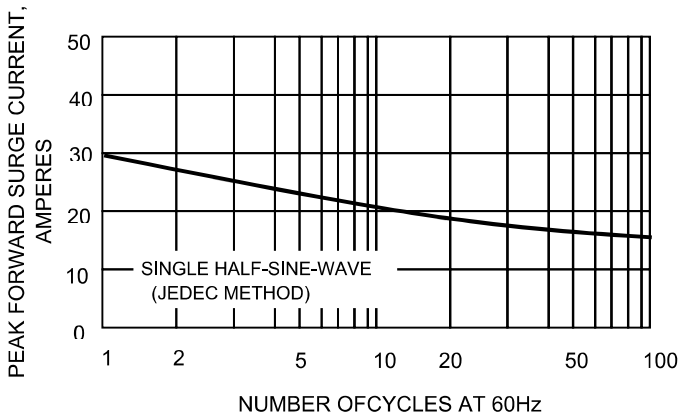


FIG.3-TYPICAL JUNCTION CAPACITANCE

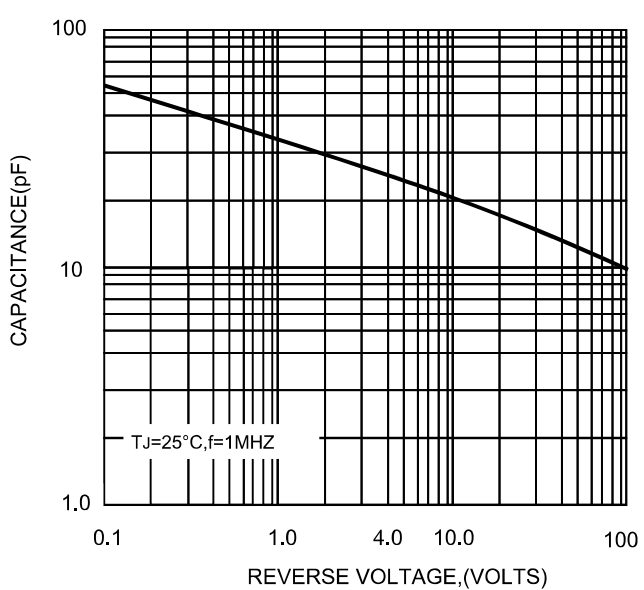


FIG.4-TYPICAL FORWARD CHARACTERISTICS

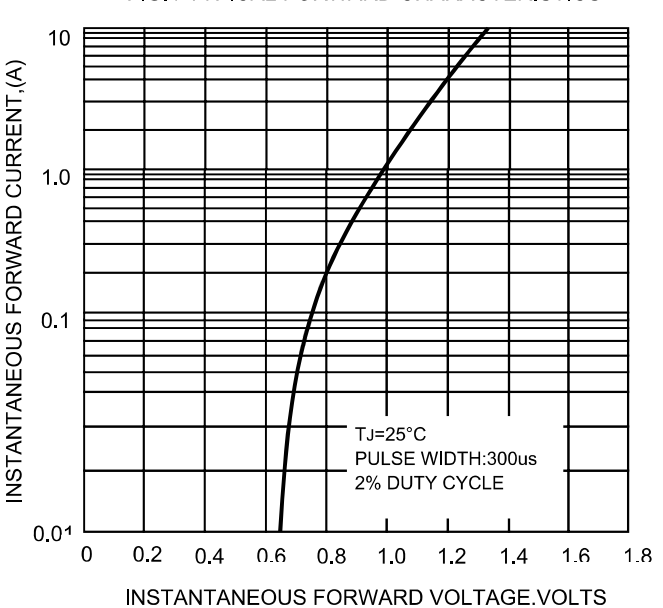
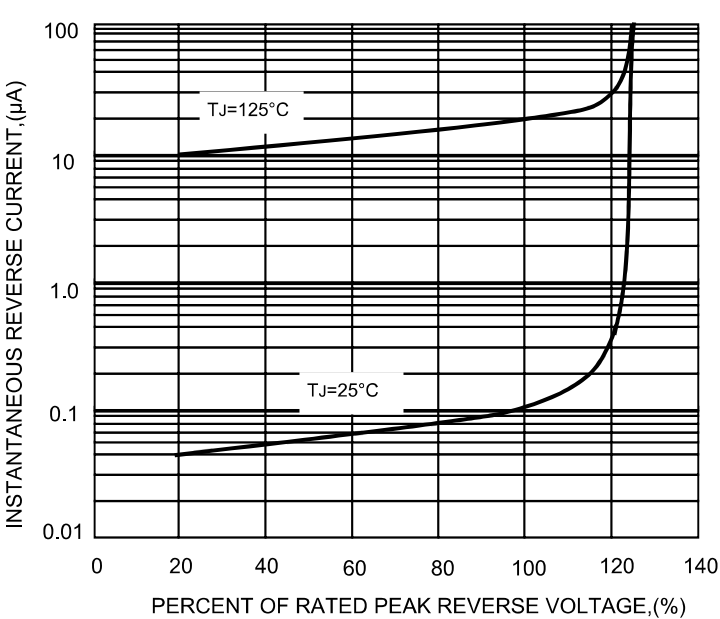


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment