

SB15005 THRU SB1510

15.0 AMP SILICON BRIDGE

FEATURES

- Universals 4-way terminals: snap-on, wrap-around, solder or P.C. board mounting
- This series is UL recognized under component index, file number E127707
- High overload surge RATING TO 300A
- High case dielectric strength to 2500V
- Typical IR less than 0.1 uA
- Terminals solderable per MIL-STD-202 method 208
- High temperature soldering guaranteed :
265°C/10 seconds/.375"(9.5mm)lead lengths at 5 lbs (2.3kg) tension

MECHANICAL DATA

- Case: Void-free plastic package
- Terminal: Either plated .25"(6.35mm). Faston or plated copper lead .04"(1.02mm)diameter. Suffix letter "W" added to indicate leads
- Polarity: Polarity symbols marked on case
- Mounting position: Bolt down on heat sink for maximum heat transfer efficiency
- Weight: 0.706 ounce, 20 grams

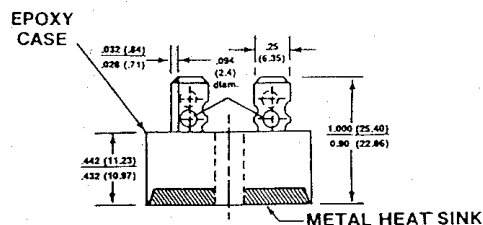
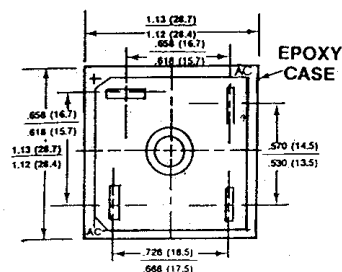
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

15.0 Amperes

SB-15



Dimensions in inches and (millimeters)

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 derate current by 20%.

	SYMBOLS	SB15005	SB1501	SB1502	SB1504	SB1506	SB1508	SB1510	UNITS
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectifier Output Current at Tc=55°C (Note1)	I(AV)	15.0							A
Peak Forward Surge Current 8.3 ms single half sine wave superimposed on rated load (JEDEC method)	Ifsm	300.0							A
Rating for fusing(t<8.35ms)	I²t	375.0							A²s
Maximum instantaneous Forward Voltage drop per Bridge Element at 7.5A	VF	1.2							V
Maximum Reverse Current at Rated DC @TA=25°C	IR	10.0							uA
Blocking Voltage per element @TC=100°C	HTIR	500.0							uA
Isolation Voltage from Case to Leads		2500							Vac
Typical Thermal Resistance (Note1)	RTHjc	2.0							°C/W
Operating and Storage Temperature Range	Tj, Tstg	-65 TO +150							°C

NOTES :

1. Bridge mounted on a 5"×4"×3"(12.8cm×10.2cm×7.3cm)AL Wing Plate.

RATINGS AND CHARACTERISTIC CURVES SB15005 THRU SB1510

FIG. 1 MAXIMUM OUTPUT RECTIFIED CURRENT

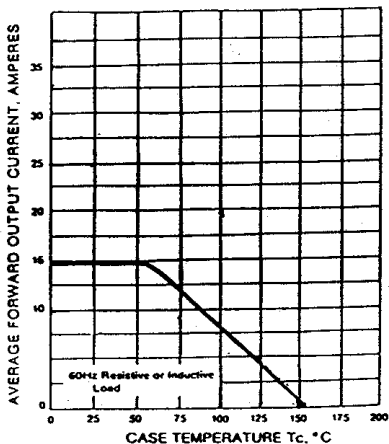


FIG. 2 MAXIMUM POWER DISSIPATION

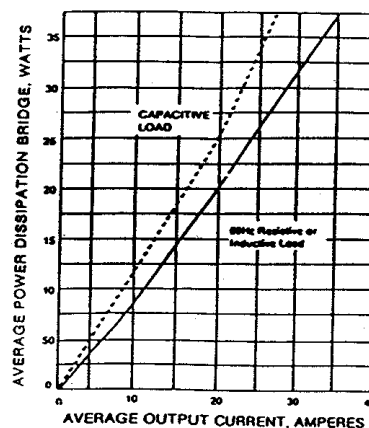


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

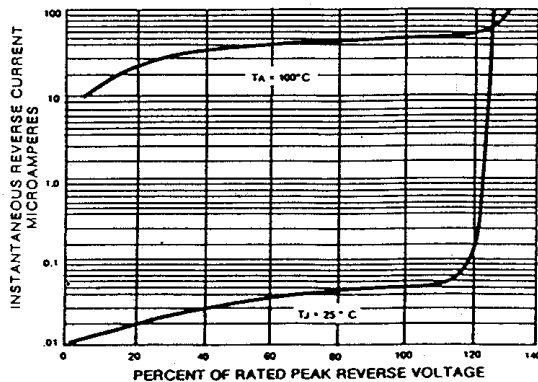


FIG. 4

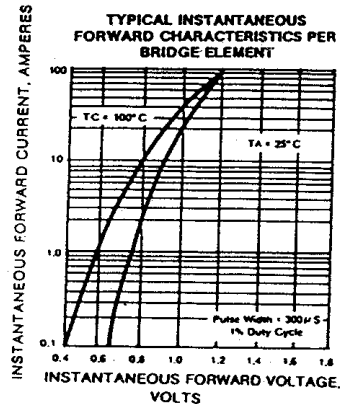


FIG. 5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

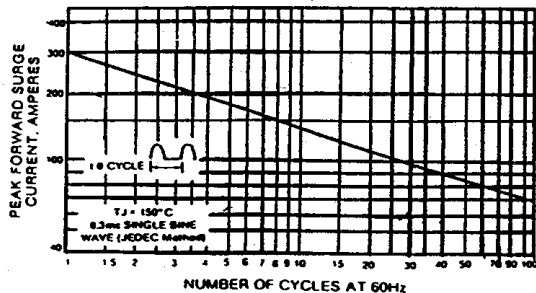
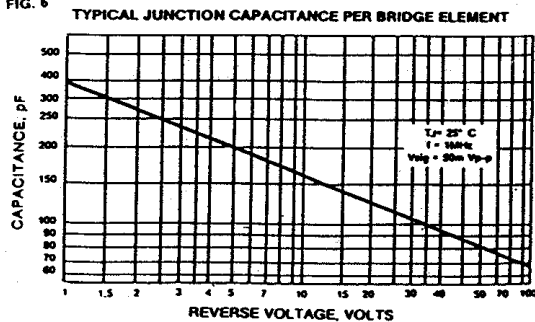


FIG. 6



SB15005W THRU SB1510W

15.0 AMP SILICON BRIDGE

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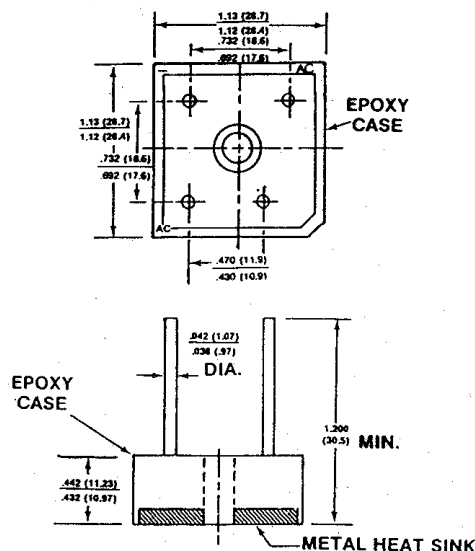
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CURRENT

15.0 Amperes

SB-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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	SYMBOLS	SB15005W	SB1501W	SB1502W	SB1504W	SB1406W	SB1508W	SB1510W	UNITS
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 Rectifier Output Current at T _c =55°C (Note 1)	I _(AV)	15.0							A
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RATINGS AND CHARACTERISTIC CURVES SB15005W THRU SB1510W

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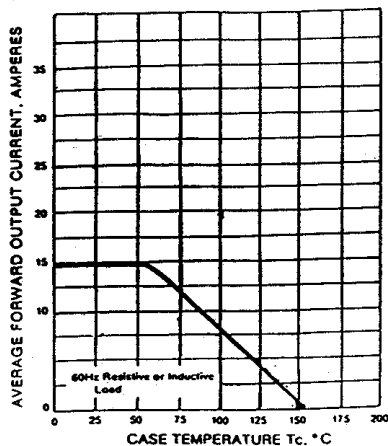


FIG. 2 MAXIMUM POWER DISSIPATION

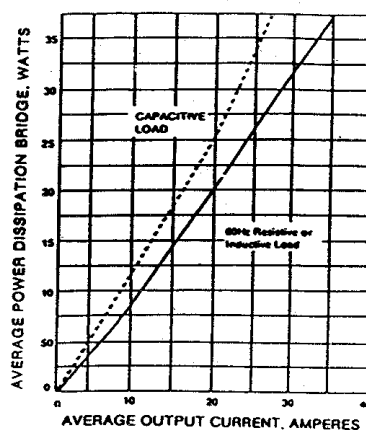


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

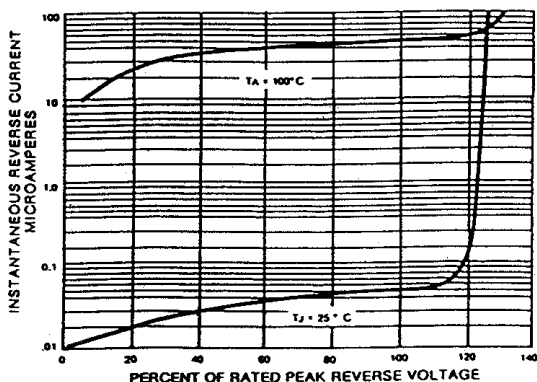


FIG. 4

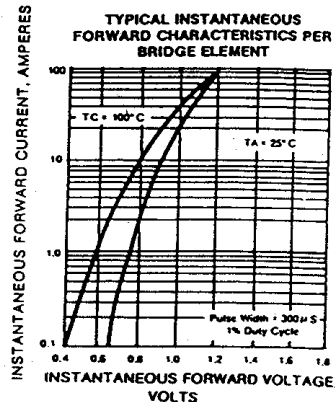


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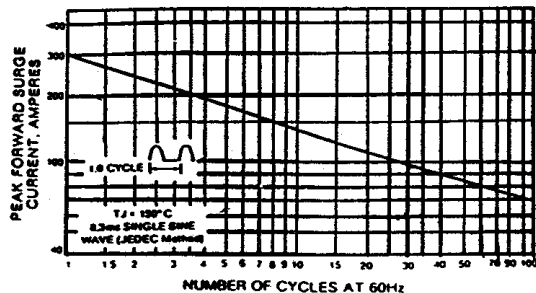


FIG. 6

TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

