

DIOTEC ELECTRONICS CORP.
18020 Hobart Blvd., Unit B
Gardena, CA 90248 U.S.A.
Tel.: (310) 767-1052 Fax: (310) 767-7958

Data Sheet No. BRSB-200-1C

2 AMP SILICON BRIDGE RECTIFIERS

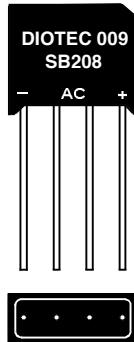
FEATURES

- PRV Ratings from 50 to 1000 Volts
- Surge overload rating to 60 Amps peak
- Reliable low cost molded plastic construction
- Ideal for printed circuit board applications
- **UL RECOGNIZED - FILE #E124962**

MECHANICAL DATA

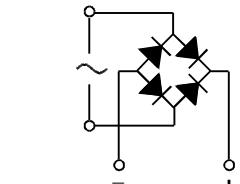
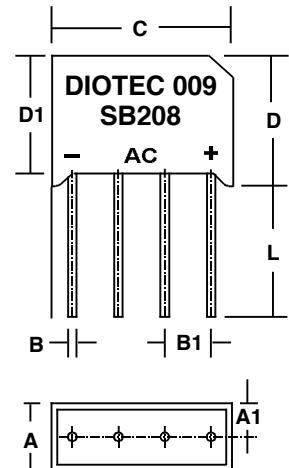
- Case: Molded plastic, U/L Flammability Rating 94V-0
- Terminals: Round silver plated pins
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Marked on case
- Mounting Position: Any
- Weight: 0.1 Ounces (2.8 Grams)

ACTUAL SIZE OF SB2 PACKAGE



MECHANICAL SPECIFICATION

SERIES SB200 - SB210



SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	5.99	7.01	0.236	0.276
A1	2.99	3.51	0.118	0.138
B	0.71	0.89	0.028	0.035
B1	3.55	4.00	0.140	0.160
C	16.0	18.0	0.63	0.71
D	14.0	15.0	0.55	0.59
D1	13.2	13.7	0.52	0.54
L	12.7	n/a	0.50	n/a

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive loads, derate current by 20%.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS							UNITS
		SB 200	SB 201	SB 202	SB 204	SB 206	SB 208	SB 210	
Series Number									
Maximum DC Blocking Voltage	V _{RM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	
Maximum Peak Recurrent Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	AMPS
Average Forward Rectified Current @ T _A = 55°C	I _O				2				
Peak Forward Surge Current. Single 60Hz Half-Sine Wave Superimposed on Rated Load (JEDEC Method). T _J = 150°C	I _{FSM}				60				VOLTS
Maximum Forward Voltage (Per Diode) at 1 Amp DC	V _{Fm}				1.05				
Maximum Average DC Reverse Current @ T _A = 25°C At Rated DC Blocking Voltage @ T _A = 125°C	I _{RM}				10				μA
Typical Thermal Resistance. Junction to Ambient (Note 1) Junction to Lead (Note 1)	R _{θJA} R _{θJL}				30				°C/W
Operating and Storage Temperature Range	T _J , T _{STG}				-55 to +150				°C

NOTES: (1) Bridge mounted on PC Board with 0.47" sq.(12mm sq.) copper pads.

3.01 02sb



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Data Sheet No. BRSB-200-2C

2 AMP SILICON BRIDGE RECTIFIERS

RATING & CHARACTERISTIC CURVES FOR SB200 - SB210 SERIES

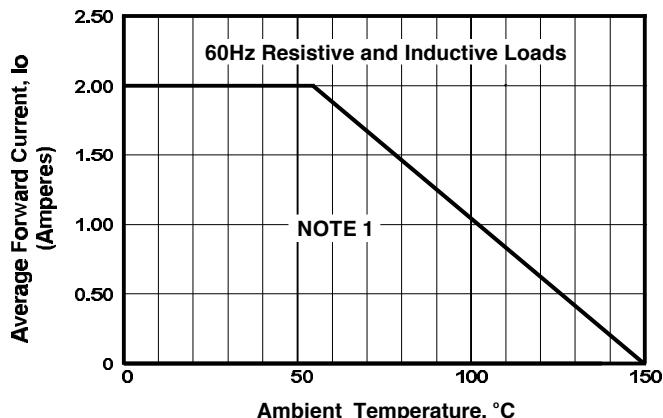


FIGURE 1. FORWARD CURRENT DERATING CURVE

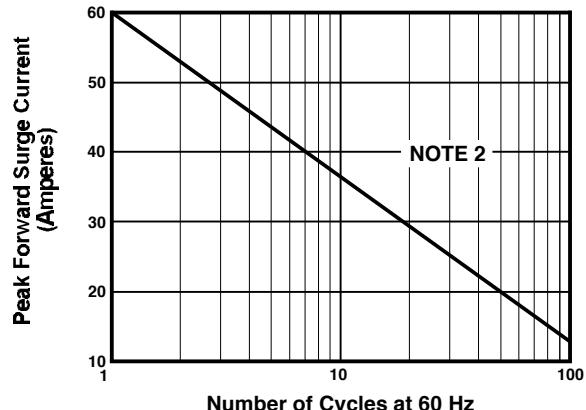


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

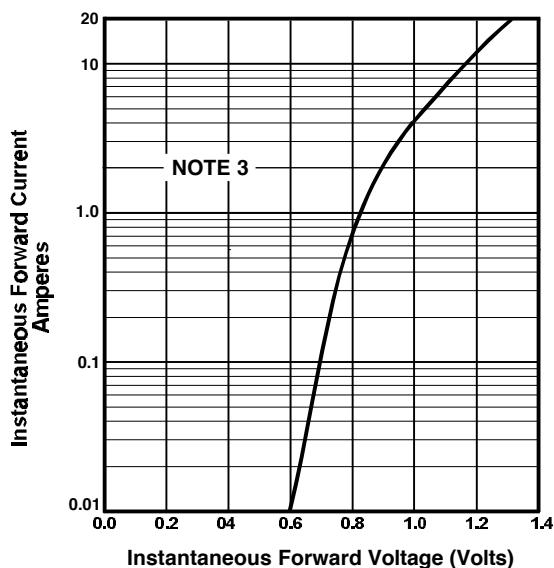


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC PER DIODE

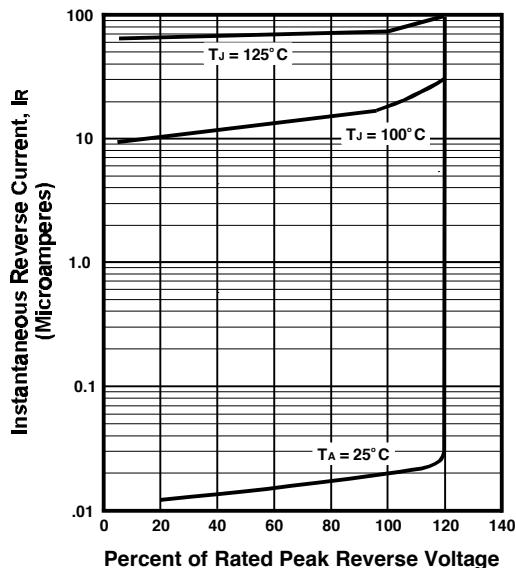


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS

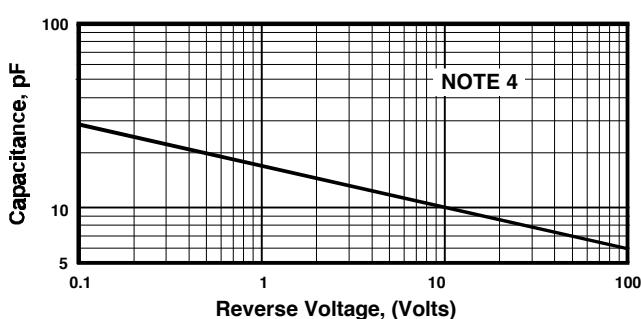


FIGURE 5. TYPICAL JUNCTION CAPACITANCE PER DIODE

NOTES

- (1) Bridge Mounted on PC Board With 0.47" Sq. (12mm Sq.) Copper Pads
- (2) $T_J = 150^\circ C$
- (3) $T_J = 25^\circ C$; Pulse Width = 300 μ Sec, 1% Duty Cycle
- (4) $T_J = 25^\circ C$; $f = 1$ MHz; $V_{SIG} = 50mVp-p$