



## 8 AMP SOFT RECOVERY FAST SWITCHING BRIDGE RECTIFIERS

### FEATURES

- TRUE SOFT RECOVERY CHARACTERISTIC WITH NO RINGING, SPIKES, or OVERSHOOT
- HIGH FREQUENCY: 250 kHz  
FAST RECOVERY: 100nS - 150nS
- UNMATCHED PERFORMANCE - Minimal RFI/EMI, Reduced Power Losses, Extremely Cool Operation Increased Power Supply Efficiency
- VOID FREE Vacuum Die Soldering For Maximum Mechanical Strength And Heat Dissipation (Solder Voids: Typical < 2%, Max. < 10% of Die Area)
- Proprietary Junction Passivation For Superior Reliability and Performance
- Wide Range of Applications: Motor Speed Controllers, Inverters, Converters, Choppers, Power Supplies, etc.

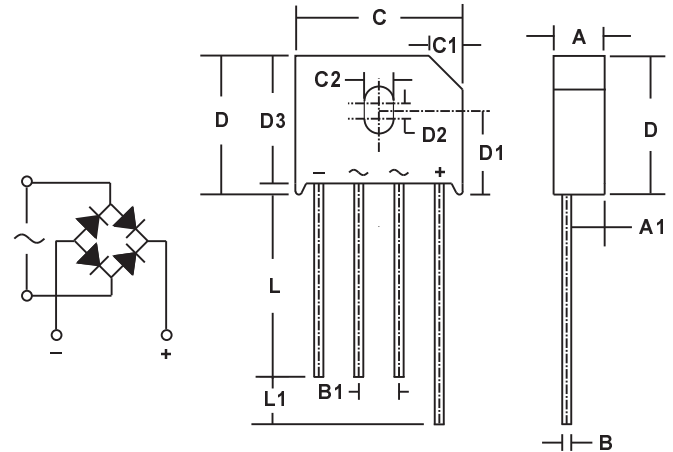
**UL RECOGNIZED - FILE #E124962**

### MECHANICAL DATA

- Case: Molded epoxy, 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. Max. mounting torque = 5 in lb
- Weight: 0.28 Ounces (8 Grams)

**RoHS COMPLIANT**

### MECHANICAL SPECIFICATION



SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	6.6	7.1	0.260	0.280
A1	4.7	5.2	0.185	0.205
B	1.22	1.32	0.048	0.052
B1	4.57	5.59	0.180	0.220
C	22.70	23.24	0.895	0.915
C1	4.2	4.7	0.165	0.185
C2	3.6	4.1	0.140	0.160
D	n/a	19.3	n/a	0.760
D1	10.3	11.3	0.405	0.455
D2	1.7	2.2	0.065	0.085
D3	16.5	17.8	0.660	0.700
L	25.4	n/a	1.0	n/a
L1	4.57	6.8	0.180	0.260

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS					UNITS
		SBU 8A-S	SBU 8B-S	SBU 8D-S	SBU 8G-S	SBU 8J-S	
Series Number							
Maximum DC Blocking Voltage	VRM	50	100	200	400	600	VOLTS
Maximum RMS Voltage	VRMS	35	70	140	280	420	
Maximum Peak Recurrent Reverse Voltage	VRRM	50	100	200	400	600	
Average Forward Rectified Current, Tc = 100 °C (Note 2)	Io	8					AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	IFSM	300					
Maximum Forward Voltage (Per Diode) at 4 Amps DC	VFM	1.25					VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage @ TA = 25 °C @ TA = 125 °C	IRM	1.0 50					µA
Maximum Reverse Recovery Time	TRR	150 (Typ. 100)					nS
Typical Thermal Resistance, Junction to Case (Note 2)	RθJC	3					°C/W
Junction Operating and Storage Temperature Range	TJ, TSTG	-55 to +150					°C

NOTES: (1) Bolt bridge on heat sink with #6 screw, using silicon thermal compound between bridge and mounting surface for maximum heat transfer.  
 (2) Bridge mounted on 4.0" sq. x 0.11" thick (10.5cm sq. x 0.3cm) aluminum plate

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