



## 35 AMP SILICON BRIDGE RECTIFIERS

### FEATURES

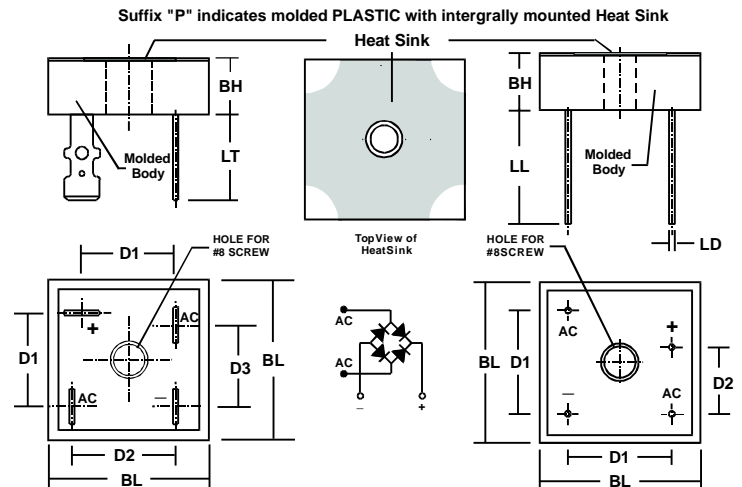
- PRV Ratings from 50 to 1000 Volts
- Surge overload rating to 400 Amps peak
- High efficiency
- Heat sink integrally mounted in the molded bridge encapsulation
- **UL RECOGNIZED - FILE #E141956**

### MECHANICAL DATA

- Case: Molded plastic, U/L Flammability Rating 94V-0
- Terminals: Round silver plated copper pins or fast-on terminals
- Soldering: Per MIL-STD 202 Method 208 guaranteed (Note 1)
- Polarity: Marked on side of case
- Mounting Position: Any. Through hole for #8 screw.  
Max. mounting torque = 20 in-lb.
- Weight: Fast-on Terminals - 0.7 Ounces (20.0 Grams)  
Wire Leads - 0.55 Ounces (16.0 Grams)

### MECHANICAL SPECIFICATION

#### SERIES: DB3500P - DB3510P and ADB3504P - ADB3508P



SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
BL	28.4	28.7	1.12	1.13
BH	9.6	9.8	0.38	0.39
D1	15.7	16.7	0.62	0.66
D2	17.5	18.5	0.69	0.73
D3	13.5	14.5	0.53	0.57
LT	n/a	15.2	n/a	0.6

SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
BL	28.4	28.7	1.12	1.13
BH	9.6	9.8	0.38	0.39
D1	17.5	18.5	0.69	0.73
D2	10.9	11.9	0.43	0.47
LL	20.6	n/a	0.81	n/a
LD	1.0	1.1	0.039	0.042

Suffix "T" indicates FAST-ON TERMINALS

Suffix "W" indicates WIRE LEADS

### 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
		CONTROLLED AVALANCHE			NON-CONTROLLED AVALANCHE						
		ADB 3504P	ADB 3506P	ADB 3508P	DB 3500P	DB 3501P	DB 3502P	DB 3504P	DB 3506P	DB 3508P	
Series Number											
Maximum DC Blocking Voltage	V <sub>RM</sub>										
Working Peak Reverse Voltage	V <sub>RWM</sub>	400	600	800	50	100	200	400	600	800	1000
Maximum Peak Recurrent Reverse Voltage	V <sub>RRM</sub>										
RMS Reverse Voltage	V <sub>R</sub> (RMS)	280	420	560	35	70	140	280	420	560	700
Thermal Energy (Rating for Fusing)	I <sup>2</sup> t	664									AMPS <sup>2</sup> SEC
Peak Forward Surge Current (8.3 mSec single half sine wave superimposed on rated load)	I <sub>FSM</sub>	400									AMPS
Average Forward Rectified Current @ T <sub>c</sub> = 55 °C (Note 2)	I <sub>o</sub>	35									
Junction Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150									°C
Minimum Avalanche Voltage	V <sub>(BR) Min</sub>	450	650	850	n/a						
Maximum Avalanche Voltage	V <sub>(BR) Max</sub>	900	1100	1300	n/a						VOLTS
Maximum Forward Voltage (Per Diode) at 17.5 Amps DC	V <sub>FM</sub>	1.1									
Maximum Reverse Current at Rated V <sub>RM</sub> @ T <sub>A</sub> = 25 °C @ T <sub>A</sub> = 100 °C	I <sub>RM</sub>	1 5									μA
Minimum Insulation Breakdown Voltage (Circuit to Case)	V <sub>ISO</sub>	2500									VOLTS
Typical Thermal Resistance (on Heat Sink); Junction to Ambient (Note 3)	R <sub>θJC</sub> R <sub>θJL</sub>	1.2 0.8									°C/W

NOTES: (1) Maximum soldering time and temperature = 10 Sec @ 265 °C  
 (2) Unit Mounted on Metal Chassis.  
 (3) Mounted on an 11.8 in.<sup>2</sup> x 0.06 in. thick (300mm<sup>2</sup> x 1.5mm thick) copper plate.