

6 AMP FAST RECOVERY BRIDGE RECTIFIERS

FEATURES

- PRV Ratings from 50 to 1000 Volts
- Surge overload rating to 90 Amps peak
- Reliable low cost molded plastic construction
- Ideal for printed circuit board applications
- Fast switching for high efficiency

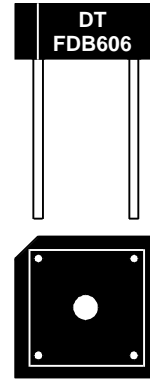
- **UL RECOGNIZED - FILE #E124962**

MECHANICAL DATA

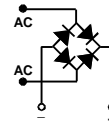
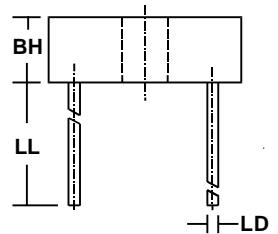
- Case: Molded plastic, U/L Flammability Rating 94V-0
- Terminals: Round silver plated copper pins
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Marked on side of case; positive lead at bevelled corner
- Mounting Position: Any. Through hole provided for #6 screw
- Weight: 0.11 Ounces (3.36 Grams)

MECHANICAL SPECIFICATION

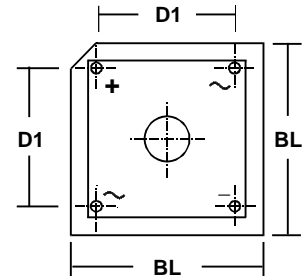
ACTUAL SIZE OF FDB PACKAGE



SERIES FDB600 - FDB610



SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
BL	14.7	15.7	0.58	0.62
BH	5.8	6.9	0.23	0.27
D1	10.3	11.3	0.405	0.445
LL	19.0	n/a	0.75	n/a
LD	1.0	1.1	0.039	0.042



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
Series Number		FDB 600	FDB 601	FDB 602	FDB 604	FDB 606	FDB 608	FDB 610		
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		
Average Forward Rectified Current @ T _c = 50 °C	I _O	6								AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	I _{FSM}	90								
Maximum Forward Voltage (Per bridge Element) at 3 Amps DC	V _{FM}	1.3								VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage (Per Bridge Element-Note 2)	I _{RM}	10 1								μA mA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	200			300		500		nS	
Thermal Energy (Rating for Fusing, t < 8.3 mS)	I ² t	60								AMPS ² SEC
Typical Thermal Resistance, Junction to Case (Note 2)	R _{θJC}	8								°C/W
Junction Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150								°C

NOTES: (1) T_J=25°C, I_F=0.5A, I_R=1A, I_{RR}=0.25A
(2) Bridge mounted on 4.0" sq. x 0.11" thick (10.5cm sq. x 0.3cm) aluminum plate

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