



3 AMP FAST RECOVERY BRIDGE RECTIFIERS

FEATURES

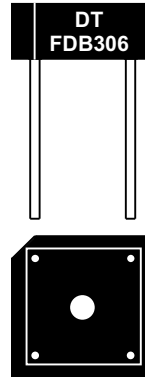
- PRV Ratings from 50 to 1000 Volts
- Surge overload rating to 50 Amps peak
- Reliable low cost molded plastic construction
- Ideal for printed circuit board applications
- Fast switching for high efficiency
- **UL RECOGNIZED - FILE #E124962**
- **RoHS COMPLIANT**

MECHANICAL DATA

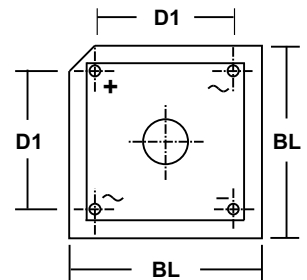
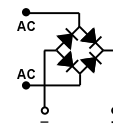
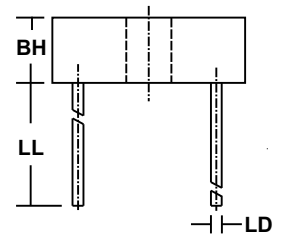
- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- Terminals: Round silver plated copper pins
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Marked on top of case; positive lead at beveled corner
- Mounting Position: Any. Thru hole provided for #6 screw (NOTE 1)
- Weight: 0.11 Ounces (3.36 Grams)

MECHANICAL SPECIFICATION

ACTUAL SIZE OF
FDB PACKAGE



SERIES FDB300 - FDB310



SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
BL	14.7	15.7	0.58	0.62
BH	4.8	5.3	0.19	0.21
D1	10.3	11.3	0.405	0.445
LL	19.0	n/a	0.75	n/a
LD	0.7	0.9	0.028	0.035

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
		FDB 300	FDB 301	FDB 302	FDB 304	FDB 306	FDB 308	FDB 310	
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	
Average Forward Rectified Current @ T _c = 50 °C	I _O	2							AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	I _{FSM}	50							
Maximum Forward Voltage (Per Diode) at 1.5 Amps DC	V _{FM}	1.3							VOLTS
Maximum Average DC Reverse Current at Rated DC Blocking Voltage @ T _A = 25 °C @ T _A = 100 °C	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	10							AMPS ² SEC
Maximum Thermal Resistance, Junction to Case (Note 2)	R _{θJC}	2.5							°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

3.01 03/04