

# 1 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**

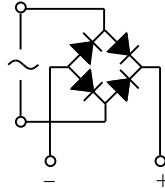
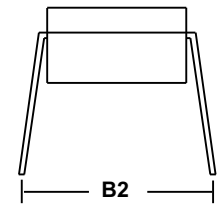
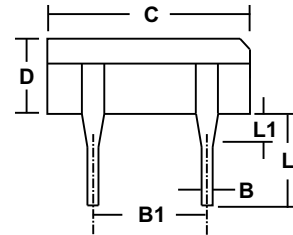
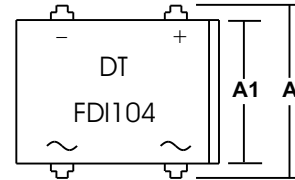
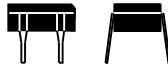
## MECHANICAL DATA

- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- Terminals: Rectangular pins
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Marked on case
- Mounting Position: Any
- Weight: 0.05 Ounces (1.3 Grams)

## MECHANICAL SPECIFICATION

ACTUAL SIZE OF THE FDI PACKAGE

SERIES FDI100 - FDI110



Sym	Minimum		Maximum	
	in	mm	in	mm
A	0.290	7.4	0.310	8.9
A1	0.245	6.2	0.255	6.5
B	0.016	0.41	0.020	0.51
B1	0.195	5.0	0.205	5.2
B2	0.300	7.6	0.350	8.9
C	0.355	9.3	0.365	9.3
D	0.125	3.2	0.135	3.4
L	0.155	3.9	0.165	4.3
L1	0.060*	1.5*		

\* This dimension is "Typical".

## 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
		FDI 100	FDI 101	FDI 102	FDI 104	FDI 106	FDI 108	FDI 110	
Series Number									
Maximum DC Blocking Voltage	V <sub>RM</sub>	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	
Maximum Peak Recurrent Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	
Average Forward Rectified Current @ T <sub>A</sub> = 40 °C	I <sub>O</sub>	1							AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	I <sub>FSM</sub>	50							
Maximum Forward Voltage at 1 Amp DC	V <sub>FM</sub>	1.3							VOLTS
Maximum Average DC Reverse Current @ T <sub>A</sub> = 25 °C	I <sub>RM</sub>	10							μA
At Rated DC Blocking Voltage @ T <sub>A</sub> = 100 °C		1							
Maximum Reverse Recovery Time (Note 1) @ T <sub>J</sub> = 25 °C	T <sub>RR</sub>	200		300		500		nS	
Maximum Thermal Resistance, Junction to Ambient (Note 2)	R <sub>θJA</sub>	40							°C/W
Junction Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

NOTES: (1) T<sub>J</sub>=25°C, I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A

(2) Thermal resistance from junction to ambient with bridge mounted on PC Board with 0.5" sq. (13mm sq.) copper pads

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