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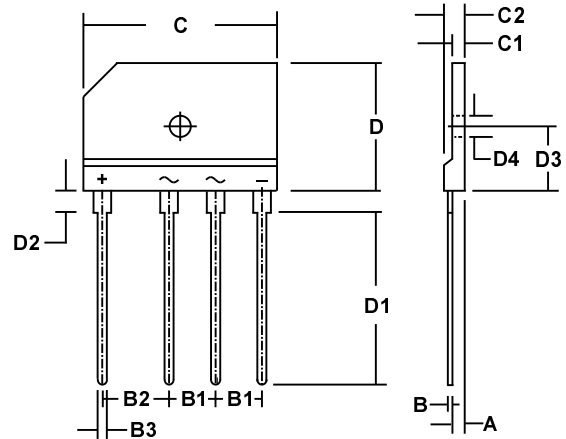
Data Sheet No. **BDTC-800-1A**

8 AMP SILICON BRIDGE RECTIFIERS

FEATURES

- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical < 2%, Max. < 10% of Die Area)
- BUILT-IN STRESS RELIEF MECHANISM FOR SUPERIOR RELIABILITY AND PERFORMANCE
- SURGE OVERLOAD RATING TO 400 AMPS PEAK
- THRU-HOLE FOR EASY HEAT SINK MOUNTING
- **UL RECOGNIZED - FILE #E124962**
- **RoHS COMPLIANT**

MECHANICAL SPECIFICATION



MECHANICAL DATA

- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- Terminals: Silver plated pins
- Soldering: Per MIL-STD 750
- Polarity: Marked on case
- Mounting Position: Any
Mounting torque = 5 in lb max.
- Weight: 0.26 Ounces (7 Grams)

SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.5	2.9	0.098	0.114
B	0.6	0.8	0.024	0.031
B1	7.3	7.7	0.287	0.303
B2	9.8	10.2	0.386	0.402
B3	0.9	1.1	0.035	0.043
C	29.7	30.3	1.17	1.19
C1	3.6	4.0	0.142	0.157
C2	4.4	4.8	0.173	0.189
D	19.7	20.3	0.776	0.799
D1	13.2	13.8	0.520	0.543
D2	3.8	4.2	0.126	0.165
D3	10.8	11.2	0.425	0.441
D4	3.1	3.3	0.122	0.130

SERIES DT8C00 - DT8C10

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
		DT8C 00	DT8C 01	DT8C 02	DT8C 04	DT8C 06	DT8C 08	DT8C 10	
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 = 100°C (Notes 1, 3)	I _O	8							AMPS
Peak Forward Surge Current. Single 60Hz Half-Sine Wave Superimposed on Rated Load (JEDEC Method). T _J = 150°C	I _{FSM}	400							
Maximum Forward Voltage (Per Diode) at 8 Amps DC	V _{FM}	0.95 (Typ. 0.90)							VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage @ T _A = 25°C @ T _A = 125°C	I _{RM}	1 50							μA
Typical Thermal Resistance Junction to Ambient (Note 2) Junction to Case (Note 1)	R _{θJA} R _{θJC}	16 3							°C/W
Minimum Insulation Breakdown Voltage (Circuit to Case)	V _{ISO}	2500							VOLTS
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

NOTES: (1) Bridge mounted on 3.2" sq. x 0.12" thick (8.2cm sq. x 0.3cm) aluminum plate
 (2) Bridge mounted on PC Board with 0.5" sq. (12mm sq.) copper pads and bridge lead length of 0.375" (9.5mm)
 (3) Bolt bridge on heat sink with #6 screw, using silicon thermal compound between bridge and mounting surface for maximum heat transfer.

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