

## 6 AMP SILICON BRIDGE RECTIFIERS

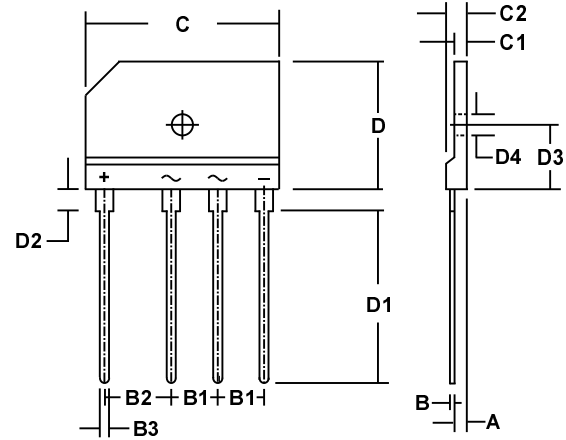
### FEATURES

- 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 250 AMPS PEAK
- IDEAL FOR PRINTED CIRCUIT BOARD APPLICATIONS
- THRU-HOLE FOR EASY HEAT SINK MOUNTING
- **UL RECOGNIZED - FILE #E124962**
- **RoHS COMPLIANT**

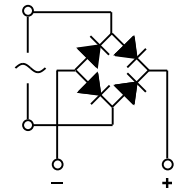
### MECHANICAL DATA

- 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)

### MECHANICAL SPECIFICATION



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 DT6C00 - DT6C10**

### 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
Series Number		DT6C 00	DT6C 01	DT6C 02	DT6C 04	DT6C 06	DT6C 08	DT6C 10		
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>c</sub> = 100°C (Notes 1, 3) T <sub>A</sub> = 40°C (Note 2)	I <sub>O</sub>	6 6								AMPS
Peak Forward Surge Current, Single 60Hz Half-Sine Wave Superimposed on Rated Load (JEDEC Method). T <sub>J</sub> = 150° C	I <sub>FSM</sub>	250								
Maximum Forward Voltage (Per Diode) at 6 Amps DC	V <sub>FM</sub>	0.95 (Typical < 0.90)								VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage @ T <sub>A</sub> = 25°C @ T <sub>A</sub> = 100°C	I <sub>RM</sub>	1 50								μA
Typical Thermal Resistance Junction to Ambient (Note 2) Junction to Case (Note 3)	R <sub>θJA</sub> R <sub>θJC</sub>	16.0 3.1								°C/W
Minimum Insulation Breakdown Voltage (Circuit to Case)	V <sub>ISO</sub>	2500								VOLTS
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150								°C

NOTES: (1) Bridge mounted on 2.6" x 1.4" x 0.06" thick (6.5cm x 3.5cm x 0.15cm) 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.