

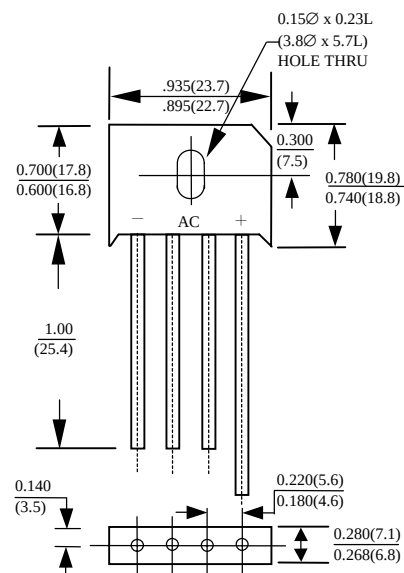
## 6A SILICON SINGLE-PHASE BRIDGE RECTIFIERS

### FEATURES

- PLASTIC MATERIAL HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- IDEAL FOR PRINTED CIRCUIT BOARD
- HIGH TEMPERATURE SOLDERING GUARANTEED : 260°C /10S  
.375" (9.5mm) LEAD LENGTH AT 5 LBS (2.3KG) TENSION

### MECHANICAL DATA

- CASE : MOLDED PLASTIC
- TERMINALS : LEADS SOLDERABLE PER MIL-STD-202, METHOD 208
- MOUNTING POSITION : ANY
- MOUNTING TORQUE : 5 IN-LB MAX
- WEIGHT : 8.0 GRAMS



DIMENSIONS IN INCHES AND (MILLIMETERS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS  
RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED  
SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD.  
FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

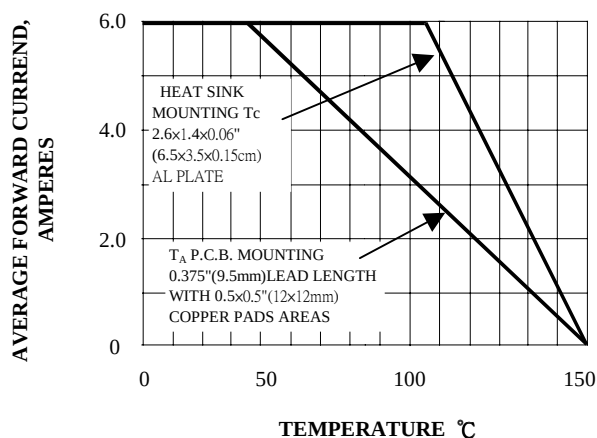
| RATINGS                                                                | SYMBOL    | BU6-005       | BU6-01 | BU6-02 | BU6-04 | BU6-06 | BU6-08 | BU6-10 | UNITS |
|------------------------------------------------------------------------|-----------|---------------|--------|--------|--------|--------|--------|--------|-------|
| MAXIMUM RECURRENT PEAK REVERSE VOLTAGE                                 | $V_{RRM}$ | 50            | 100    | 200    | 400    | 600    | 800    | 1000   | V     |
| MAXIMUM RMS VOLTAGE                                                    | $V_{RMS}$ | 35            | 70     | 140    | 280    | 420    | 560    | 700    | V     |
| MAXIMUM DC BLOCKING VOLTAGE                                            | $V_{DC}$  | 50            | 100    | 200    | 400    | 600    | 800    | 1000   | V     |
| MAXIMUM AVERAGE FORWARD RECTIFIED OUTPUT CURRENT ( SEE FIG.1 )         | $I_O$     | 6.0           |        |        |        |        |        |        | A     |
| PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD | $I_{FSM}$ | 250           |        |        |        |        |        |        | A     |
| STORAGE TEMPERATURE RANGE                                              | $T_{STG}$ | - 55 TO + 150 |        |        |        |        |        |        | °C    |
| OPERATING TEMPERATURE RANGE                                            | $T_{OP}$  | - 55 TO + 150 |        |        |        |        |        |        | °C    |

### ELECTRICAL CHARACTERISTICS ( $A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

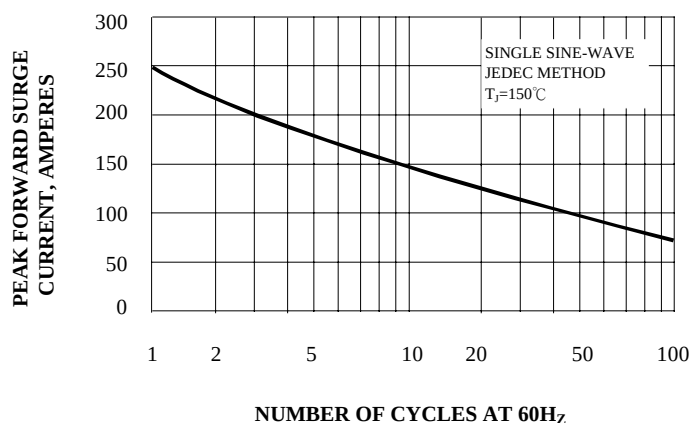
| CHARACTERISTICS                                                                                                   | SYMBOL | BU6-005 | BU6-01 | BU6-02 | BU6-04 | BU6-06 | BU6-08 | BU6-10 | UNITS         |
|-------------------------------------------------------------------------------------------------------------------|--------|---------|--------|--------|--------|--------|--------|--------|---------------|
| MAXIMUM INSTANTANEOUS FORWARD VOLTAGE DROP PER ELEMENT AT $I_{FM}$                                                | $V_F$  | 1.0     |        |        |        |        |        |        | V             |
| MAXIMUM REVERSE LEAKAGE AT RATED DC BLOCKING VOLTAGE PER ELEMENT $T_A=25^\circ\text{C}$ , $T_C=100^\circ\text{C}$ | $I_R$  | 10      |        |        |        |        |        |        | $\mu\text{A}$ |

# RATINGS AND CHARACTERISTIC CURVES BU6-005 THRU BU6-10

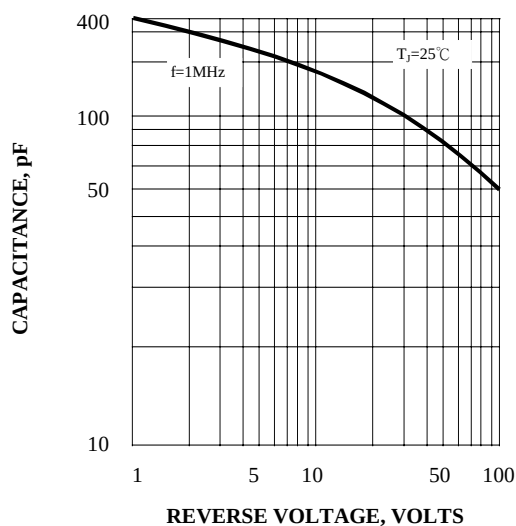
**FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT**



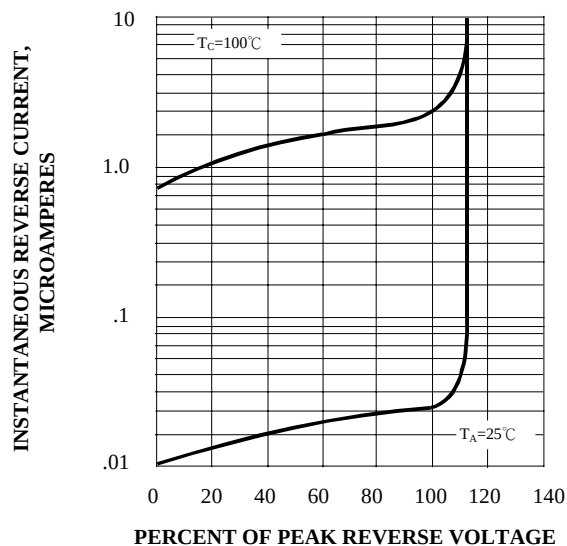
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT**



**FIG. 4 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT**



**FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT**

