### **A28F5000 Series Snubbers Capacitors**

#### 1000 and 2000 Volts Peak/ Max DC

The A28F5000 series of Snubber Capacitors are designed for use in power semiconductor circuits to protect the semiconductor by limiting the rate of voltage rise. The dielectric system is polypropylene and paper with foil electrodes. The RMS currents encountered in these circuits are usually low; however, the peak currents are very high. Refer to the Application Data for correct application of these capacitors.

#### **SPECIFICATIONS**

Available Capacitance Range: 0.05 to 2 µF

**Capacitance Tolerance:** ± 10%

Capacitance Variation with Temperature: ±3% from -30 °C to +80 °C

Rated Voltage: See Ratings Table. The rating is the Maximum Peak voltage

permissible in either polarity.

Rated Current: See Ratings Tables. The value given is for derating purposes

only. Refer to the Application Note on Page 12 to determine the required derating. In no circumstances should the 10 Amp RMS Current rating of the eyelet terminals be exceeded. For 1/4-20 threaded terminals, full current less

any derating may be applied.

Operating Temperature: -40 °C to +70 °C

Storage Temperature: -55 °C to +90 °C

Operating Life: 40,000 hours with 95% survival with proper derating

**Dissipation Factor:** 0.3% maximum

Case Material/Finish: Aluminum Case with Steel Cover for eyelet terminal designs;

Aluminum case with Aluminum Cover for \*Threaded

terminals.

**Terminations:** 0.125-in. Solder Eyelets (10 Amp RMS maximum) & 1/4-20

screw thread studs (60 A RMS maximum) For threaded terminal designs, nut and washer hardware is supplied in bag

**Dielectric Fluid:** A28F5500 Series Dielektrol VII

A28F5600 Series Dielektrol VII

**Internal Protection:** Internal Pressure Sensitive Interrupter for eyelet designs.

Threaded terminal designs do not contain an internal protection mechanism. The user is responsible for ensuring

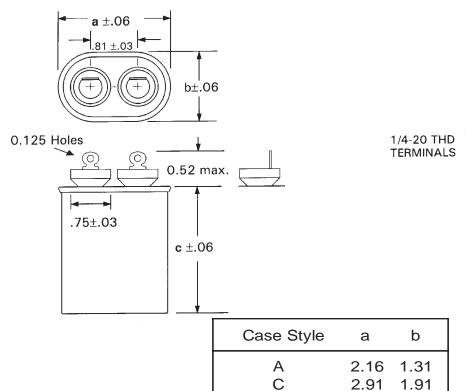
that the capacitors are correctly applied for safe use

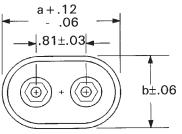
### **A28F5000 Series Snubber Capacitors**

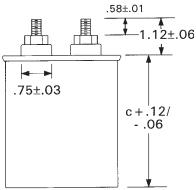
(All Dimensions in Inches)

### **Standard Ratings**

| 1.0 A28F5503 A 2 2.0 A28F5504 A 2  2000 Volts Peak / Max DC  .05 A28F5600 A 2 .10 A28F5601 A 2 .10 A28F5615 A* 2 .25 A28F5602 A 2 .25 A28F5605 A* 2 .50 A28F5603 A 2 .50 A28F5606 A* 2 | Capacitance (µF)   | Height<br>c (in)   | Current (A)                                  |  |  |
|--|--|--|--|--|--|
| 1.0 A28F5503 A 2 2.0 A28F5504 A 2  2000 Volts Peak / Max DC  .05 A28F5600 A 2 .10 A28F5601 A 2 .10 A28F5615 A* 2 .25 A28F5602 A 2 .25 A28F5605 A* 2 .50 A28F5603 A 2 .50 A28F5606 A* 2 | 1000 Volts Peak / Max DC   |  |  |  |  |
| .05  | 1.0 A28F   | 2.12<br>2.12<br>2.88   | 6<br>7<br>11                                 |  |  |
| .10  | 2000 Volts Peak / Max DC   |  |  |  |  |
| 2.0 A28F5688 C 4   | .10 A28F .10 A28F .25 A28F .25 A28F .50 A28F .50 A28F 1.0 A28F 1.0 A28F 2.0 A28F | 2.12<br>2.12<br>2.12<br>2.12<br>2.12<br>2.88<br>2.88<br>4.50<br>4.50<br>4.25<br>4.25 | 2<br>3<br>4<br>4<br>7<br>7<br>12<br>12<br>17 |  |  |







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### Mounting Hardware

(All Dimensions in Inches)

## FOOTED BRACKETS FOR OVAL CASE STYLES

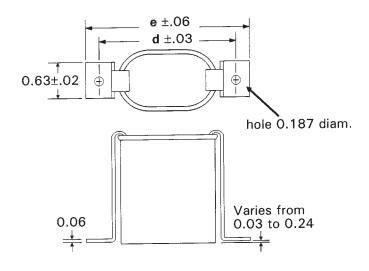
#### (2 per Capacitor)

For the proper bracket, match the capacitor case height to the case height shown next to the bracket part

| Case<br>Height | Bracket Part<br>Number |  |  |
|----------------|------------------------|--|--|
| 2.12           | 302C920000210          |  |  |
| 2.38           | 302C920000200          |  |  |
| 2.62           | 302C920000200          |  |  |
| 2.88           | 302C920000113          |  |  |
| 3.12           | 302C920000179          |  |  |
| 3.50           | 302C920000119          |  |  |
| 3.88           | 302C920000115          |  |  |
| 4.25           | 302C920000122          |  |  |
| 4.50           | 302C920000211          |  |  |
| 4.75           | 302C920000116          |  |  |
| 5.25           | 302C920000153          |  |  |
| 5.50           | 302C920000233          |  |  |
| 5.75           | 302C920000209          |  |  |
| 6.25           | 302C920000152          |  |  |
| 6.75           | 302C920000213          |  |  |
| 7.25           | 302C920000214          |  |  |

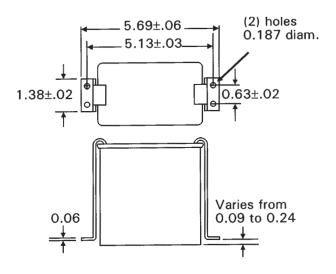
# FOOTED BRACKETS FOR RECTANGULAR CASE STYLE G (2 per Capacitor)

| Case   | Bracket Part  |  |  |
|--------|---------------|--|--|
| Height | Number        |  |  |
| 5.18   | 302C920000189 |  |  |
| 6.25   | 302C920000190 |  |  |
| 7.25   | 302C920000207 |  |  |
| 8.00   | 302C920000194 |  |  |
| 9.00   | 302C920000196 |  |  |
|        |               |  |  |



| Case<br>Style | d    | е    |
|---------------|------|------|
| **A           | 2.56 | 3.00 |
| В             | 3.13 | 3.56 |
| С             | 3.38 | 3.81 |
| D             | 4.13 | 4.56 |

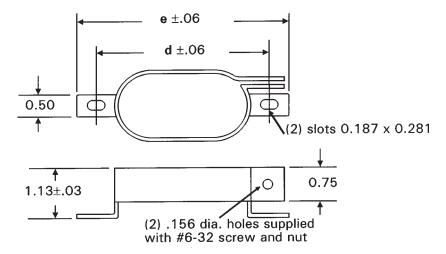
\*\* Cannot be used on "A" base size units with threaded terminals (Aluminum covers).



### **Mounting Hardware**

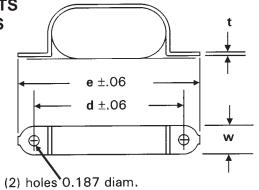
(All Dimensions in Inches)

UNIVERSAL WRAPAROUND BRACKETS FOR OVAL CASE STYLES



| Case<br>Style    | Bracket Part<br>number   | d            | e                            |
|------------------|--|--------------|------------------------------|
| A<br>B<br>C<br>D | 128A2244AC021<br>128A2244AB025<br>128A2244AB022<br>128A2244AB023 | 3.27<br>3.44 | 3.13<br>3.70<br>3.88<br>4.63 |

WRAPAROUND BRACKETS FOR OVAL CASE STYLES



| Case<br>Style | Bracket Part<br>Number | d    | е    | w    | t    |
|---------------|------------------------|------|------|------|------|
| A             | 9827065000021          | 2.56 | 2.94 | 0.50 | 0.02 |
| B             | 9827065000031          | 3.06 | 3.50 | 0.63 | 0.02 |
| C             | 614A301000061          | 3.31 | 3.81 | 0.75 | 0.03 |
| D             | 614A301000051          | 4/06 | 4.56 | 0.75 | 0.03 |