

## SMT Aluminum Electrolytic Capacitors - General Purpose, 85°C

### General Purpose Filtering, Bypassing, Power Supply Decoupling



Type AVS Capacitors are the best value for filter and bypass applications not requiring wide temperature performance or high ripple current. Their vertical cylindrical cases facilitate automatic mounting and reflow soldering and Type AVS offers a significant cost savings over tantalum capacitors.

### Highlights

- +85°C, 2000 Hour Load Life
- Capacitance Range: 0.1  $\mu\text{F}$  to 1500  $\mu\text{F}$
- Voltage Range: 4.0 Vdc to 100 Vdc
- AEC-Q200 Compliant

### Specifications

**Operating Temperature:** -40°C to +85°C

**Rated voltage:** 4.0, 6.3, 10, 16, 25, 35, 63, & 100 Vdc

**Capacitance:** 0.1  $\mu\text{F}$  to 1500  $\mu\text{F}$

**D.F. (@ 20°C):** See Ratings Table

**Capacitance Tolerance:**  $\pm 20\%$  @ 120 Hz and +20°C

**Leakage Current:** 0.01 CV or 3  $\mu\text{A}$  @ +20°C, after two minutes (whichever is greater)

**Ripple Current Multipliers:**

### Frequency

| 50/60 Hz | 120 Hz | 1 kHz | 10 kHz & up |
|----------|--------|-------|-------------|
| 0.7      | 1.0    | 1.3   | 1.7         |

**Load Life:** 2000 h @ 85°C

**Shelf Life:** 1000 h @ 85°C

$\Delta$  Capacitance:  $\pm 20\%$

DF:  $\leq 200\%$  of limit

DCL:  $< 100\%$  of limit

$\Delta$  Capacitance:  $\pm 20\%$

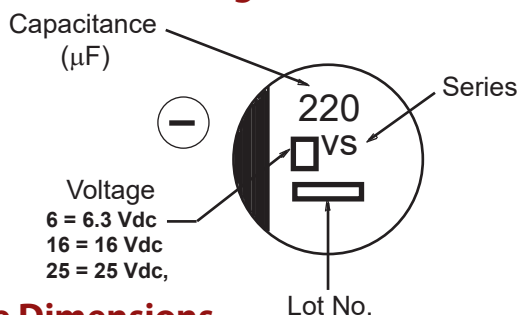
DF:  $\leq 200\%$  of limit

DCL:  $< 100\%$  of limit

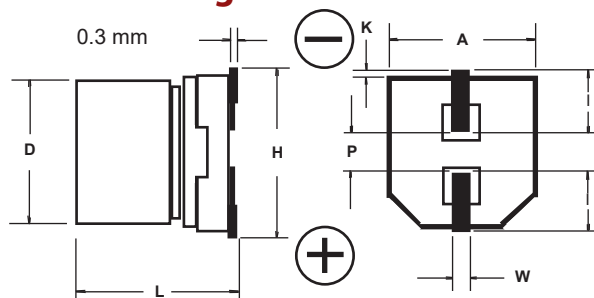
**RoHS Compliant**

| Maximum Impedance Ratio @ 120 Hz |      |     |      |      |      |      |      |      |       |
|----------------------------------|------|-----|------|------|------|------|------|------|-------|
| W.V. (Vdc)                       | 4.0  | 6.3 | 10.0 | 16.0 | 25.0 | 35.0 | 50.0 | 63.0 | 100.0 |
| -25°C / +20°C                    | 7.0  | 4.0 | 3.0  | 2.0  | 2.0  | 2.0  | 2.0  | 3.0  | 3.0   |
| -40°C / +20°C                    | 15.0 | 8.0 | 6.0  | 4.0  | 4.0  | 3.0  | 3.0  | 4.0  | 4.0   |

### AVS Series Marking



### Outline Drawing



### Case Dimensions

| Case Code | D $\pm 0.5$ | L              | A $\pm 0.2$ | H (max) | I (ref) | W              | P (ref) | K                 |
|-----------|-------------|----------------|-------------|---------|---------|----------------|---------|-------------------|
| A         | 3           | 5.4 $\pm 1.2$  | 3.3         | 4.5     | 1.5     | 0.55 $\pm 0.1$ | 0.6     | 0.35 + 0.15/-0.20 |
| B         | 4           | 5.4 $\pm 1.2$  | 4.3         | 5.5     | 1.8     | 0.65 $\pm 0.1$ | 1.0     | 0.35 + 0.15/-0.20 |
| C         | 5           | 5.4 $\pm 1.2$  | 5.3         | 6.5     | 2.2     | 0.65 $\pm 0.1$ | 1.5     | 0.35 + 0.15/-0.20 |
| D         | 6.3         | 5.4 $\pm 1.2$  | 6.6         | 7.8     | 2.6     | 0.65 $\pm 0.1$ | 1.8     | 0.35 + 0.15/-0.20 |
| X         | 6.3         | 7.9 $\pm 0.3$  | 6.6         | 7.8     | 2.6     | 0.65 $\pm 0.1$ | 1.8     | 0.35 + 0.15/-0.20 |
| E         | 8           | 6.2 $\pm 0.3$  | 8.3         | 9.5     | 3.4     | 0.65 $\pm 0.1$ | 2.2     | 0.35 + 0.15/-0.20 |
| F         | 8           | 10.2 $\pm 0.3$ | 8.3         | 10.0    | 3.4     | 0.90 $\pm 0.2$ | 3.1     | 0.70 $\pm 0.20$   |
| G         | 10          | 10.2 $\pm 0.3$ | 10.3        | 12.0    | 3.5     | 0.90 $\pm 0.2$ | 4.6     | 0.70 $\pm 0.20$   |

# Type AVS

## SMT Aluminum Electrolytic Capacitors - General Purpose, 85°C

| Cap<br>(µF)           | CaT-Falog<br>Part-F Number | Max.<br>DCL<br>(µA) | Max.<br>Dissipation<br>Factor @<br>120 Hz | Max.<br>ESR @<br>120 Hz/20 °C<br>(Ohms) | Max.<br>Ripple Current<br>120 Hz/85 °C<br>(mA) | Case<br>Code | Size<br>D x L<br>(mm) | Quantity<br>per Reel |
|-----------------------|----------------------------|---------------------|-------------------------------------------|-----------------------------------------|------------------------------------------------|--------------|-----------------------|----------------------|
| 4 Vdc (5 Vdc Surge)   |                            |                     |                                           |                                         |                                                |              |                       |                      |
| 22                    | AVS226M04A12T-F*           | 3.0                 | 0.37                                      | 27.9                                    | 19                                             | A            | 3 x 5.4               | 2000                 |
| 33                    | AVS336M04B12T-F            | 3.0                 | 0.35                                      | 17.6                                    | 26                                             | B            | 4 x 5.4               | 2000                 |
| 47                    | AVS476M04B12T-F            | 3.0                 | 0.35                                      | 12.3                                    | 34                                             | B            | 4 x 5.4               | 2000                 |
| 100                   | AVS107M04C12T-F            | 4.0                 | 0.35                                      | 5.8                                     | 61                                             | C            | 5 x 5.4               | 1000                 |
| 220                   | AVS227M04D16T-F            | 8.8                 | 0.35                                      | 2.6                                     | 82                                             | D            | 6.3 x 5.4             | 1000                 |
| 6.3 Vdc (8 Vdc Surge) |                            |                     |                                           |                                         |                                                |              |                       |                      |
| 22                    | AVS226M06A12T-F*           | 3.0                 | 0.35                                      | 26.4                                    | 20                                             | A            | 3 x 5.4               | 2000                 |
| 22                    | AVS226M06B12T-F            | 3.0                 | 0.26                                      | 19.6                                    | 29                                             | B            | 4 x 5.4               | 2000                 |
| 33                    | AVS336M06B12T-F            | 3.0                 | 0.35                                      | 17.6                                    | 29                                             | B            | 4 x 5.4               | 2000                 |
| 47                    | AVS476M06B12T-F            | 3.0                 | 0.35                                      | 12.3                                    | 36                                             | B            | 4 x 5.4               | 2000                 |
| 47                    | AVS476M06C12T-F            | 3.0                 | 0.26                                      | 9.2                                     | 46                                             | C            | 5 x 5.4               | 1000                 |
| 100                   | AVS107M06C12T-F            | 6.3                 | 0.35                                      | 5.8                                     | 47                                             | C            | 5 x 5.4               | 1000                 |
| 100                   | AVS107M06D16T-F            | 6.3                 | 0.26                                      | 4.3                                     | 71                                             | D            | 6.3 x 5.4             | 1000                 |
| 220                   | AVS227M06D16T-F            | 13.9                | 0.35                                      | 2.6                                     | 74                                             | D            | 6.3 x 5.4             | 1000                 |
| 330                   | AVS337M06X16T-F            | 20.8                | 0.26                                      | 1.3                                     | 150                                            | X            | 6.3 x 7.9             | 900                  |
| 330                   | AVS337M06E16T-F            | 20.8                | 0.35                                      | 1.8                                     | 300                                            | E            | 8 x 6.2               | 1000                 |
| 470                   | AVS477M06F24T-F            | 29.6                | 0.35                                      | 1.2                                     | 380                                            | F            | 8 x 10.2              | 500                  |
| 1000                  | AVS108M06F24T-F            | 63.0                | 0.35                                      | 0.6                                     | 500                                            | F            | 8 x 10.2              | 500                  |
| 1000                  | AVS108M06G24T-F            | 63.0                | 0.35                                      | 0.6                                     | 700                                            | G            | 10 x 10.2             | 500                  |
| 1500                  | AVS158M06G24T-F            | 94.5                | 0.35                                      | 0.4                                     | 700                                            | G            | 10 x 10.2             | 500                  |
| 10 Vdc (13 Vdc Surge) |                            |                     |                                           |                                         |                                                |              |                       |                      |
| 22                    | AVS226M10B12T-F            | 3.0                 | 0.3                                       | 22.6                                    | 28                                             | B            | 4 x 5.4               | 2000                 |
| 33                    | AVS336M10B12T-F            | 3.3                 | 0.3                                       | 15.1                                    | 29                                             | B            | 4 x 5.4               | 2000                 |
| 33                    | AVS336M10C12T-F            | 3.3                 | 0.2                                       | 10.1                                    | 43                                             | C            | 5 x 5.4               | 1000                 |
| 47                    | AVS476M10C12T-F            | 4.7                 | 0.3                                       | 10.6                                    | 43                                             | C            | 5 x 5.4               | 1000                 |
| 100                   | AVS107M10C12T-F            | 10.0                | 0.3                                       | 5.0                                     | 50                                             | C            | 5 x 5.4               | 1000                 |
| 100                   | AVS107M10D16T-F            | 10.0                | 0.2                                       | 3.3                                     | 70                                             | D            | 6.3 x 5.4             | 1000                 |
| 220                   | AVS227M10X16T-F            | 22.0                | 0.2                                       | 1.5                                     | 150                                            | X            | 6.3 x 7.9             | 900                  |
| 220                   | AVS227M10E16T-F            | 22.0                | 0.26                                      | 2.0                                     | 250                                            | E            | 8 x 6.2               | 1000                 |
| 330                   | AVS337M10F24T-F            | 33.0                | 0.26                                      | 1.3                                     | 330                                            | F            | 8 x 10.2              | 500                  |
| 470                   | AVS477M10F24T-F            | 47.0                | 0.26                                      | 0.9                                     | 330                                            | F            | 8 x 10.2              | 500                  |
| 470                   | AVS477M10G24T-F            | 47.0                | 0.26                                      | 0.9                                     | 400                                            | G            | 10 x 10.2             | 500                  |
| 1000                  | AVS108M10G24T-F            | 100.0               | 0.26                                      | 0.4                                     | 580                                            | G            | 10 x 10.2             | 500                  |
| 16 Vdc (20 Vdc Surge) |                            |                     |                                           |                                         |                                                |              |                       |                      |
| 10                    | AVS106M16A12T-F*           | 3.0                 | 0.18                                      | 29.9                                    | 20                                             | A            | 3 x 5.4               | 2000                 |
| 10                    | AVS106M16B12T-F            | 3.0                 | 0.16                                      | 26.5                                    | 28                                             | B            | 4 x 5.4               | 2000                 |
| 22                    | AVS226M16B12T-F            | 3.5                 | 0.26                                      | 19.6                                    | 28                                             | B            | 4 x 5.4               | 2000                 |
| 22                    | AVS226M16C12T-F            | 3.5                 | 0.16                                      | 12.1                                    | 39                                             | C            | 5 x 5.4               | 1000                 |
| 33                    | AVS336M16C12T-F            | 5.3                 | 0.26                                      | 13.1                                    | 35                                             | C            | 5 x 5.4               | 1000                 |
| 47                    | AVS476M16C12T-F            | 7.5                 | 0.26                                      | 9.2                                     | 39                                             | C            | 5 x 5.4               | 1000                 |
| 47                    | AVS476M16D16T-F            | 7.5                 | 0.16                                      | 5.6                                     | 70                                             | D            | 6.3 x 5.4             | 1000                 |
| 100                   | AVS107M16D16T-F            | 16.0                | 0.26                                      | 4.3                                     | 70                                             | D            | 6.3 x 5.4             | 1000                 |
| 100                   | AVS107M16E16T-F            | 16.0                | 0.2                                       | 3.3                                     | 200                                            | E            | 8 x 6.2               | 1000                 |
| 220                   | AVS227M16X16T-F            | 35.2                | 0.16                                      | 1.2                                     | 150                                            | X            | 6.3 x 7.9             | 900                  |
| 220                   | AVS227M16E16T-F            | 35.2                | 0.2                                       | 1.5                                     | 200                                            | E            | 8 x 6.2               | 1000                 |
| 220                   | AVS227M16F24T-F            | 35.2                | 0.2                                       | 1.5                                     | 280                                            | F            | 8 x 10.2              | 500                  |
| 330                   | AVS337M16F24T-F            | 52.8                | 0.2                                       | 1.0                                     | 320                                            | F            | 8 x 10.2              | 500                  |
| 330                   | AVS337M16G24T-F            | 52.8                | 0.2                                       | 1.0                                     | 380                                            | G            | 10 x 10.2             | 500                  |
| 470                   | AVS477M16F24T-F            | 75.2                | 0.2                                       | 0.7                                     | 320                                            | F            | 8 x 10.2              | 500                  |
| 470                   | AVS477M16G24T-F            | 75.2                | 0.2                                       | 0.7                                     | 420                                            | G            | 10 x 10.2             | 500                  |
| 25 Vdc (31 Vdc Surge) |                            |                     |                                           |                                         |                                                |              |                       |                      |
| 4.7                   | AVS475M25A12T-F*           | 3.0                 | 0.16                                      | 56.5                                    | 12                                             | A            | 3 x 5.4               | 2000                 |
| 4.7                   | AVS475M25B12T-F            | 3.0                 | 0.14                                      | 49.4                                    | 22                                             | B            | 4 x 5.4               | 2000                 |
| 10                    | AVS106M25B12T-F            | 3.0                 | 0.2                                       | 33.2                                    | 22                                             | B            | 4 x 5.4               | 2000                 |
| 10                    | AVS106M25C12T-F            | 3.0                 | 0.14                                      | 23.2                                    | 28                                             | C            | 5 x 5.4               | 1000                 |
| 22                    | AVS226M25C12T-F            | 5.5                 | 0.2                                       | 15.1                                    | 35                                             | C            | 5 x 5.4               | 1000                 |
| 22                    | AVS226M25D16T-F            | 5.5                 | 0.14                                      | 10.6                                    | 55                                             | D            | 6.3 x 5.4             | 1000                 |
| 33                    | AVS336M25C12T-F            | 8.3                 | 0.2                                       | 10.0                                    | 42                                             | C            | 5 x 5.4               | 1000                 |
| 33                    | AVS336M25D16T-F            | 8.3                 | 0.14                                      | 7.0                                     | 65                                             | D            | 6.3 x 5.4             | 1000                 |
| 47                    | AVS476M25D16T-F            | 11.8                | 0.2                                       | 7.1                                     | 70                                             | D            | 6.3 x 5.4             | 1000                 |
| 100                   | AVS107M25X16T-F            | 25.0                | 0.14                                      | 2.3                                     | 150                                            | X            | 6.3 x 7.9             | 900                  |
| 100                   | AVS107M25E16T-F            | 25.0                | 0.16                                      | 2.7                                     | 91                                             | E            | 8 x 6.2               | 1000                 |
| 100                   | AVS107M25F24T-F            | 25.0                | 0.16                                      | 2.7                                     | 180                                            | F            | 8 x 10.2              | 500                  |
| 220                   | AVS227M25F24T-F            | 55.0                | 0.16                                      | 1.2                                     | 140                                            | F            | 8 x 10.2              | 500                  |
| 220                   | AVS227M25G24T-F            | 55.0                | 0.16                                      | 1.2                                     | 310                                            | G            | 10 x 10.2             | 500                  |
| 330                   | AVS337M25F24T-F            | 82.5                | 0.16                                      | 0.8                                     | 150                                            | F            | 8 x 10.2              | 500                  |
| 330                   | AVS337M25G24T-F            | 82.5                | 0.16                                      | 0.8                                     | 340                                            | G            | 10 x 10.2             | 500                  |
| 470                   | AVS477M25G24T-F            | 117.5               | 0.16                                      | 0.6                                     | 360                                            | G            | 10 x 10.2             | 500                  |

\*Denotes discontinued part

# Type AVS

## SMT Aluminum Electrolytic Capacitors - General Purpose, 85°C

| Cap<br>(µF)                    | CaT-Fallog<br>Part-F Number | Max.<br>DCL<br>(µA) | Dissipation<br>Factor @<br>120 Hz | ESR @<br>120 Hz/20 °C<br>(Ohms) | Ripple Current<br>120 Hz/85 °C<br>(mA) | Case<br>Code | Size<br>D x L<br>(mm) | Quantity<br>per Reel |
|--------------------------------|-----------------------------|---------------------|-----------------------------------|---------------------------------|----------------------------------------|--------------|-----------------------|----------------------|
| <b>35 Vdc (44 Vdc Surge)</b>   |                             |                     |                                   |                                 |                                        |              |                       |                      |
| 2.2                            | AVS225M35A12T-F*            | 3.0                 | 0.14                              | 105.6                           | 8                                      | A            | 3 x 5.4               | 2000                 |
| 3.3                            | AVS335M35A12T-F*            | 3.0                 | 0.14                              | 70.4                            | 10                                     | A            | 3 x 5.4               | 2000                 |
| 4.7                            | AVS475M35B12T-F             | 3.0                 | 0.12                              | 42.4                            | 22                                     | B            | 4 x 5.4               | 2000                 |
| 10                             | AVS106M35B12T-F             | 3.5                 | 0.16                              | 26.5                            | 22                                     | B            | 4 x 5.4               | 2000                 |
| 10                             | AVS106M35C12T-F             | 3.5                 | 0.12                              | 19.9                            | 30                                     | C            | 5 x 5.4               | 1000                 |
| 22                             | AVS226M35C12T-F             | 7.7                 | 0.16                              | 12.1                            | 36                                     | C            | 5 x 5.4               | 1000                 |
| 22                             | AVS226M35D16T-F             | 7.7                 | 0.12                              | 9.1                             | 60                                     | D            | 6.3 x 5.4             | 1000                 |
| 33                             | AVS336M35D16T-F             | 11.6                | 0.16                              | 8.0                             | 60                                     | D            | 6.3 x 5.4             | 1000                 |
| 33                             | AVS336M35E16T-F             | 11.6                | 0.14                              | 7.0                             | 130                                    | E            | 8 x 6.2               | 1000                 |
| 47                             | AVS476M35D16T-F             | 16.5                | 0.16                              | 5.6                             | 70                                     | D            | 6.3 x 5.4             | 1000                 |
| 47                             | AVS476M35E16T-F             | 16.5                | 0.14                              | 4.9                             | 165                                    | E            | 8 x 6.2               | 1000                 |
| 100                            | AVS107M35X16T-F             | 35.0                | 0.12                              | 2.0                             | 130                                    | X            | 6.3 x 7.9             | 900                  |
| 100                            | AVS107M35F24T-F             | 35.0                | 0.14                              | 2.3                             | 140                                    | F            | 8 x 10.2              | 500                  |
| 100                            | AVS107M35G24T-F             | 35.0                | 0.14                              | 2.3                             | 210                                    | G            | 10 x 10.2             | 500                  |
| 220                            | AVS227M35F24T-F             | 77.0                | 0.14                              | 1.1                             | 200                                    | F            | 8 x 10.2              | 500                  |
| 220                            | AVS227M35G24T-F             | 77.0                | 0.14                              | 1.1                             | 310                                    | G            | 10 x 10.2             | 500                  |
| 330                            | AVS337M35G24T-F             | 115.5               | 0.14                              | 0.7                             | 320                                    | G            | 10 x 10.2             | 500                  |
| <b>50 Vdc (63 Vdc Surge)</b>   |                             |                     |                                   |                                 |                                        |              |                       |                      |
| 0.1                            | AVS104M50A12T-F*            | 3.0                 | 0.14                              | 2322.0                          | 1                                      | A            | 3 x 5.4               | 2000                 |
| 0.1                            | AVS104M50B12T-F*            | 3.0                 | 0.12                              | 1990.0                          | 1                                      | B            | 4 x 5.4               | 2000                 |
| 0.22                           | AVS224M50A12T-F*            | 3.0                 | 0.14                              | 1055.0                          | 2                                      | A            | 3 x 5.4               | 2000                 |
| 0.22                           | AVS224M50B12T-F             | 3.0                 | 0.12                              | 905.0                           | 2                                      | B            | 4 x 5.4               | 2000                 |
| 0.33                           | AVS334M50A12T-F*            | 3.0                 | 0.14                              | 704.0                           | 3                                      | A            | 3 x 5.4               | 2000                 |
| 0.33                           | AVS334M50B12T-F             | 3.0                 | 0.12                              | 603.0                           | 3                                      | B            | 4 x 5.4               | 2000                 |
| 0.47                           | AVS474M50A12T-F*            | 3.0                 | 0.14                              | 494.0                           | 5                                      | A            | 3 x 5.4               | 2000                 |
| 0.47                           | AVS474M50B12T-F*            | 3.0                 | 0.12                              | 424.0                           | 5                                      | B            | 4 x 5.4               | 2000                 |
| 1                              | AVS105M50A12T-F*            | 3.0                 | 0.14                              | 232.0                           | 8                                      | A            | 3 x 5.4               | 2000                 |
| 1                              | AVS105M50B12T-F             | 3.0                 | 0.12                              | 199.0                           | 10                                     | B            | 4 x 5.4               | 2000                 |
| 2.2                            | AVS225M50A12T-F*            | 3.0                 | 0.14                              | 106.0                           | 10                                     | A            | 3 x 5.4               | 2000                 |
| 2.2                            | AVS225M50B12T-F             | 3.0                 | 0.12                              | 90.5                            | 16                                     | B            | 4 x 5.4               | 2000                 |
| 3.3                            | AVS335M50B12T-F             | 3.0                 | 0.12                              | 60.3                            | 16                                     | B            | 4 x 5.4               | 2000                 |
| 4.7                            | AVS475M50B12T-F             | 3.0                 | 0.14                              | 49.4                            | 18                                     | B            | 4 x 5.4               | 2000                 |
| 4.7                            | AVS475M50C12T-F             | 3.0                 | 0.12                              | 42.4                            | 23                                     | C            | 5 x 5.4               | 1000                 |
| 10                             | AVS106M50C12T-F             | 5.0                 | 0.14                              | 23.2                            | 27                                     | C            | 5 x 5.4               | 1000                 |
| 10                             | AVS106M50D16T-F             | 5.0                 | 0.12                              | 19.9                            | 35                                     | D            | 6.3 x 5.4             | 1000                 |
| 22                             | AVS226M50D16T-F             | 11.0                | 0.14                              | 10.6                            | 60                                     | D            | 6.3 x 5.4             | 1000                 |
| 22                             | AVS226M50E16T-F             | 11.0                | 0.12                              | 9.1                             | 120                                    | E            | 8 x 6.2               | 1000                 |
| 33                             | AVS336M50X16T-F             | 16.5                | 0.12                              | 6.0                             | 85                                     | X            | 6.3 x 7.9             | 900                  |
| 33                             | AVS336M50E16T-F             | 16.5                | 0.12                              | 6.0                             | 130                                    | E            | 8 x 6.2               | 1000                 |
| 33                             | AVS336M50F24T-F             | 16.5                | 0.12                              | 6.0                             | 140                                    | F            | 8 x 10.2              | 500                  |
| 47                             | AVS476M50X16T-F             | 23.5                | 0.12                              | 4.2                             | 90                                     | X            | 6.3 x 7.9             | 900                  |
| 47                             | AVS476M50F24T-F             | 23.5                | 0.12                              | 4.2                             | 150                                    | F            | 8 x 10.2              | 500                  |
| 47                             | AVS476M50G24T-F             | 23.5                | 0.12                              | 4.2                             | 160                                    | G            | 10 x 10.2             | 500                  |
| 100                            | AVS107M50F24T-F             | 50.0                | 0.12                              | 2.0                             | 200                                    | F            | 8 x 10.2              | 500                  |
| 100                            | AVS107M50G24T-F             | 50.0                | 0.12                              | 2.0                             | 250                                    | G            | 10 x 10.2             | 500                  |
| 220                            | AVS227M50G24T-F             | 110.0               | 0.12                              | 0.9                             | 300                                    | G            | 10 x 10.2             | 500                  |
| <b>63 Vdc (75 Vdc Surge)</b>   |                             |                     |                                   |                                 |                                        |              |                       |                      |
| 10                             | AVS106M63D16T-F             | 6.3                 | 0.18                              | 29.9                            | 35                                     | D*           | 6.3 x 5.7             | 1000                 |
| 22                             | AVS226M63E16T-F             | 13.9                | 0.18                              | 13.6                            | 40                                     | E            | 8 x 6.2               | 1000                 |
| 22                             | AVS226M63F24T-F             | 13.9                | 0.18                              | 13.6                            | 40                                     | F            | 8 x 10.2              | 500                  |
| 33                             | AVS336M63F24T-F             | 20.8                | 0.18                              | 9.1                             | 45                                     | F            | 8 x 10.2              | 500                  |
| 47                             | AVS476M63F24T-F             | 29.6                | 0.18                              | 6.4                             | 45                                     | F            | 8 x 10.2              | 500                  |
| 100                            | AVS107M63G24T-F             | 63.0                | 0.18                              | 3.0                             | 60                                     | G            | 10 x 10.2             | 500                  |
| <b>100 Vdc (125 Vdc Surge)</b> |                             |                     |                                   |                                 |                                        |              |                       |                      |
| 3.3                            | AVS335M2AE16T-F             | 3.3                 | 0.18                              | 90.4                            | 50                                     | E            | 8 x 6.2               | 1000                 |
| 4.7                            | AVS475M2AE16T-F*            | 4.7                 | 0.18                              | 63.5                            | 50                                     | E            | 8 x 6.2               | 1000                 |
| 4.7                            | AVS475M2AF24T-F*            | 4.7                 | 0.18                              | 63.5                            | 80                                     | F            | 8 x 10.2              | 500                  |
| 10                             | AVS106M2AE16T-F             | 10.0                | 0.18                              | 29.8                            | 50                                     | E            | 8 x 6.2               | 1000                 |
| 10                             | AVS106M2AF24T-F             | 10.0                | 0.18                              | 29.8                            | 85                                     | F            | 8 x 10.2              | 500                  |
| 22                             | AVS226M2AF24T-F             | 22.0                | 0.18                              | 13.6                            | 70                                     | F            | 8 x 10.2              | 500                  |
| 22                             | AVS226M2AG24T-F             | 22.0                | 0.18                              | 13.6                            | 90                                     | G            | 10 x 10.2             | 500                  |
| 33                             | AVS336M2AG24T-F             | 33.0                | 0.18                              | 8.0                             | 90                                     | G            | 10 x 10.2             | 500                  |

\*Denotes discontinued part

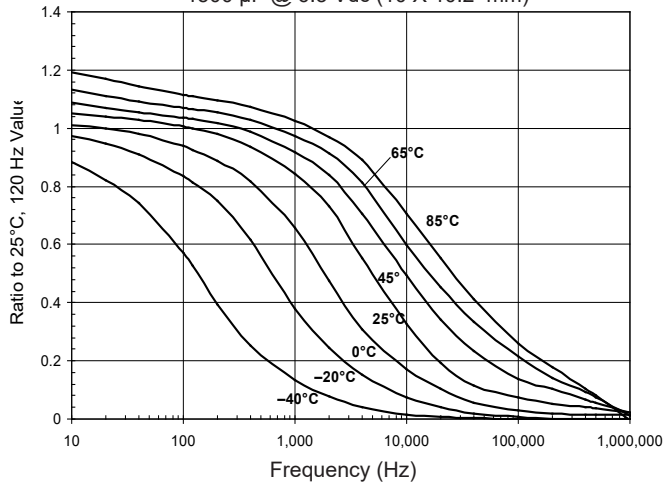
\*Overall case height (L dimension) is 5.7 mm ±0.3 mm

### Part Numbering System

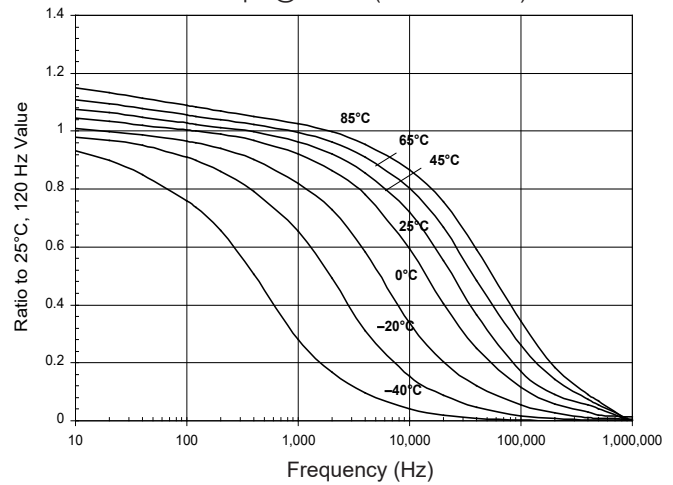
| AVS  | 106                                                                          | M                     | 16                                                                      | B                                                         | 12T                                                            | -F             |
|------|------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------|----------------|
|      |                                                                              |                       |                                                                         |                                                           |                                                                |                |
| Type | Capacitance                                                                  | Capacitance Tolerance | Voltage                                                                 | Case Code                                                 | Packaging Information                                          | RoHS Compliant |
|      | 104 = 0.1 µF<br>105 = 1.0 µF<br>106 = 10 µF<br>107 = 100 µF<br>108 = 1000 µF | M = ±20%              | 04 = 4 Vdc<br>06 = 6.3 Vdc<br>10 = 10 Vdc<br>16 = 16 Vdc<br>25 = 25 Vdc | 35 = 35 Vdc<br>50 = 50 Vdc<br>63 = 63 Vdc<br>2A = 100 Vdc | 12 = Carrier Tape<br>Width (mm)<br>T = Tape & Reel<br>B = Bulk |                |

### Typical Performance Curves

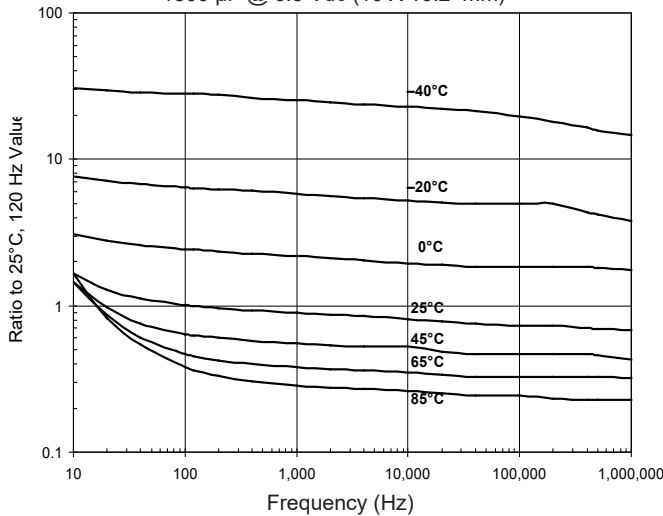
Capacitance vs. Temperature & Frequency  
1500  $\mu$ F @ 6.3 Vdc (10 X 10.2 mm)



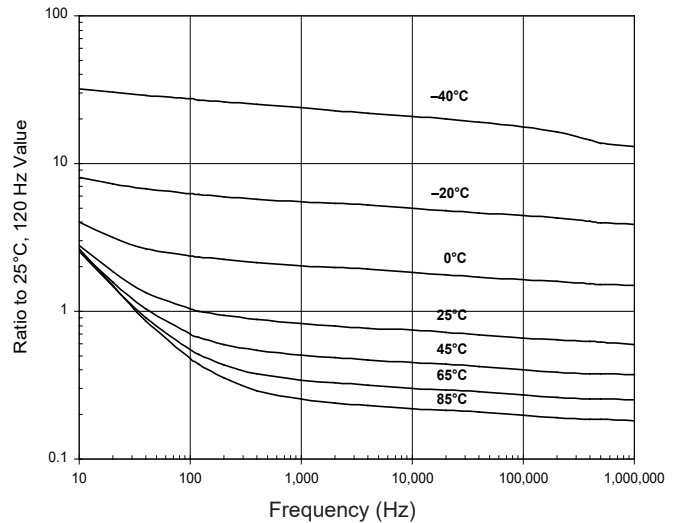
Capacitance vs. Temperature & Frequency  
100  $\mu$ F @ 16 Vdc (10 X 10.2 mm)



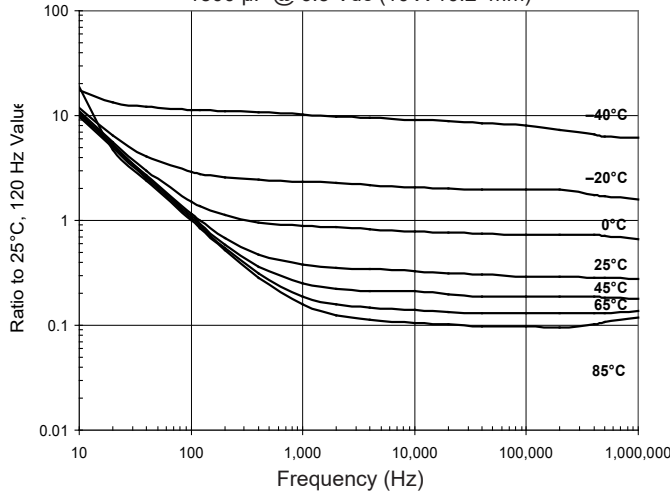
ESR vs. Temperature and Frequency  
1500  $\mu$ F @ 6.3 Vdc (10 X 10.2 mm)



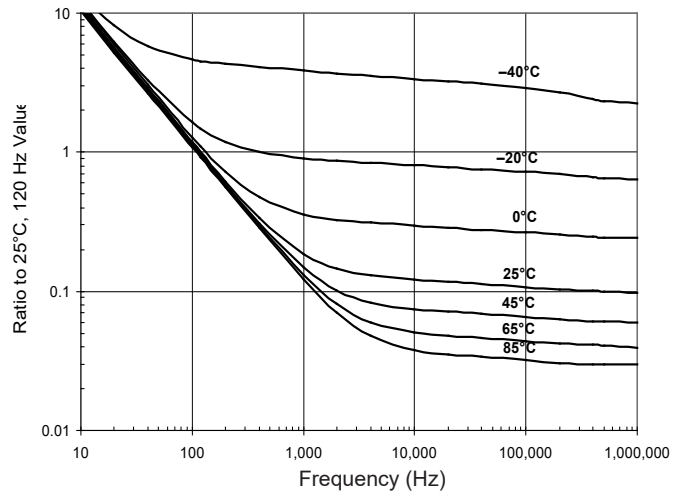
ESR vs. Temperature and Frequency  
100  $\mu$ F @ 16 Vdc (10 X 10.2 mm)



Impedance vs. Temperature and Frequency  
1500  $\mu$ F @ 6.3 Vdc (10 X 10.2 mm)



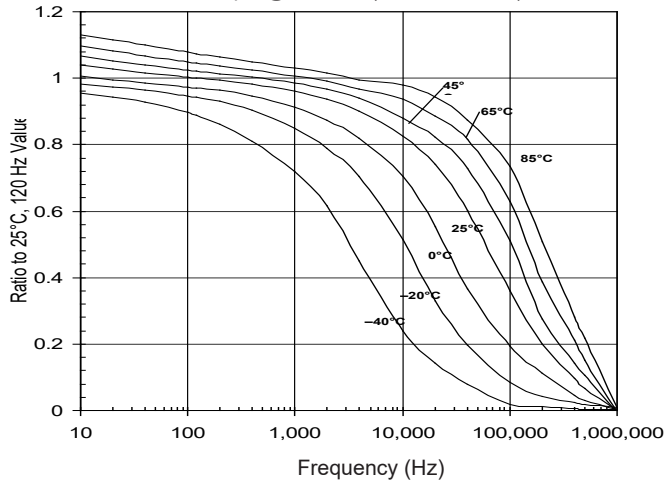
Impedance vs. Temperature and Frequency  
100  $\mu$ F @ 16 Vdc (10 X 10.2 mm)



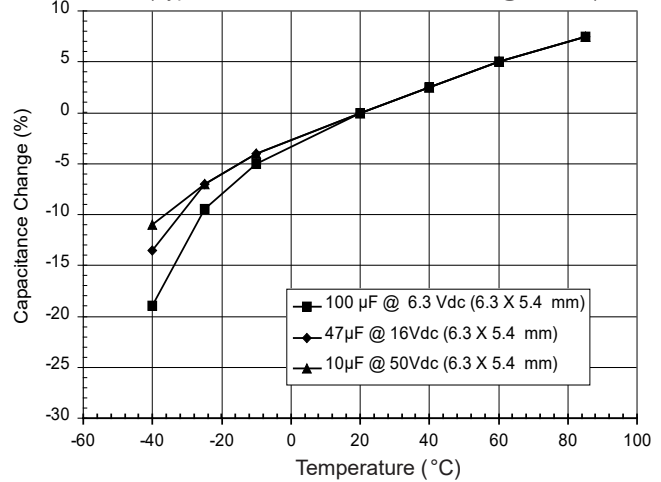
# Type AVS

## SMT Aluminum Electrolytic Capacitors - General Purpose, 85°C

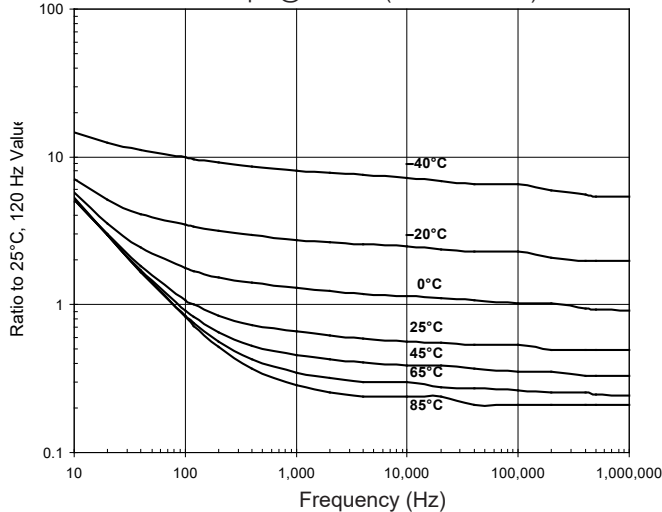
Capacitance vs. Temperature & Frequency  
220  $\mu\text{F}$  @ 50 Vdc (10 X 10.2 mm)



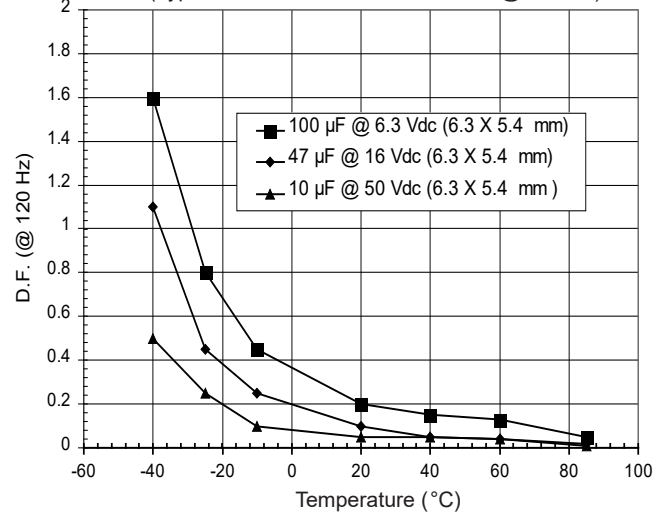
Capacitance Change with Temperature  
(Typical Performance for AVS Series @ 120 Hz)



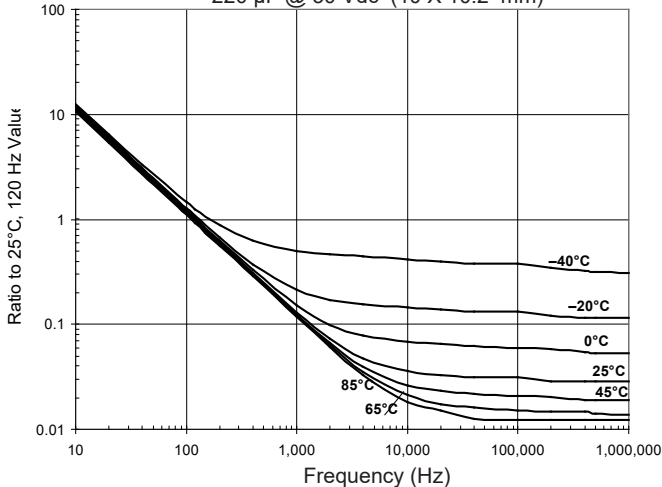
ESR vs. Temperature and Frequency  
220  $\mu\text{F}$  @ 50 Vdc (10 X 10.2 mm)



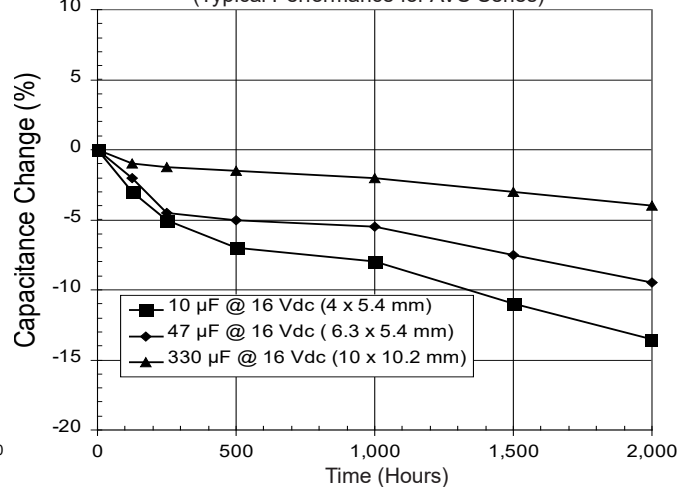
Dissipation Factor vs. Temperature  
(Typical Performance for AVS Series @ 120 Hz)



Impedance vs. Temperature and Frequency  
220  $\mu\text{F}$  @ 50 Vdc (10 X 10.2 mm)



Capacitance Change vs. Time  
(Typical Performance for AVS Series)



## Type AVS

# SMT Aluminum Electrolytic Capacitors - General Purpose, 85°C

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