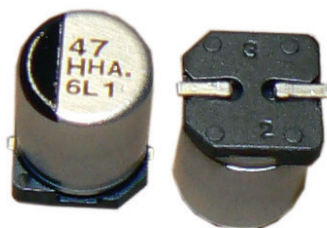


# Type AHA

## SMT Aluminum Electrolytic Capacitors -55 °C to +105 °C - Long Life

### Long Life Filtering, Bypassing, Power Supply Decoupling



Type AHA Capacitors deliver twice the life of many SMT aluminum capacitor types, and they handle high levels of ripple current. The AHA can handle the ripple current of Type AVS at 20 °C higher temperature. The vertical cylindrical cases facilitate automatic mounting and reflow soldering and Type AHA offers a significant cost savings over tantalum capacitors.

### Highlights

- +105 °C, Up to 2000 Hour Load Life
- Capacitance Range: 0.1  $\mu$ F to 1500  $\mu$ F
- Voltage Range: 6.3 Vdc to 100 Vdc

### Specifications

**Operating Temperature:** -55 °C to +105 °C

**Rated Voltage:** 6.3, 10, 16, 25, 35, 50, 63 & 100 Vdc

**Capacitance:** 0.1  $\mu$ F to 1500  $\mu$ F

**D.F. (@ 20 °C):** See Ratings Table

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

**Leakage Current:** 0.01 CV or 3  $\mu$ 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      | 1.3   | 1.7         |

**Load Life:** 1000 h @ +105 °C, 4.0 - 6.3 mm dia.  
2000 h @ +105 °C, 8.0 - 10.0 mm dia.

$\Delta$  Capacitance  $\pm$ 20%

DF: < 200% of limit

DCL:  $\leq$ 100% of limit

**Shelf Life:** 1000 h @ +105 °C

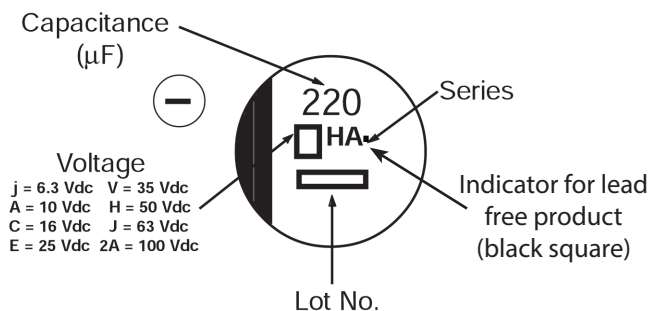
$\Delta$  Capacitance  $\pm$ 20%

DF: < 200% of limit

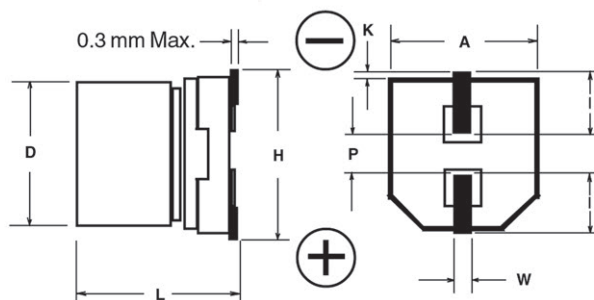
DCL:  $\leq$ 100% of limit

| Maximum Impedance Ratio at 120 Hz |     |    |    |    |    |    |    |     |
|-----------------------------------|-----|----|----|----|----|----|----|-----|
| W.V. Vdc                          | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 |
| -25 °C / +20 °C                   | 4   | 3  | 2  | 2  | 2  | 2  | 3  | 3   |
| -40 °C / +20 °C                   | 8   | 6  | 4  | 4  | 3  | 3  | 4  | 4   |

### AHA Series Marking



### Outline Drawing



# Type AHA

## SMT Aluminum Electrolytic Capacitors -55 °C to +105 °C - Long Life

### Case Dimen-

| Case |         |             |         |         |         |            |         |                   |
|------|---------|-------------|---------|---------|---------|------------|---------|-------------------|
| Code | D ± 0.5 | L           | A ± 0.2 | H (max) | I (ref) | W          | P (ref) | K                 |
| B    | 4       | 5.4 +.1,-.2 | 4.3     | 5.5     | 1.8     | 0.65 ± 0.1 | 1       | 0.35 + 0.15/-0.20 |
| C    | 5       | 5.4 +.1,-.2 | 5.3     | 6.5     | 2.2     | 0.65 ± 0.1 | 1.5     | 0.35 + 0.15/-0.20 |
| D    | 6.3     | 5.4 +.1,-.2 | 6.6     | 7.8     | 2.6     | 0.65 ± 0.1 | 1.8     | 0.35 + 0.15/-0.20 |
| X    | 6.3     | 7.7 ±.3     | 6.6     | 7.8     | 2.6     | 0.65 ± 0.1 | 1.8     | 0.35 + 0.15/-0.20 |
| E    | 8       | 6.2 ±.3     | 8.3     | 9.5     | 3.4     | 0.65 ± 0.1 | 2.2     | 0.35 + 0.15/-0.20 |
| F    | 8       | 10.2 ±.3    | 8.3     | 10      | 3.4     | 0.90 ± 0.2 | 3.1     | 0.70 ± 0.20       |
| G    | 10      | 10.2 ±.3    | 10.3    | 12      | 3.5     | 0.90 ± 0.2 | 4.6     | 0.70 ± 0.20       |

### Ratings

| Cap (µF)               | Catalog Part Number | Max DCL 2 min. (µA) | Max DF 120 Hz /20 °C | Max ESR 120 Hz /20 °C (Ω) | Max Ripple Current 120 Hz /105 °C (mA) | Case Code | Size D x L (mm) | Quantity per Reel |
|------------------------|---------------------|---------------------|----------------------|---------------------------|----------------------------------------|-----------|-----------------|-------------------|
| 6.3 Vdc ( 8 Vdc Surge) |                     |                     |                      |                           |                                        |           |                 |                   |
| 22.0                   | AHA226M06B12T-F     | 3.0                 | 0.30                 | 22.6                      | 29                                     | B         | 4 x 5.4         | 2000              |
| 33.0                   | AHA336M06B12T-F     | 3.0                 | 0.35                 | 17.6                      | 29                                     | B         | 4 x 5.4         | 2000              |
| 47.0                   | AHA476M06B12T-F     | 3.0                 | 0.35                 | 12.3                      | 36                                     | B         | 4 x 5.4         | 2000              |
| 47.0                   | AHA476M06C12T-F     | 3.0                 | 0.30                 | 10.6                      | 46                                     | C         | 5 x 5.4         | 1000              |
| 100.0                  | AHA107M06C12T-F     | 6.3                 | 0.35                 | 5.8                       | 47                                     | C         | 5 x 5.4         | 1000              |
| 100.0                  | AHA107M06D16T-F     | 6.3                 | 0.30                 | 5.0                       | 71                                     | D         | 6.3 x 5.4       | 1000              |
| 220.0                  | AHA227M06D16T-F     | 13.9                | 0.35                 | 2.6                       | 74                                     | D         | 6.3 x 5.4       | 1000              |
| 330.0                  | AHA337M06X16T-F     | 20.8                | 0.30                 | 1.5                       | 105                                    | X         | 6.3 x 7.7       | 900               |
| 330.0                  | AHA337M06F24T-F     | 20.8                | 0.35                 | 1.8                       | 230                                    | F         | 8 x 10.2        | 500               |
| 470.0                  | AHA477M06F24T-F     | 29.6                | 0.35                 | 1.2                       | 300                                    | F         | 8 x 10.2        | 500               |
| 1000.0                 | AHA108M06F24T-F     | 63.0                | 0.35                 | 0.6                       | 300                                    | F         | 8 x 10.2        | 500               |
| 1000.0                 | AHA108M06G24T-F     | 63.0                | 0.35                 | 0.6                       | 400                                    | G         | 10 x 10.2       | 500               |
| 1500.0                 | AHA158M06G24T-F     | 94.5                | 0.35                 | 0.4                       | 480                                    | G         | 10 x 10.2       | 500               |
| 10 Vdc ( 13 Vdc Surge) |                     |                     |                      |                           |                                        |           |                 |                   |
| 22.0                   | AHA226M10B12T-F     | 3.0                 | 0.30                 | 22.6                      | 28                                     | B         | 4 x 5.4         | 2000              |
| 33.0                   | AHA336M10B12T-F     | 3.3                 | 0.30                 | 15.1                      | 29                                     | B         | 4 x 5.4         | 2000              |
| 33.0                   | AHA336M10C12T-F     | 3.3                 | 0.22                 | 11.1                      | 43                                     | C         | 5 x 5.4         | 1000              |
| 47.0                   | AHA476M10C12T-F     | 4.7                 | 0.30                 | 10.6                      | 43                                     | C         | 5 x 5.4         | 1000              |
| 100.0                  | AHA107M10D16T-F     | 10.0                | 0.30                 | 5.0                       | 70                                     | D         | 6.3 x 5.4       | 1000              |
| 100.0                  | AHA107M10E16T-F     | 10.0                | 0.26                 | 4.3                       | 110                                    | E         | 8 x 6.2         | 1000              |
| 220.0                  | AHA227M10X16T-F     | 22.0                | 0.22                 | 1.7                       | 105                                    | X         | 6.3 x 7.7       | 900               |
| 220.0                  | AHA227M10F24T-F     | 22.0                | 0.26                 | 2.0                       | 160                                    | F         | 8 x 10.2        | 500               |
| 470.0                  | AHA477M10F24T-F     | 47.0                | 0.26                 | 0.9                       | 200                                    | F         | 8 x 10.2        | 500               |
| 470.0                  | AHA477M10G24T-F     | 47.0                | 0.26                 | 0.9                       | 270                                    | G         | 10 x 10.2       | 500               |
| 1000.0                 | AHA108M10G24T-F     | 100.0               | 0.26                 | 0.4                       | 580                                    | G         | 10 x 10.2       | 500               |
| 16 Vdc ( 20 Vdc Surge) |                     |                     |                      |                           |                                        |           |                 |                   |
| 10.0                   | AHA106M16B12T-F     | 3.0                 | 0.16                 | 26.5                      | 28                                     | B         | 4 x 5.4         | 2000              |
| 22.0                   | AHA226M16B12T-F     | 3.5                 | 0.26                 | 19.6                      | 28                                     | B         | 4 x 5.4         | 2000              |
| 22.0                   | AHA226M16C12T-F     | 3.5                 | 0.16                 | 12.1                      | 39                                     | C         | 5 x 5.4         | 1000              |
| 33.0                   | AHA336M16C12T-F     | 5.3                 | 0.26                 | 13.1                      | 35                                     | C         | 5 x 5.4         | 1000              |
| 47.0                   | AHA476M16C12T-F     | 7.5                 | 0.26                 | 9.2                       | 39                                     | C         | 5 x 5.4         | 1000              |
| 47.0                   | AHA476M16D16T-F     | 7.5                 | 0.16                 | 5.6                       | 70                                     | D         | 6.3 x 5.4       | 1000              |
| 100.0                  | AHA107M16D16T-F     | 16.0                | 0.26                 | 4.3                       | 70                                     | D         | 6.3 x 5.4       | 1000              |
| 220.0                  | AHA227M16X16T-F     | 35.2                | 0.16                 | 1.2                       | 105                                    | X         | 6.3 x 7.7       | 900               |
| 220.0                  | AHA227M16F24T-F     | 35.2                | 0.20                 | 1.5                       | 150                                    | F         | 8 x 10.2        | 500               |
| 220.0                  | AHA227M16G24T-F     | 35.2                | 0.20                 | 1.5                       | 210                                    | G         | 10 x 10.2       | 500               |
| 330.0                  | AHA337M16F24T-F     | 52.8                | 0.20                 | 1.0                       | 170                                    | F         | 8 x 10.2        | 500               |
| 330.0                  | AHA337M16G24T-F     | 52.8                | 0.20                 | 1.0                       | 230                                    | G         | 10 x 10.2       | 500               |
| 470.0                  | AHA477M16F24T-F     | 75.2                | 0.20                 | 0.7                       | 190                                    | F         | 8 x 10.2        | 500               |
| 470.0                  | AHA477M16G24T-F     | 75.2                | 0.20                 | 0.7                       | 340                                    | G         | 10 x 10.2       | 500               |
| 25 Vdc ( 31 Vdc Surge) |                     |                     |                      |                           |                                        |           |                 |                   |
| 4.7                    | AHA475M25B12T-F     | 3.0                 | 0.14                 | 49.4                      | 22                                     | B         | 4 x 5.4         | 2000              |
| 10.0                   | AHA106M25B12T-F     | 3.0                 | 0.20                 | 33.2                      | 22                                     | B         | 4 x 5.4         | 2000              |
| 10.0                   | AHA106M25C12T-F     | 3.0                 | 0.14                 | 23.2                      | 28                                     | C         | 5 x 5.4         | 1000              |
| 22.0                   | AHA226M25C12T-F     | 5.5                 | 0.20                 | 15.1                      | 35                                     | C         | 5 x 5.4         | 1000              |
| 22.0                   | AHA226M25D16T-F     | 5.5                 | 0.14                 | 10.6                      | 55                                     | D         | 6.3 x 5.4       | 1000              |
| 33.0                   | AHA336M25C12T-F     | 8.3                 | 0.20                 | 10.0                      | 42                                     | C         | 5 x 5.4         | 1000              |
| 33.0                   | AHA336M25D16T-F     | 8.3                 | 0.14                 | 7.0                       | 65                                     | D         | 6.3 x 5.4       | 1000              |
| 47.0                   | AHA476M25D16T-F     | 11.8                | 0.20                 | 7.1                       | 70                                     | D         | 6.3 x 5.4       | 1000              |
| 47.0                   | AHA476M25E16T-F     | 11.8                | 0.16                 | 5.6                       | 91                                     | E         | 8 x 6.2         | 1000              |
| 100.0                  | AHA107M25E16T-F     | 25.0                | 0.16                 | 2.7                       | 91                                     | E         | 8 x 6.2         | 1000              |
| 100.0                  | AHA107M25F24T-F     | 25.0                | 0.16                 | 2.7                       | 130                                    | F         | 8 x 10.2        | 500               |
| 220.0                  | AHA227M25F24T-F     | 55.0                | 0.16                 | 1.2                       | 160                                    | F         | 8 x 10.2        | 500               |
| 220.0                  | AHA227M25G24T-F     | 55.0                | 0.16                 | 1.2                       | 190                                    | G         | 10 x 10.2       | 500               |
| 330.0                  | AHA337M25F24T-F     | 82.5                | 0.16                 | 0.8                       | 180                                    | F         | 8 x 10.2        | 500               |
| 330.0                  | AHA337M25G24T-F     | 82.5                | 0.16                 | 0.8                       | 340                                    | G         | 10 x 10.2       | 500               |
| 470.0                  | AHA477M25G24T-F     | 117.5               | 0.16                 | 0.6                       | 360                                    | G         | 10 x 10.2       | 500               |

# Type AHA

## SMT Aluminum Electrolytic Capacitors -55 °C to +105 °C - Long Life

| Cap<br>(µF)             | Catalog<br>Part Number | Max<br>DCL<br>2 min.<br>(µA) | Max<br>DF<br>120 Hz /20 °C | Max<br>ESR<br>120 Hz /20 °C<br>( Ω ) | Max<br>Ripple Current<br>120 Hz /105 °C<br>(mA) | Case<br>Code | Size<br>D x L<br>(mm) | Quantity<br>per Reel |
|-------------------------|------------------------|------------------------------|----------------------------|--------------------------------------|-------------------------------------------------|--------------|-----------------------|----------------------|
| 35 Vdc (44 Vdc Surge)   |                        |                              |                            |                                      |                                                 |              |                       |                      |
| 4.7                     | AHA475M35B12T-F        | 3.0                          | 0.12                       | 42.3                                 | 22                                              | B            | 4 x 5.4               | 2000                 |
| 10.0                    | AHA106M35B12T-F        | 3.6                          | 0.16                       | 26.5                                 | 22                                              | B            | 4 x 5.4               | 2000                 |
| 10.0                    | AHA106M35C12T-F        | 3.6                          | 0.12                       | 19.9                                 | 30                                              | C            | 5 x 5.4               | 1000                 |
| 22.0                    | AHA226M35C12T-F        | 7.7                          | 0.16                       | 12.1                                 | 35                                              | C            | 5 x 5.4               | 1000                 |
| 22.0                    | AHA226M35D16T-F        | 7.7                          | 0.12                       | 9.0                                  | 60                                              | D            | 6.3 x 5.4             | 1000                 |
| 33.0                    | AHA336M35D16T-F        | 11.6                         | 0.16                       | 8.0                                  | 42                                              | D            | 6.3 x 5.4             | 1000                 |
| 33.0                    | AHA336M35E16T-F        | 11.6                         | 0.14                       | 7.0                                  | 84                                              | E            | 8 x 6.2               | 1000                 |
| 47.0                    | AHA476M35E16T-F        | 16.5                         | 0.14                       | 4.9                                  | 84                                              | E            | 8 x 6.2               | 1000                 |
| 47.0                    | AHA476M35F24T-F        | 16.5                         | 0.14                       | 4.9                                  | 98                                              | F            | 8 x 10.2              | 500                  |
| 100.0                   | AHA107M35X16T-F        | 35.0                         | 0.12                       | 2.0                                  | 84                                              | X            | 6.3 x 7.7             | 900                  |
| 100.0                   | AHA107M35F24T-F        | 35.0                         | 0.14                       | 2.3                                  | 120                                             | F            | 8 x 10.2              | 500                  |
| 100.0                   | AHA107M35G24T-F        | 35.0                         | 0.14                       | 2.3                                  | 160                                             | G            | 10 x 10.2             | 500                  |
| 220.0                   | AHA227M35F24T-F        | 77.0                         | 0.14                       | 1.1                                  | 170                                             | F            | 8 x 10.2              | 500                  |
| 220.0                   | AHA227M35G24T-F        | 77.0                         | 0.14                       | 1.1                                  | 210                                             | G            | 10 x 10.2             | 500                  |
| 330.0                   | AHA337M35G24T-F        | 115.5                        | 0.14                       | 0.7                                  | 250                                             | G            | 10 x 10.2             | 500                  |
| 50 Vdc (63 Vdc Surge)   |                        |                              |                            |                                      |                                                 |              |                       |                      |
| 0.10                    | AHA104M50B12T-F*       | 3.0                          | 0.12                       | 1990.0                               | 1                                               | B            | 4 x 5.4               | 2000                 |
| 0.22                    | AHA224M50B12T-F*       | 3.0                          | 0.12                       | 905.0                                | 2                                               | B            | 4 x 5.4               | 2000                 |
| 0.33                    | AHA334M50B12T-F*       | 3.0                          | 0.12                       | 603.0                                | 3                                               | B            | 4 x 5.4               | 2000                 |
| 0.47                    | AHA474M50B12T-F*       | 3.0                          | 0.12                       | 424.0                                | 5                                               | B            | 4 x 5.4               | 2000                 |
| 1.0                     | AHA105M50B12T-F        | 3.0                          | 0.12                       | 199.0                                | 10                                              | B            | 4 x 5.4               | 2000                 |
| 2.2                     | AHA225M50B12T-F        | 3.0                          | 0.12                       | 90.5                                 | 16                                              | B            | 4 x 5.4               | 2000                 |
| 3.3                     | AHA335M50B12T-F        | 3.0                          | 0.12                       | 60.3                                 | 16                                              | B            | 4 x 5.4               | 2000                 |
| 4.7                     | AHA475M50C12T-F        | 3.0                          | 0.12                       | 42.4                                 | 23                                              | C            | 5 x 5.4               | 1000                 |
| 10.0                    | AHA106M50D16T-F        | 5.0                          | 0.12                       | 19.9                                 | 35                                              | D            | 6.3 x 5.4             | 1000                 |
| 22.0                    | AHA226M50E16T-F        | 11.0                         | 0.12                       | 9.0                                  | 70                                              | E            | 8 x 6.2               | 1000                 |
| 33.0                    | AHA336M50X16T-F        | 16.5                         | 0.12                       | 6.0                                  | 60                                              | X            | 6.3 x 7.7             | 900                  |
| 33.0                    | AHA336M50E16T-F        | 16.5                         | 0.12                       | 6.0                                  | 70                                              | E            | 8 x 6.2               | 1000                 |
| 33.0                    | AHA336M50F24T-F        | 16.5                         | 0.12                       | 6.0                                  | 91                                              | F            | 8 x 10.2              | 500                  |
| 47.0                    | AHA476M50X16T-F        | 23.5                         | 0.12                       | 4.2                                  | 63                                              | X            | 6.3 x 7.7             | 900                  |
| 47.0                    | AHA476M50F24T-F        | 23.5                         | 0.12                       | 4.2                                  | 95                                              | F            | 8 x 10.2              | 500                  |
| 47.0                    | AHA476M50G24T-F        | 23.5                         | 0.12                       | 4.2                                  | 100                                             | G            | 10 x 10.2             | 500                  |
| 100.0                   | AHA107M50F24T-F        | 50.0                         | 0.12                       | 2.0                                  | 110                                             | F            | 8 x 10.2              | 500                  |
| 100.0                   | AHA107M50G24T-F        | 50.0                         | 0.12                       | 2.0                                  | 120                                             | G            | 10 x 10.2             | 500                  |
| 220.0                   | AHA227M50G24T-F        | 110.0                        | 0.12                       | 0.9                                  | 150                                             | G            | 10 x 10.2             | 500                  |
| 63 Vdc (75 Vdc Surge)   |                        |                              |                            |                                      |                                                 |              |                       |                      |
| 10.0                    | AHA106M63E16T-F        | 6.3                          | 0.18                       | 29.9                                 | 25                                              | E            | 8 x 6.2               | 1000                 |
| 22.0                    | AHA226M63E16T-F        | 13.9                         | 0.18                       | 13.6                                 | 30                                              | E            | 8 x 6.2               | 1000                 |
| 22.0                    | AHA226M63F24T-F        | 13.9                         | 0.18                       | 13.6                                 | 30                                              | F            | 8 x 10.2              | 500                  |
| 33.0                    | AHA336M63G24T-F        | 20.8                         | 0.18                       | 9.0                                  | 45                                              | G            | 10 x 10.2             | 500                  |
| 47.0                    | AHA476M63F24T-F        | 29.6                         | 0.18                       | 6.3                                  | 50                                              | F            | 8 x 10.2              | 500                  |
| 47.0                    | AHA476M63G24T-F        | 29.6                         | 0.18                       | 6.3                                  | 50                                              | G            | 10 x 10.2             | 500                  |
| 100 Vdc (125 Vdc Surge) |                        |                              |                            |                                      |                                                 |              |                       |                      |
| 3.3                     | AHA335M2AE16T-F        | 3.3                          | 0.18                       | 90.5                                 | 30                                              | E            | 8 x 6.2               | 1000                 |
| 4.7                     | AHA475M2AE16T-F*       | 4.7                          | 0.18                       | 63.5                                 | 30                                              | E            | 8 x 6.2               | 1000                 |
| 4.7                     | AHA475M2AF24T-F*       | 4.7                          | 0.18                       | 63.5                                 | 50                                              | F            | 8 x 10.2              | 500                  |
| 10.0                    | AHA106M2AF24T-F        | 10.0                         | 0.18                       | 29.8                                 | 55                                              | F            | 8 x 10.2              | 500                  |
| 22.0                    | AHA226M2AF24T-F        | 22.0                         | 0.18                       | 13.6                                 | 55                                              | F            | 8 x 10.2              | 500                  |
| 22.0                    | AHA226M2AG24T-F        | 22.0                         | 0.18                       | 13.6                                 | 60                                              | G            | 10 x 10.2             | 500                  |
| 33.0                    | AHA336M2AG24T-F        | 33.0                         | 0.18                       | 9.0                                  | 65                                              | G            | 10 x 10.2             | 500                  |

\* denotes a discontinued part

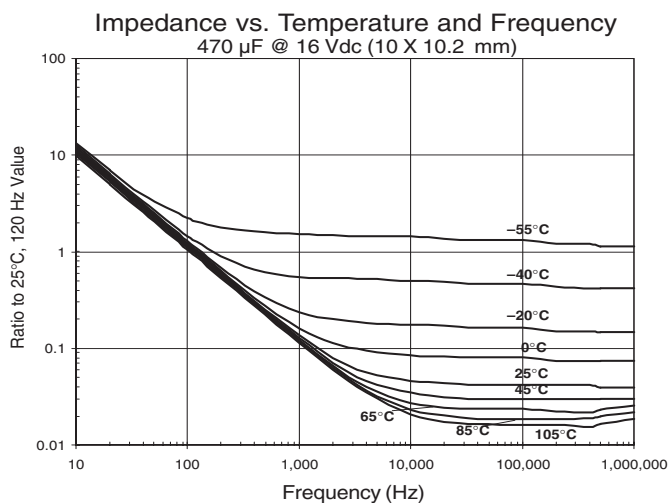
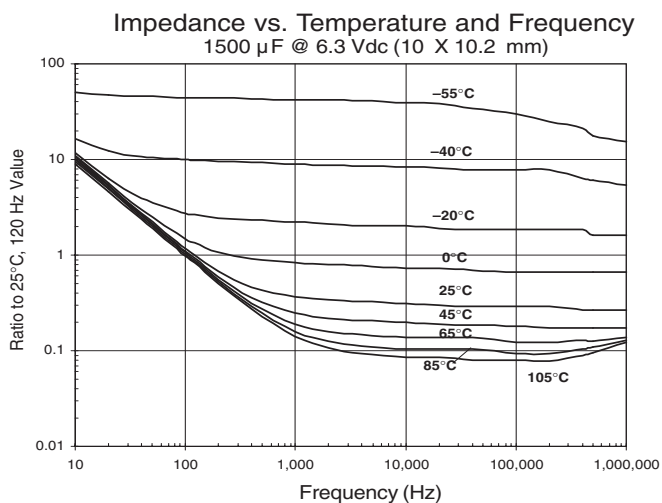
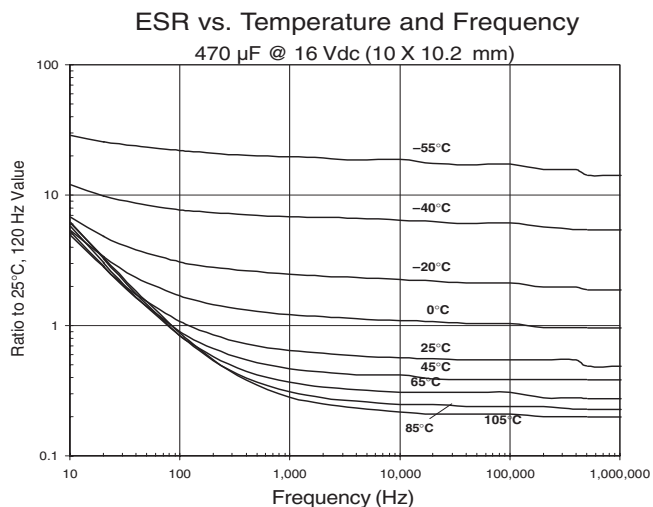
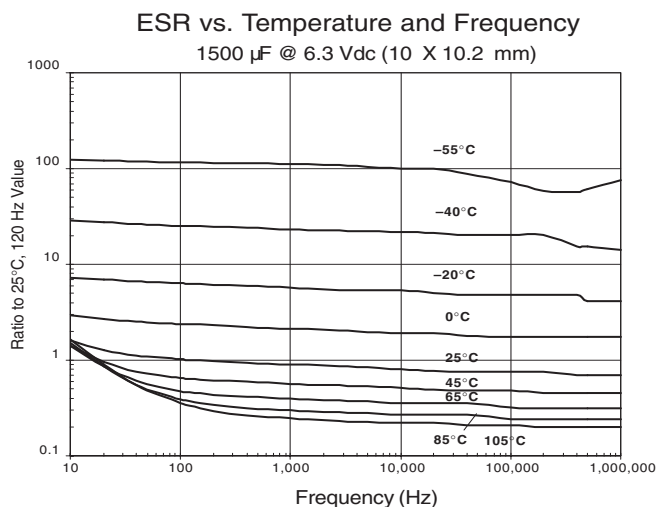
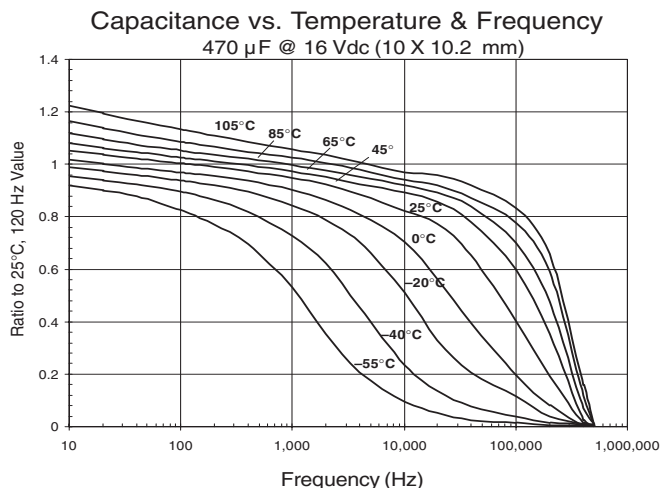
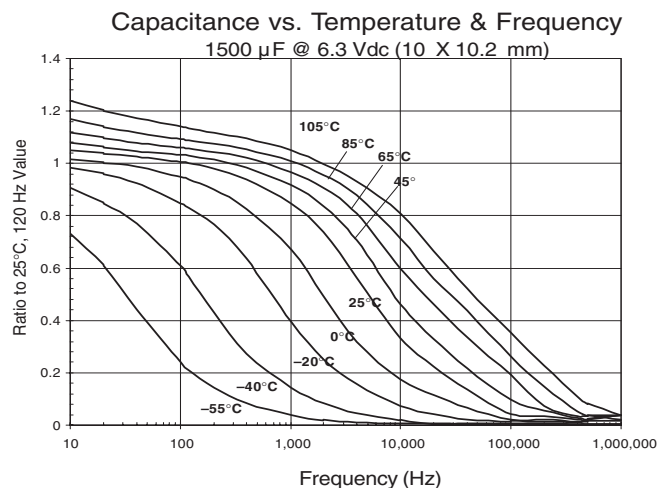
### Part Numbering System

| AHA    | 106             | M           | 16                       | B     | 12T               | - F       |
|--------|-----------------|-------------|--------------------------|-------|-------------------|-----------|
| I      | I               | I           | I                        | I     | I                 | I         |
| Series | Capacitance     | Capacitance | Voltage                  | Case  | Packaging         | RoHS      |
|        | 104 = 0.1 µF    | Tolerance   | 06 = 6.3 Vdc 35 = 35 Vdc | Code  | Information       | Compliant |
|        | 105 = 1.0 µF    | M = ±20%    | 10 = 10 Vdc 50 = 50 Vdc  | B = B | 12 = Carrier Tape |           |
|        | 106 = 10.0 µF   |             | 16 = 16 Vdc 63 = 63 Vdc  |       | Width (mm)        |           |
|        | 107 = 100.0 µF  |             | 25 = 25 Vdc 2A = 100 Vdc |       | T = Tape & Reel   |           |
|        | 108 = 1000.0 µF |             |                          |       | B = Bulk          |           |

# Type AHA

## SMT Aluminum Electrolytic Capacitors -55 °C to +105 °C - Long Life

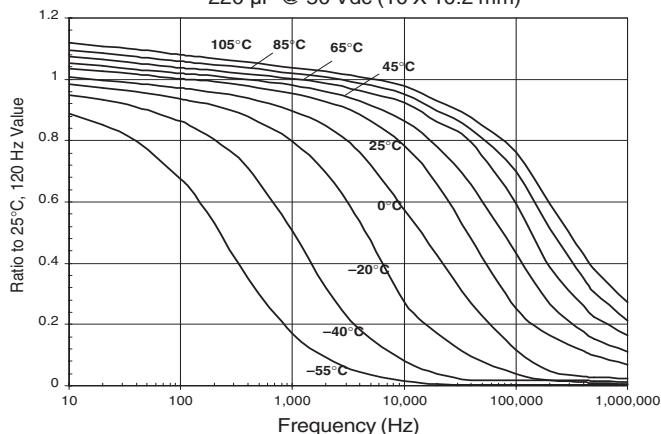
### Typical Performance Curves



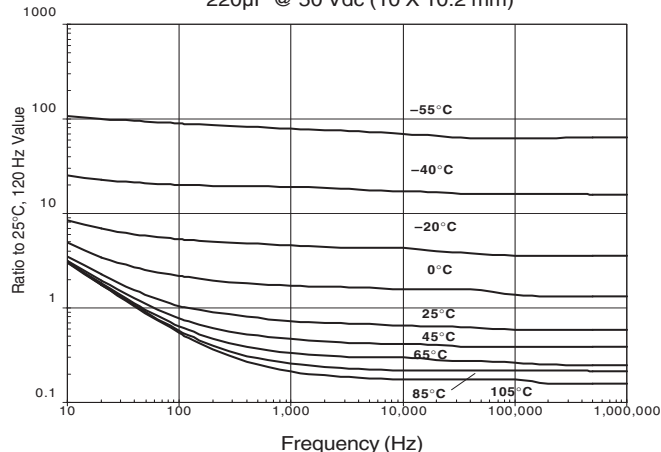
# Type AHA

## SMT Aluminum Electrolytic Capacitors -55 °C to +105 °C - Long Life

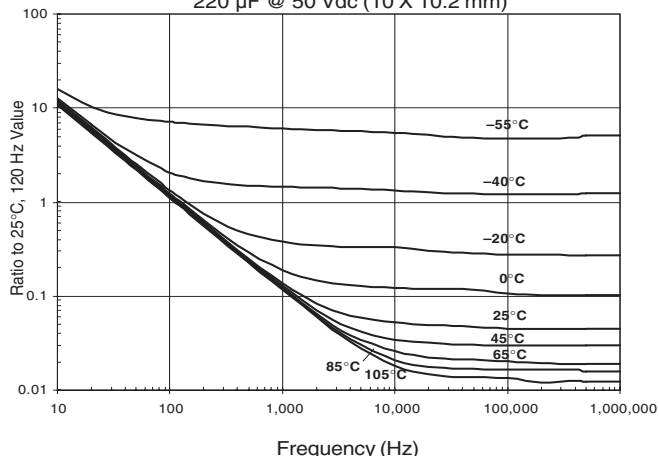
Capacitance vs. Temperature & Frequency  
220  $\mu$ F @ 50 Vdc (10 X 10.2 mm)



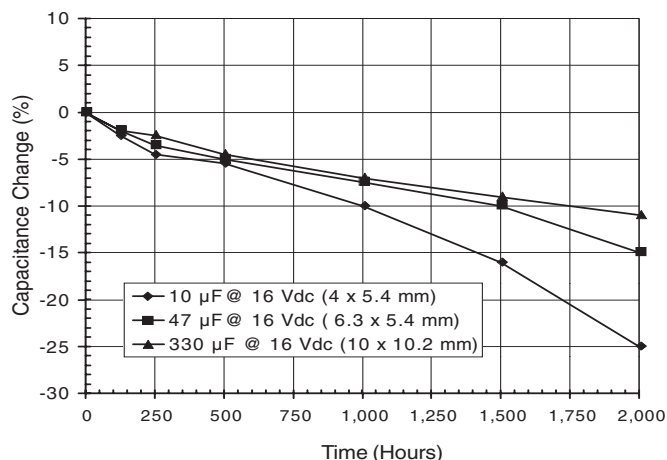
ESR vs. Temperature and Frequency  
220 $\mu$ F @ 50 Vdc (10 X 10.2 mm)



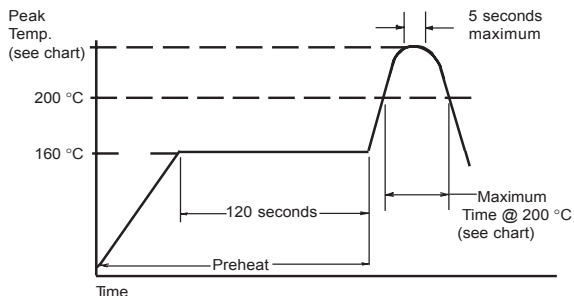
Impedance vs. Temperature and Frequency  
220  $\mu$ F @ 50 Vdc (10 X 10.2 mm)



Capacitance Change vs Time



## Reflow Soldering Temperature Profile for Part Numbers Ending in -F



| Case Code  | Peak Temperature (°C) | Max. Time at or above 200°C (sec.) | Number of Reflow Processes |
|------------|-----------------------|------------------------------------|----------------------------|
| B, C, D, X | 250                   | 60                                 | 1                          |
| E, F, G    | 235                   | 60                                 | 1                          |

See SMT application guide for land pattern, tape and reel specifications, and cleaning information.

## Type AHA

### SMT Aluminum Electrolytic Capacitors -55 °C to +105 °C - Long Life

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