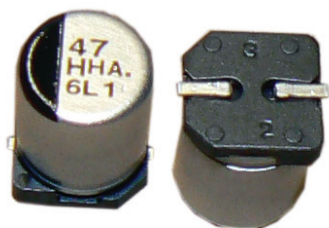


# Type AHA

## 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  $\mu\text{F}$  to 1500  $\mu\text{F}$
- Voltage Range: 6.3 Vdc to 100 Vdc

### Specifications

|                                    |                                                                             |
|------------------------------------|-----------------------------------------------------------------------------|
| <b>Operating Temperature:</b>      | -55 °C to +105 °C                                                           |
| <b>Rated Voltage:</b>              | 6.3, 10, 16, 25, 35, 50, 63 & 100 Vdc                                       |
| <b>Capacitance:</b>                | 0.1 $\mu\text{F}$ to 1500 $\mu\text{F}$                                     |
| <b>D.F. (@ 20 °C):</b>             | See Ratings Table                                                           |
| <b>Capacitance Tolerance:</b>      | 20% @ 120 Hz and +20 °C                                                     |
| <b>Leakage Current:</b>            | 0.01 CV or 3 $\mu\text{A}$ @ +20°C after two minutes (whichever is greater) |
| <b>Ripple Current Multipliers:</b> | <b>Frequency</b>                                                            |

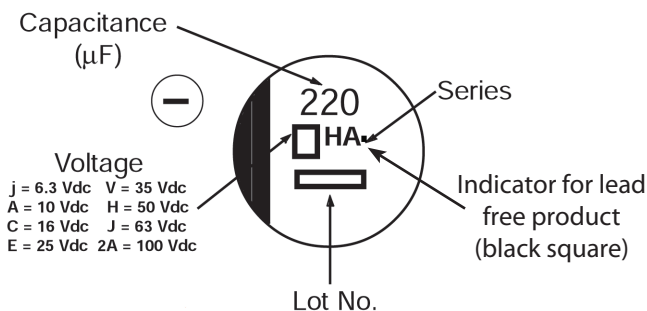
| 50/60 Hz | 120 Hz | 1 kHz | 10 kHz & up |
|----------|--------|-------|-------------|
| 0.7      | 1      | 1.3   | 1.7         |

**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

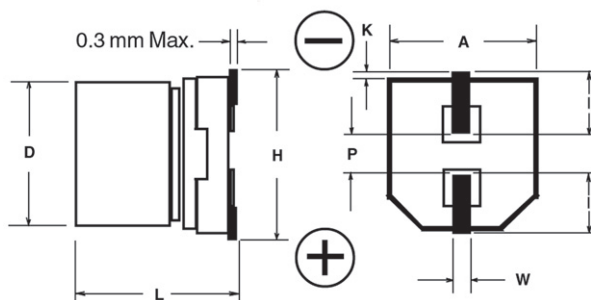
**Shelf Life:** 1000 h @ +105 °C  
 $\Delta$  Capacitance  $\pm 20\%$   
DF: < 200% of limit  
DCL:  $\leq 100\%$  of limit

| 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 Dimensions

| 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 |
|--------------------------------|------------------------|------------------------------|----------------------------|------------------------------------|-------------------------------------------------|--------------|-----------------------|----------------------|
| <b>35 Vdc (44 Vdc Surge)</b>   |                        |                              |                            |                                    |                                                 |              |                       |                      |
| 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                  |
| <b>50 Vdc (63 Vdc Surge)</b>   |                        |                              |                            |                                    |                                                 |              |                       |                      |
| 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                  |
| <b>63 Vdc (75 Vdc Surge)</b>   |                        |                              |                            |                                    |                                                 |              |                       |                      |
| 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                  |
| <b>100 Vdc (125 Vdc Surge)</b> |                        |                              |                            |                                    |                                                 |              |                       |                      |
| 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                  |

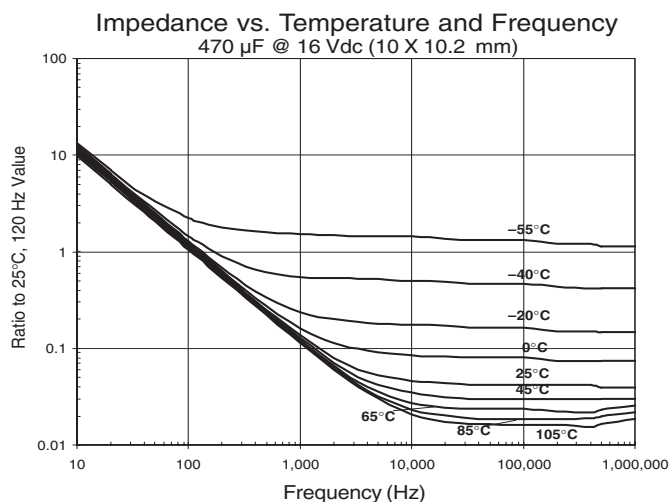
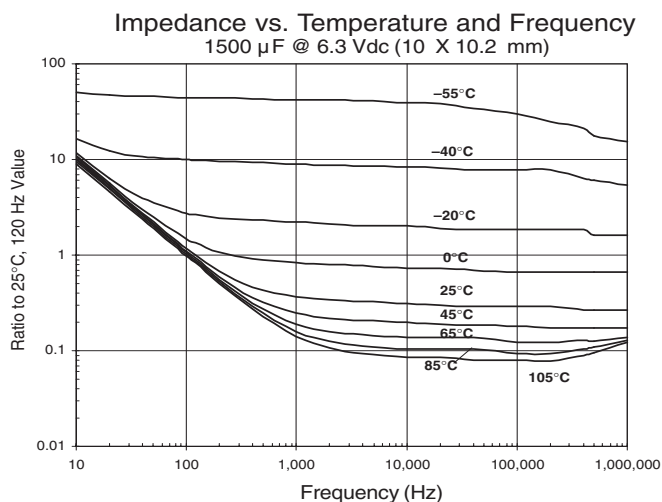
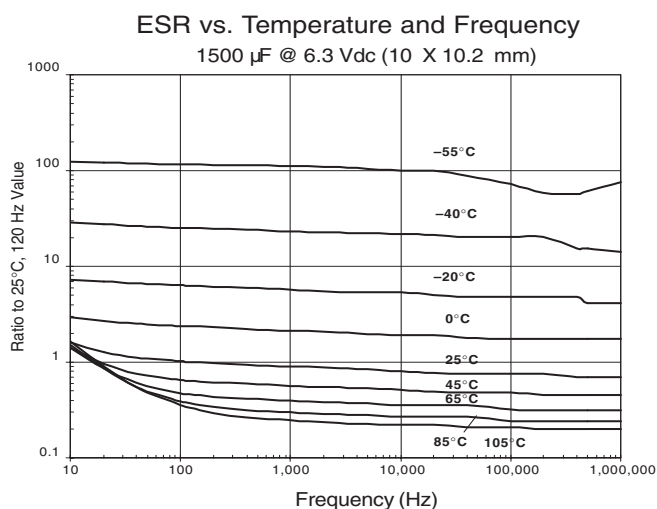
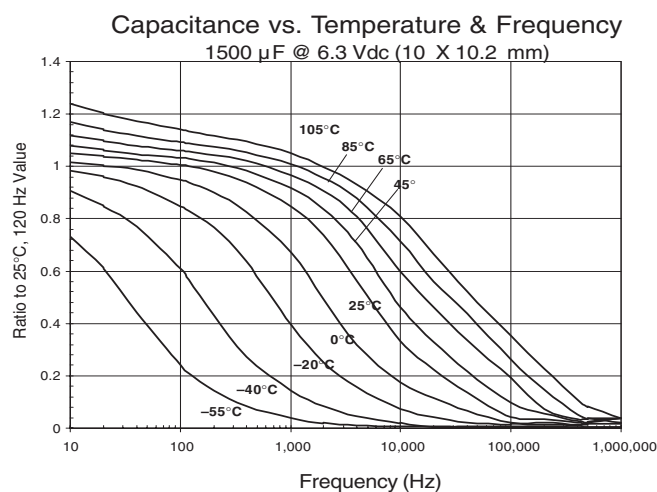
### Part Numbering System

| 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    | <b>Tolerance</b> | 06 = 6.3 Vdc 35 = 35 Vdc | <b>Code</b> | <b>Information</b> | <b>Compliant</b> |
|        | 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

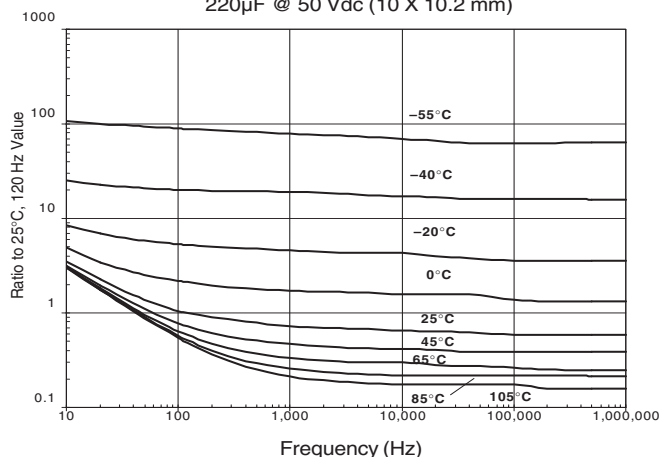
Capacitance vs. Temperature & Frequency

220  $\mu$ F @ 50 Vdc (10 X 10.2 mm)



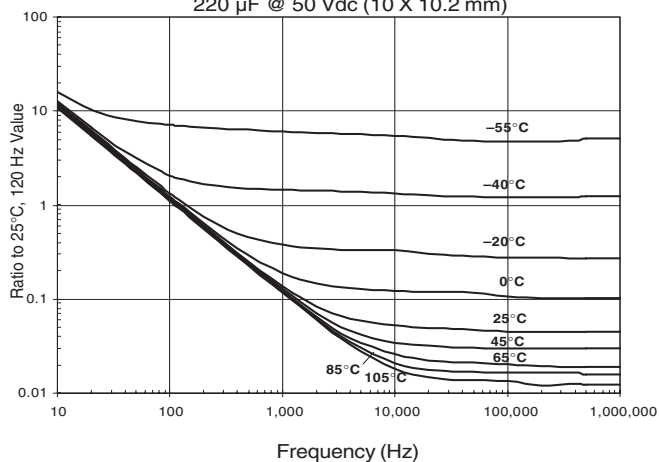
ESR vs. Temperature and Frequency

220 $\mu$ F @ 50 Vdc (10 X 10.2 mm)

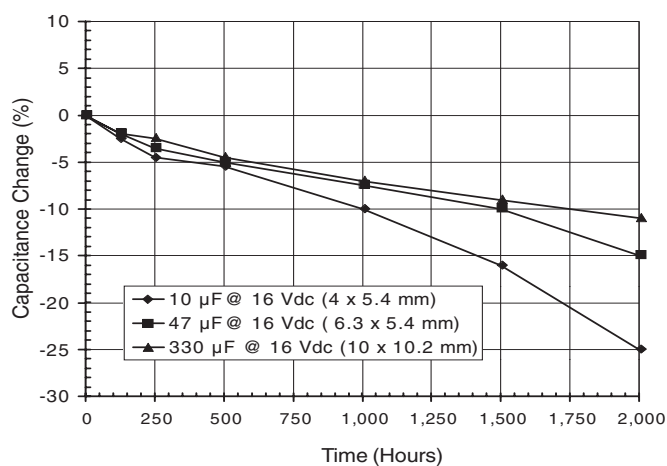


Impedance vs. Temperature and Frequency

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.