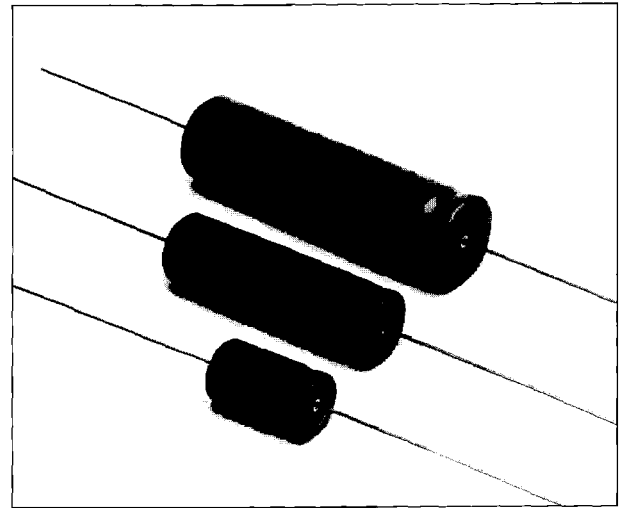


# + 105°C Tubular Axial Lead Aluminum Capacitors

## Features —

- Wide Temperature Range
- Military Version — MIL-C-39018/03
- Long Life
- Low ESR



L65-08

## General Specifications —

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

**Voltage Range:** 6.3 - 300 VDC.

**Capacitance Range:** 12μF - 33,000μF.

**Capacitance Tolerance:** -10%, +50%.

**Case Size Range:** 0.625" x 1.125"  
- 1.0" x 3.625".

**Termination:** Axial lead.

**Life Validation Test:** 2000 hrs @ +105°C:  
 Δ CAP ≤ 15% from initial measurement.  
 Δ ESR ≤ 1.25x initial specified limit.  
 Δ DCL ≤ initial specified limit.

**Shelf Test:** 500 hrs @ + 105°C:  
 Δ CAP ≤ 10% from initial measurement.  
 Δ ESR ≤ 1.15x initial specified limit.  
 Δ DCL ≤ 2x initial specified limit.

**DC Leakage Current:** 5 min. charge time.

$$I = K\sqrt{CV}$$

K = .5 @ +25°C; = 3.0 @ +105°C  
 I in μA, C in μF, V in Volts

## Ripple Current Multipliers:

### TEMPERATURE

| Ambient Temp. | Multipliers |
|---------------|-------------|
| + 105°C       | 0.4         |
| + 85°C        | 1.0         |
| + 75°C        | 1.41        |
| + 65°C        | 1.7         |
| + 45°C        | 2.0         |
| + 25°C        | 2.65        |

### FREQUENCY Hz

| Rated WVDC | 50-60 | 300-400 | 1000 and up |
|------------|-------|---------|-------------|
| 0-60       | 0.85  | 1.10    | 1.15        |
| 61-250     | 0.83  | 1.15    | 1.20        |

## Low Temperature Performance:

**Capacitance Ratio C<sup>-55°C</sup>/C<sup>+25°C</sup> min. @ 120Hz**

| Rated Voltage (VDC) | Capacitance Remaining |
|---------------------|-----------------------|
| 0 to 25             | 75                    |
| 26 to 100           | 80                    |
| 101 to 250          | 85                    |

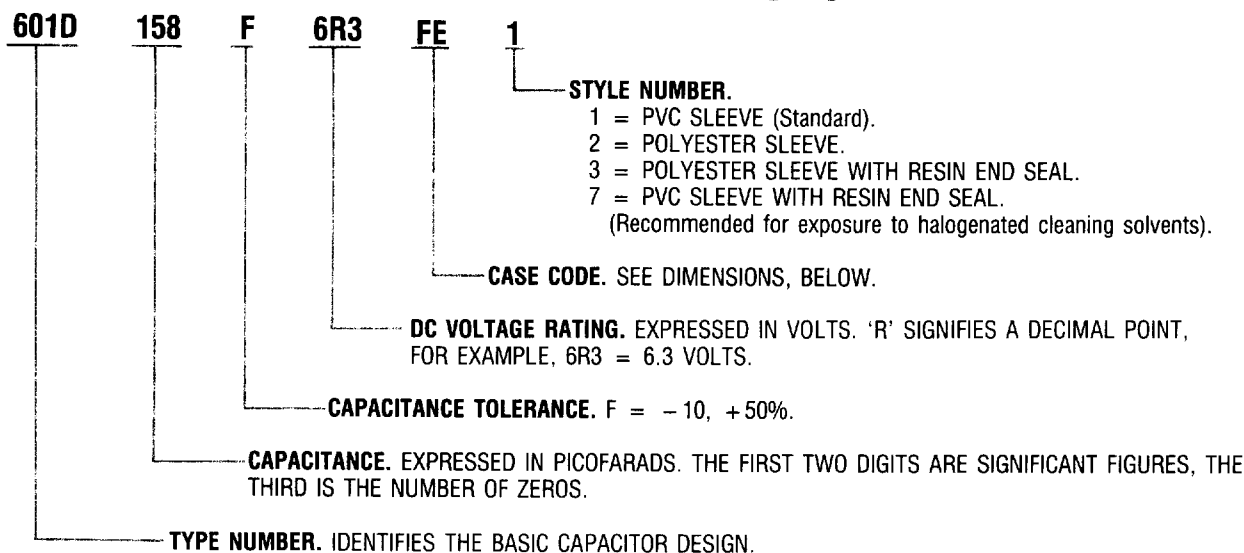
**ESR Ratio ESR<sup>-55°C</sup>/ESR<sup>+25°C</sup> max. @ 120Hz**

| Rated Voltage (VDC) | Multiplier |
|---------------------|------------|
| 0 to 9              | 10         |
| 10 to 40            | 12         |
| 41 to 100           | 18         |
| 150 to 300          | 100        |

## Performance Characteristics —

SEE PAGE 2.

### Catalog Numbering System



#### DIMENSIONS IN INCHES

| Case Code | STYLE 1, 2<br>Insulating Sleeve |              | STYLE 3, 7<br>Insulating Sleeve,<br>Coated End-Seal |              | Typical<br>Weight<br>(Oz). |
|-----------|---------------------------------|--------------|---|--------------|----------------------------|
|           | D<br>± 0.020                    | L<br>± 0.062 | D<br>± 0.020  | L<br>± 0.062 |                            |
| FE        | 0.635                           | 1.141        | 0.635   | 1.187        | 0.32                       |
| FJ        | 0.635                           | 1.641        | 0.635   | 1.687        | 0.42                       |
| FL        | 0.635                           | 2.141        | 0.635   | 2.187        | 0.56                       |
| FP        | 0.635                           | 2.641        | 0.635   | 2.687        | 0.67                       |
| FS        | 0.635                           | 3.141        | 0.635   | 3.187        | 0.81                       |
| FT        | 0.635                           | 3.641        | 0.635   | 3.687        | 0.92                       |
| GE        | 0.760                           | 1.141        | 0.760   | 1.187        | 0.46                       |
| GJ        | 0.760                           | 1.641        | 0.760   | 1.687        | 0.63                       |
| GL        | 0.760                           | 2.141        | 0.760   | 2.187        | 0.81                       |
| GP        | 0.760                           | 2.641        | 0.760   | 2.687        | 0.98                       |
| GS        | 0.760                           | 3.141        | 0.760   | 3.187        | 1.16                       |
| GT        | 0.760                           | 3.641        | 0.760   | 3.687        | 1.33                       |
| HE        | 0.885                           | 1.141        | 0.885   | 1.187        | 0.63                       |
| HJ        | 0.885                           | 1.641        | 0.885   | 1.687        | 0.88                       |
| HL        | 0.885                           | 2.141        | 0.885   | 2.187        | 1.09                       |
| HP        | 0.885                           | 2.641        | 0.885   | 2.687        | 1.34                       |
| HS        | 0.885                           | 3.141        | 0.885   | 3.187        | 1.58                       |
| HT        | 0.885                           | 3.641        | 0.885   | 3.687        | 1.83                       |
| JE        | 1.010                           | 1.141        | 1.010   | 1.187        | 0.81                       |
| JJ        | 1.010                           | 1.641        | 1.010   | 1.687        | 1.12                       |
| JL        | 1.010                           | 2.141        | 1.010   | 2.187        | 1.44                       |
| JP        | 1.010                           | 2.641        | 1.010   | 2.687        | 1.76                       |
| JS        | 1.010                           | 3.141        | 1.010   | 3.187        | 2.08                       |
| JT        | 1.010                           | 3.641        | 1.010   | 3.687        | 2.39                       |

#### DIMENSIONS IN MILLIMETERS

| Case Code | STYLE 1, 2<br>Insulating Sleeve |             | STYLE 3, 7<br>Insulating Sleeve,<br>Coated End-Seal |             | Typical<br>Weight<br>(Grams) |
|-----------|---------------------------------|-------------|---|-------------|------------------------------|
|           | D<br>± 0.51                     | L<br>± 1.58 | D<br>± 0.51   | L<br>± 1.58 |                              |
| FE        | 16.1                            | 29.0        | 16.1  | 30.2        | 9                            |
| FJ        | 16.1                            | 41.7        | 16.1  | 42.9        | 12                           |
| FL        | 16.1                            | 54.4        | 16.1  | 55.6        | 16                           |
| FP        | 16.1                            | 67.1        | 16.1  | 68.3        | 19                           |
| FS        | 16.1                            | 79.8        | 16.1  | 81.0        | 23                           |
| FT        | 16.1                            | 92.5        | 16.1  | 93.7        | 26                           |
| GE        | 19.3                            | 29.0        | 19.3  | 30.2        | 13                           |
| GJ        | 19.3                            | 41.7        | 19.3  | 42.9        | 18                           |
| GL        | 19.3                            | 54.4        | 19.3  | 55.6        | 23                           |
| GP        | 19.3                            | 67.1        | 19.3  | 68.3        | 28                           |
| GS        | 19.3                            | 79.8        | 19.3  | 81.0        | 33                           |
| GT        | 19.3                            | 92.5        | 19.3  | 93.7        | 38                           |
| HE        | 22.5                            | 29.0        | 22.5  | 30.2        | 18                           |
| HJ        | 22.5                            | 41.7        | 22.5  | 42.9        | 25                           |
| HL        | 22.5                            | 54.4        | 22.5  | 55.6        | 31                           |
| HP        | 22.5                            | 67.1        | 22.5  | 68.3        | 38                           |
| HS        | 22.5                            | 79.8        | 22.5  | 81.0        | 45                           |
| HT        | 22.5                            | 92.5        | 22.5  | 93.7        | 52                           |
| JE        | 25.7                            | 29.0        | 25.7  | 30.2        | 23                           |
| JJ        | 25.7                            | 41.7        | 25.7  | 42.9        | 32                           |
| JL        | 25.7                            | 54.4        | 25.7  | 55.6        | 41                           |
| JP        | 25.7                            | 67.1        | 25.7  | 68.3        | 50                           |
| JS        | 25.7                            | 79.8        | 25.7  | 81.0        | 59                           |
| JT        | 25.7                            | 92.5        | 25.7  | 93.7        | 68                           |



# TUBULAR AXIAL LEAD CAPACITORS

TYPE 601D

## STANDARD RATINGS

| μF  | Catalog Number | Nominal Case Size<br>Inches |         | Max. ESR<br>@ +25°C (mΩ) |            | Max. Ripple Current<br>@ +85°C (A) |            |
|---|----------------|-----------------------------|---------|--------------------------|------------|------------------------------------|------------|
|   |                | D                           | x L     | 120Hz                    | 20k-100kHz | 120Hz                              | 20k-100kHz |
| <b>6.3 VOLTS DC WORKING; 8 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 1500  | 601D158F6R3FE1 | 0.625                       | x 1.125 | 311.0                    | 227.0      | 1.04                               | 1.22       |
| 2700  | 601D278F6R3FJ1 | 0.625                       | x 1.625 | 148.0                    | 108.0      | 1.76                               | 2.05       |
| 3900  | 601D398F6R3FL1 | 0.625                       | x 2.125 | 98.0                     | 72.0       | 2.41                               | 2.81       |
| 5600  | 601D568F6R3FP1 | 0.625                       | x 2.625 | 74.0                     | 55.0       | 3.05                               | 3.54       |
| 6800  | 601D688F6R3FS1 | 0.625                       | x 3.125 | 60.0                     | 44.0       | 3.66                               | 4.25       |
| 8200  | 601D828F6R3FT1 | 0.625                       | x 3.625 | 51.0                     | 38.0       | 4.26                               | 4.94       |
| 2700  | 601D278F6R3GE1 | 0.750                       | x 1.125 | 169.0                    | 124.0      | 1.58                               | 1.84       |
| 5600  | 601D568F6R3GJ1 | 0.750                       | x 1.625 | 83.0                     | 61.0       | 2.60                               | 3.02       |
| 8200  | 601D828F6R3GL1 | 0.750                       | x 2.125 | 57.0                     | 42.0       | 3.52                               | 4.07       |
| 10000   | 601D109F6R3GP1 | 0.750                       | x 2.625 | 43.0                     | 32.0       | 4.40                               | 5.09       |
| 12000   | 601D129F6R3GS1 | 0.750                       | x 3.125 | 37.0                     | 28.0       | 5.13                               | 5.91       |
| 15000   | 601D159F6R3GT1 | 0.750                       | x 3.625 | 31.0                     | 23.0       | 5.98                               | 6.89       |
| 3900  | 601D398F6R3HE1 | 0.875                       | x 1.125 | 118.0                    | 88.0       | 2.09                               | 2.42       |
| 8200  | 601D828F6R3HJ1 | 0.875                       | x 1.625 | 59.0                     | 44.0       | 3.38                               | 3.90       |
| 12000   | 601D129F6R3HL1 | 0.875                       | x 2.125 | 42.0                     | 31.0       | 4.47                               | 5.15       |
| 15000   | 601D159F6R3HP1 | 0.875                       | x 2.625 | 33.0                     | 24.0       | 5.54                               | 6.37       |
| 18000   | 601D189F6R3HS1 | 0.875                       | x 3.125 | 27.0                     | 20.0       | 6.56                               | 7.50       |
| 22000   | 601D229F6R3HT1 | 0.875                       | x 3.625 | 23.0                     | 18.0       | 7.52                               | 8.61       |
| 5600  | 601D568F6R3JE1 | 1.000                       | x 1.125 | 93.0                     | 69.0       | 2.57                               | 2.96       |
| 10000   | 601D109F6R3JJ1 | 1.000                       | x 1.625 | 49.0                     | 36.0       | 4.05                               | 4.66       |
| 18000   | 601D189F6R3JL1 | 1.000                       | x 2.125 | 33.0                     | 25.0       | 5.44                               | 6.23       |
| 22000   | 601D229F6R3JP1 | 1.000                       | x 2.625 | 26.0                     | 20.0       | 6.72                               | 7.68       |
| 27000   | 601D279F6R3JS1 | 1.000                       | x 3.125 | 22.0                     | 17.0       | 7.86                               | 8.91       |
| 33000   | 601D339F6R3JT1 | 1.000                       | x 3.625 | 19.0                     | 15.0       | 8.98                               | 10.18      |
| <b>10 VOLTS DC WORKING; 15 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 1000  | 601D108F010FE1 | 0.625                       | x 1.125 | 332.0                    | 233.0      | 1.00                               | 1.21       |
| 2200  | 601D228F010FJ1 | 0.625                       | x 1.625 | 157.0                    | 111.0      | 1.70                               | 2.03       |
| 3300  | 601D338F010FL1 | 0.625                       | x 2.125 | 106.0                    | 75.0       | 2.31                               | 2.76       |
| 4700  | 601D478F010FP1 | 0.625                       | x 2.625 | 80.0                     | 57.0       | 2.94                               | 3.50       |
| 5600  | 601D568F010FS1 | 0.625                       | x 3.125 | 65.0                     | 47.0       | 3.52                               | 4.17       |
| 6800  | 601D688F010FT1 | 0.625                       | x 3.625 | 55.0                     | 39.0       | 4.11                               | 4.87       |
| 2200  | 601D228F010GE1 | 0.750                       | x 1.125 | 182.0                    | 129.0      | 1.53                               | 1.81       |
| 3900  | 601D398F010GJ1 | 0.750                       | x 1.625 | 91.0                     | 65.0       | 2.50                               | 2.96       |
| 6800  | 601D688F010GL1 | 0.750                       | x 2.125 | 61.0                     | 44.0       | 3.40                               | 4.03       |
| 8200  | 601D828F010GP1 | 0.750                       | x 2.625 | 47.0                     | 34.0       | 4.25                               | 5.01       |
| 10000   | 601D109F010GS1 | 0.750                       | x 3.125 | 41.0                     | 29.0       | 5.00                               | 5.82       |
| 12000   | 601D129F010GT1 | 0.750                       | x 3.625 | 35.0                     | 25.0       | 5.72                               | 6.71       |
| 3300  | 601D338F010HE1 | 0.875                       | x 1.125 | 127.0                    | 90.0       | 2.02                               | 2.39       |
| 5600  | 601D568F010HJ1 | 0.875                       | x 1.625 | 64.0                     | 46.0       | 3.26                               | 3.84       |
| 8200  | 601D828F010HL1 | 0.875                       | x 2.125 | 44.0                     | 32.0       | 4.38                               | 5.14       |
| 12000   | 601D129F010HP1 | 0.875                       | x 2.625 | 36.0                     | 26.0       | 5.30                               | 6.22       |
| 15000   | 601D159F010HS1 | 0.875                       | x 3.125 | 29.0                     | 20.0       | 6.43                               | 7.50       |
| 18000   | 601D189F010HT1 | 0.875                       | x 3.625 | 25.0                     | 18.0       | 7.37                               | 8.56       |
| 3900  | 601D398F010JE1 | 1.000                       | x 1.125 | 99.0                     | 71.0       | 2.49                               | 2.93       |
| 8200  | 601D828F010JJ1 | 1.000                       | x 1.625 | 50.0                     | 37.0       | 4.00                               | 4.67       |
| 13000   | 601D139F010JL1 | 1.000                       | x 2.125 | 36.0                     | 26.0       | 5.27                               | 6.15       |
| 18000   | 601D189F010JP1 | 1.000                       | x 2.625 | 28.0                     | 21.0       | 6.45                               | 7.49       |
| 22000   | 601D229F010JS1 | 1.000                       | x 3.125 | 23.0                     | 17.0       | 7.68                               | 8.86       |
| 27000   | 601D279F010JT1 | 1.000                       | x 3.625 | 20.0                     | 15.0       | 8.75                               | 10.08      |



**STANDARD RATINGS**

| μF  | Catalog Number | Nominal Case Size<br>Inches |         | Max. ESR<br>@ +25°C (mΩ) |            | Max. Ripple Current<br>@ +85°C (A) |            |
|---|----------------|-----------------------------|---------|--------------------------|------------|------------------------------------|------------|
|   |                | D                           | x L     | 120Hz                    | 20k-100kHz | 120Hz                              | 20k-100kHz |
| <b>16 VOLTS DC WORKING; 20 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 820   | 601D827F016FE1 | 0.625                       | x 1.125 | 349.0                    | 230.0      | 0.99                               | 1.21       |
| 1800  | 601D188F016FJ1 | 0.625                       | x 1.625 | 175.0                    | 116.0      | 1.62                               | 1.98       |
| 2700  | 601D278F016FL1 | 0.625                       | x 2.125 | 115.0                    | 77.0       | 2.23                               | 2.73       |
| 3300  | 601D338F016FP1 | 0.625                       | x 2.625 | 87.0                     | 58.0       | 2.83                               | 3.45       |
| 3900  | 601D398F016FS1 | 0.625                       | x 3.125 | 71.0                     | 48.0       | 3.37                               | 4.11       |
| 4700  | 601D478F016FT1 | 0.625                       | x 3.625 | 60.0                     | 40.0       | 3.94                               | 4.79       |
| 1500  | 601D158F016GE1 | 0.750                       | x 1.125 | 198.0                    | 132.0      | 1.47                               | 1.79       |
| 3300  | 601D338F016GJ1 | 0.750                       | x 1.625 | 98.0                     | 66.0       | 2.40                               | 2.92       |
| 4700  | 601D478F016GL1 | 0.750                       | x 2.125 | 67.0                     | 45.0       | 3.26                               | 3.95       |
| 5600  | 601D568F016GP1 | 0.750                       | x 2.625 | 51.0                     | 35.0       | 4.07                               | 4.93       |
| 8200  | 601D828F016GS1 | 0.750                       | x 3.125 | 42.0                     | 29.0       | 4.87                               | 5.86       |
| 10000   | 601D109F016GT1 | 0.750                       | x 3.625 | 36.0                     | 25.0       | 5.64                               | 6.78       |
| 2200  | 601D228F016HE1 | 0.875                       | x 1.125 | 139.0                    | 94.0       | 1.93                               | 2.34       |
| 4700  | 601D478F016HJ1 | 0.875                       | x 1.625 | 70.0                     | 48.0       | 3.12                               | 3.77       |
| 6800  | 601D688F016HL1 | 0.875                       | x 2.125 | 48.0                     | 33.0       | 4.20                               | 5.05       |
| 10000   | 601D109F016HP1 | 0.875                       | x 2.625 | 37.0                     | 26.0       | 5.23                               | 6.27       |
| 12000   | 601D129F016HS1 | 0.875                       | x 3.125 | 31.0                     | 22.0       | 6.19                               | 7.38       |
| 15000   | 601D159F016HT1 | 0.875                       | x 3.625 | 27.0                     | 19.0       | 7.06                               | 8.40       |
| 3300  | 601D338F016JE1 | 1.000                       | x 1.125 | 108.0                    | 75.0       | 2.38                               | 2.87       |
| 6800  | 601D688F016JJ1 | 1.000                       | x 1.625 | 55.0                     | 38.0       | 3.83                               | 4.59       |
| 10000   | 601D109F016JL1 | 1.000                       | x 2.125 | 38.0                     | 27.0       | 5.10                               | 6.09       |
| <b>25 VOLTS DC WORKING; 40 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 560   | 601D567F025FE1 | 0.625                       | x 1.125 | 383.0                    | 237.0      | 0.941                              | 1.20       |
| 1000  | 601D108F025FJ1 | 0.625                       | x 1.625 | 198.0                    | 124.0      | 1.52                               | 1.92       |
| 1500  | 601D158F025FL1 | 0.625                       | x 2.125 | 125.0                    | 78.0       | 2.14                               | 2.71       |
| 2200  | 601D228F025FP1 | 0.625                       | x 2.625 | 96.0                     | 61.0       | 2.68                               | 3.38       |
| 2700  | 601D278F025FS1 | 0.625                       | x 3.125 | 78.0                     | 50.0       | 3.22                               | 4.04       |
| 3300  | 601D338F025FT1 | 0.652                       | x 3.625 | 65.0                     | 41.0       | 3.79                               | 4.75       |
| 1000  | 601D108F025GE1 | 0.750                       | x 1.125 | 213.0                    | 134.0      | 1.41                               | 1.78       |
| 1800  | 601D188F025GJ1 | 0.750                       | x 1.625 | 110.0                    | 70.0       | 2.27                               | 2.85       |
| 2700  | 601D278F025GL1 | 0.750                       | x 2.125 | 73.0                     | 47.0       | 3.11                               | 3.89       |
| 3900  | 601D398F025GP1 | 0.750                       | x 2.625 | 56.0                     | 36.0       | 3.91                               | 4.87       |
| 4700  | 601D478F025GS1 | 0.750                       | x 3.125 | 45.0                     | 29.0       | 4.68                               | 5.80       |
| 5600  | 601D568F025GT1 | 0.750                       | x 3.625 | 38.0                     | 25.0       | 5.43                               | 6.70       |
| 1500  | 601D158F025HE1 | 0.875                       | x 1.125 | 157.0                    | 100.0      | 1.81                               | 2.27       |
| 2700  | 601D278F025HJ1 | 0.875                       | x 1.625 | 76.0                     | 49.0       | 2.98                               | 3.72       |
| 3900  | 601D398F025HL1 | 0.875                       | x 2.125 | 52.0                     | 34.0       | 4.04                               | 5.01       |
| 5600  | 601D568F025HP1 | 0.875                       | x 2.625 | 40.0                     | 26.0       | 5.04                               | 6.20       |
| 6800  | 601D688F025HS1 | 0.875                       | x 3.125 | 33.0                     | 22.0       | 6.00                               | 7.33       |
| 8200  | 601D828F025HT1 | 0.875                       | x 3.625 | 28.0                     | 19.0       | 6.91                               | 8.42       |
| 1800  | 601D188F025JE1 | 1.000                       | x 1.125 | 117.0                    | 76.0       | 2.28                               | 2.83       |
| 3900  | 601D398F025JJ1 | 1.000                       | x 1.625 | 59.0                     | 39.0       | 3.70                               | 4.55       |
| 5600  | 601D568F025JL1 | 1.000                       | x 2.125 | 40.0                     | 27.0       | 4.96                               | 6.07       |
| 8200  | 601D828F025JP1 | 1.000                       | x 2.625 | 31.0                     | 21.0       | 6.14                               | 7.44       |
| 10000   | 601D109F025JS1 | 1.000                       | x 3.125 | 27.0                     | 18.0       | 7.15                               | 8.64       |
| 12000   | 601D129F025JT1 | 1.000                       | x 3.625 | 23.0                     | 16.0       | 8.21                               | 9.89       |



# TUBULAR AXIAL LEAD CAPACITORS

TYPE 601D

## STANDARD RATINGS

| μF  | Catalog Number | Nominal Case Size<br>Inches |         | Max. ESR<br>@ +25°C (mΩ) |            | Max. Ripple Current<br>@ +85°C (A) |            |
|---|----------------|-----------------------------|---------|--------------------------|------------|------------------------------------|------------|
|   |                | D                           | x L     | 120Hz                    | 20k-100kHz | 120Hz                              | 20k-100kHz |
| <b>35 VOLTS DC WORKING; 50 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 330   | 601D337F035FE1 | 0.625                       | x 1.125 | 480                      | 244        | 0.84                               | 1.18       |
| 680   | 601D687F035FJ1 | 0.625                       | x 1.625 | 231.0                    | 118.0      | 1.40                               | 1.96       |
| 1000  | 601D108F035FL1 | 0.625                       | x 2.125 | 154.0                    | 79.0       | 1.93                               | 2.68       |
| 1500  | 601D158F035FP1 | 0.625                       | x 2.625 | 118.0                    | 61.0       | 2.42                               | 3.35       |
| 1800  | 601D188F035FS1 | 0.625                       | x 3.125 | 95.0                     | 50.0       | 2.91                               | 4.02       |
| 2200  | 601D228F035FT1 | 0.625                       | x 3.625 | 80.0                     | 42.0       | 3.40                               | 4.67       |
| 680   | 601D687F035GE1 | 0.750                       | x 1.125 | 266.0                    | 137.0      | 1.26                               | 1.75       |
| 1200  | 601D128F035GJ1 | 0.750                       | x 1.625 | 133.0                    | 70.0       | 2.06                               | 2.84       |
| 2200  | 601D228F035GL1 | 0.750                       | x 2.125 | 87.0                     | 46.0       | 2.84                               | 3.89       |
| 2700  | 601D278F035GP1 | 0.750                       | x 2.625 | 68.0                     | 36.0       | 3.52                               | 4.80       |
| 3300  | 601D338F035GS1 | 0.750                       | x 3.125 | 54.0                     | 29.0       | 4.25                               | 5.75       |
| 3900  | 601D398F035GT1 | 0.750                       | x 3.625 | 46.0                     | 25.0       | 4.95                               | 6.67       |
| 1000  | 601D108F035HE1 | 0.875                       | x 1.125 | 182.0                    | 96.0       | 1.68                               | 2.31       |
| 2200  | 601D228F035HJ1 | 0.875                       | x 1.625 | 91.0                     | 49.0       | 2.73                               | 3.72       |
| 2700  | 601D278F035HL1 | 0.875                       | x 2.125 | 62.0                     | 34.0       | 3.67                               | 4.94       |
| 3900  | 601D398F035HP1 | 0.875                       | x 2.625 | 47.0                     | 26.0       | 4.61                               | 6.17       |
| 4700  | 601D478F035HS1 | 0.875                       | x 3.125 | 39.0                     | 22.0       | 5.46                               | 7.26       |
| 5600  | 601D568F035HT1 | 0.875                       | x 3.625 | 33.0                     | 19.0       | 6.33                               | 8.35       |
| 1200  | 601D128F035JE1 | 1.000                       | x 1.125 | 146.0                    | 79.0       | 2.04                               | 2.77       |
| 2700  | 601D278F035JJ1 | 1.000                       | x 1.625 | 71.0                     | 39.0       | 3.35                               | 4.49       |
| 3900  | 601D398F035JL1 | 1.000                       | x 2.125 | 48.0                     | 27.0       | 4.52                               | 5.99       |
| 5600  | 601D568F035JP1 | 1.000                       | x 2.625 | 37.0                     | 21.0       | 5.62                               | 7.37       |
| 6800  | 601D688F035JS1 | 1.000                       | x 3.125 | 30.0                     | 18.0       | 6.66                               | 8.67       |
| 8200  | 601D828F035JT1 | 1.000                       | x 3.625 | 26.0                     | 15.0       | 7.66                               | 9.92       |
| <b>50 VOLTS DC WORKING; 75 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 270   | 601D277F050FE1 | 0.625                       | x 1.125 | 519                      | 241        | 0.81                               | 1.19       |
| 470   | 601D477F050FJ1 | 0.625                       | x 1.625 | 249.0                    | 117.0      | 1.35                               | 1.98       |
| 680   | 601D687F050FL1 | 0.625                       | x 2.125 | 165.0                    | 78.0       | 1.87                               | 2.71       |
| 1000  | 601D108F050FP1 | 0.625                       | x 2.625 | 128.0                    | 61.0       | 2.33                               | 3.37       |
| 1200  | 601D128F050FS1 | 0.625                       | x 3.125 | 107.0                    | 51.0       | 2.76                               | 3.97       |
| 1500  | 601D158F050FT1 | 0.625                       | x 3.625 | 87.0                     | 42.0       | 3.28                               | 4.70       |
| 470   | 601D477F050GE1 | 0.750                       | x 1.125 | 285.0                    | 135.0      | 1.22                               | 1.77       |
| 1000  | 601D108F050GJ1 | 0.750                       | x 1.625 | 139.0                    | 67.0       | 2.02                               | 2.90       |
| 1500  | 601D158F050GL1 | 0.750                       | x 2.125 | 95.0                     | 47.0       | 2.73                               | 3.90       |
| 1800  | 601D188F050GP1 | 0.750                       | x 2.625 | 71.0                     | 35.0       | 3.45                               | 4.90       |
| 2200  | 601D228F050GS1 | 0.750                       | x 3.125 | 60.0                     | 30.0       | 4.08                               | 5.75       |
| 2700  | 601D278F050GT1 | 0.750                       | x 3.625 | 50.0                     | 25.0       | 4.76                               | 6.67       |
| 680   | 601D687F050HE1 | 0.875                       | x 1.125 | 196.0                    | 95.0       | 1.62                               | 2.32       |
| 1500  | 601D158F050HJ1 | 0.875                       | x 1.625 | 99.0                     | 49.0       | 2.63                               | 3.72       |
| 2200  | 601D228F050HL1 | 0.875                       | x 2.125 | 67.0                     | 34.0       | 3.55                               | 4.99       |
| 2700  | 601D278F050HP1 | 0.875                       | x 2.625 | 51.0                     | 27.0       | 4.44                               | 6.17       |
| 3300  | 601D338F050HS1 | 0.875                       | x 3.125 | 42.0                     | 22.0       | 5.28                               | 7.29       |
| 3900  | 601D398F050HT1 | 0.875                       | x 3.625 | 36.0                     | 19.0       | 6.12                               | 8.38       |
| 1000  | 601D108F050JE1 | 1.000                       | x 1.125 | 148.0                    | 75.0       | 2.03                               | 2.86       |
| 1800  | 601D188F050JJ1 | 1.000                       | x 1.625 | 77.0                     | 40.0       | 3.23                               | 4.50       |
| 2700  | 601D278F050JL1 | 1.000                       | x 2.125 | 52.0                     | 28.0       | 4.37                               | 6.00       |
| 3900  | 601D398F050JP1 | 1.000                       | x 2.625 | 40.0                     | 22.0       | 5.44                               | 7.40       |
| 4700  | 601D478F050JS1 | 1.000                       | x 3.125 | 33.0                     | 18.0       | 6.47                               | 8.69       |
| 5600  | 601D568F050JT1 | 1.000                       | x 3.625 | 28.0                     | 16.0       | 7.45                               | 9.92       |



# TUBULAR AXIAL LEAD CAPACITORS

TYPE 601D

## STANDARD RATINGS

| μF  | Catalog Number | Nominal Case Size<br>Inches |         | Max. ESR<br>@ +25°C (mΩ) |            | Max. Ripple Current<br>@ +85°C (A) |            |
|---|----------------|-----------------------------|---------|--------------------------|------------|------------------------------------|------------|
|   |                | D                           | x L     | 120Hz                    | 20k-100kHz | 120Hz                              | 20k-100kHz |
| <b>63 VOLTS DC WORKING; 90 VOLTS DC SURGE</b>   |                |                             |         |                          |            |                                    |            |
| 220   | 601D227F063FE1 | 0.625                       | x 1.125 | 563                      | 250        | 0.78                               | 1.16       |
| 470   | 601D477F063FJ1 | 0.625                       | x 1.625 | 269.0                    | 121.0      | 1.30                               | 1.94       |
| 680   | 601D687F063FL1 | 0.625                       | x 2.125 | 178.0                    | 80.0       | 1.80                               | 2.67       |
| 820   | 601D827F063FP1 | 0.625                       | x 2.625 | 134.0                    | 61.0       | 2.27                               | 3.36       |
| 1000  | 601D108F063FS1 | 0.625                       | x 3.125 | 111.0                    | 51.0       | 2.70                               | 3.98       |
| 1200  | 601D128F063FT1 | 0.625                       | x 3.625 | 95.0                     | 44.0       | 3.13                               | 4.59       |
| 390   | 601D397F063GE1 | 0.750                       | x 1.125 | 304.0                    | 138.0      | 1.18                               | 1.75       |
| 820   | 601D827F063GJ1 | 0.750                       | x 1.625 | 150.0                    | 69.0       | 1.94                               | 2.86       |
| 1200  | 601D128F063GL1 | 0.750                       | x 2.125 | 105.0                    | 49.0       | 2.59                               | 3.79       |
| 1500  | 601D158F063GP1 | 0.750                       | x 2.625 | 80.0                     | 38.0       | 3.26                               | 4.73       |
| 1800  | 601D188F063GS1 | 0.750                       | x 3.125 | 62.0                     | 30.0       | 3.99                               | 5.75       |
| 2200  | 601D228F063GT1 | 0.750                       | x 3.625 | 53.0                     | 26.0       | 4.62                               | 6.62       |
| 680   | 601D687F063HE1 | 0.875                       | x 1.125 | 210.0                    | 98.0       | 1.57                               | 2.30       |
| 1200  | 601D128F063HJ1 | 0.875                       | x 1.625 | 109.0                    | 52.0       | 2.50                               | 3.63       |
| 1800  | 601D188F063HL1 | 0.875                       | x 2.125 | 70.0                     | 34.0       | 3.47                               | 4.97       |
| 2200  | 601D228F063HP1 | 0.875                       | x 2.625 | 54.0                     | 27.0       | 4.31                               | 6.13       |
| 2700  | 601D278F063HS1 | 0.875                       | x 3.125 | 45.0                     | 23.0       | 5.12                               | 7.21       |
| 3900  | 601D398F063HT1 | 0.875                       | x 3.625 | 38.0                     | 19.0       | 5.98                               | 8.33       |
| 820   | 601D827F063JE1 | 1.000                       | x 1.125 | 158.0                    | 76.0       | 1.97                               | 2.83       |
| 1800  | 601D188F063JJ1 | 1.000                       | x 1.625 | 81.0                     | 40.0       | 3.14                               | 4.46       |
| 2700  | 601D278F063JL1 | 1.000                       | x 2.125 | 55.0                     | 28.0       | 4.25                               | 5.97       |
| 3300  | 601D338F063JP1 | 1.000                       | x 2.625 | 42.0                     | 22.0       | 5.31                               | 7.35       |
| 3900  | 601D398F063JS1 | 1.000                       | x 3.125 | 34.0                     | 18.0       | 6.31                               | 8.64       |
| 4700  | 601D478F063JT1 | 1.000                       | x 3.625 | 29.0                     | 16.0       | 7.29                               | 9.89       |
| <b>100 VOLTS DC WORKING; 150 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 68  | 601D686F100FE1 | 0.625                       | x 1.125 | 1714                     | 727        | .444                               | .683       |
| 120   | 601D127F100FJ1 | 0.625                       | x 1.625 | 869.0                    | 370.0      | .725                               | 1.11       |
| 180   | 601D187F100FL1 | 0.625                       | x 2.125 | 561.0                    | 240.0      | 1.01                               | 1.55       |
| 270   | 601D277F100FP1 | 0.625                       | x 2.625 | 415.0                    | 178.0      | 1.29                               | 1.97       |
| 330   | 601D337F100FS1 | 0.625                       | x 3.125 | 330.0                    | 142.0      | 1.57                               | 2.39       |
| 390   | 601D397F100FT1 | 0.625                       | x 3.625 | 274.0                    | 118.0      | 1.84                               | 2.80       |
| 120   | 601D127F100GE1 | 0.750                       | x 1.125 | 986.0                    | 421.0      | .656                               | 1.00       |
| 270   | 601D277F100GJ1 | 0.750                       | x 1.625 | 461.0                    | 198.0      | 1.11                               | 1.69       |
| 390   | 601D397F100GL1 | 0.750                       | x 2.125 | 302.0                    | 131.0      | 1.53                               | 2.33       |
| 470   | 601D477F100GP1 | 0.750                       | x 2.625 | 230.0                    | 100.0      | 1.92                               | 2.91       |
| 560   | 601D567F100GS1 | 0.750                       | x 3.125 | 183.0                    | 80.0       | 2.33                               | 3.52       |
| 680   | 601D687F100GT1 | 0.750                       | x 3.625 | 152.0                    | 67.0       | 2.73                               | 4.11       |
| 180   | 601D187F100HE1 | 0.875                       | x 1.125 | 632.0                    | 273.0      | 0.903                              | 1.38       |
| 390   | 601D397F100HJ1 | 0.875                       | x 1.625 | 308.0                    | 134.0      | 1.49                               | 2.25       |
| 560   | 601D567F100HL1 | 0.875                       | x 2.125 | 205.0                    | 90.0       | 2.03                               | 3.06       |
| 680   | 601D687F100HP1 | 0.875                       | x 2.625 | 155.0                    | 68.0       | 2.56                               | 3.84       |
| 820   | 601D827F100HS1 | 0.875                       | x 3.125 | 124.0                    | 56.0       | 3.08                               | 4.60       |
| 1000  | 601D108F100HT1 | 0.875                       | x 3.625 | 108.0                    | 48.0       | 3.53                               | 5.26       |
| 270   | 601D277F100JE1 | 1.000                       | x 1.125 | 469.0                    | 205.0      | 1.14                               | 1.73       |
| 470   | 601D477F100JJ1 | 1.000                       | x 1.625 | 226.0                    | 100.0      | 1.88                               | 2.83       |
| 820   | 601D827F100JL1 | 1.000                       | x 2.125 | 152.0                    | 68.0       | 2.56                               | 3.82       |
| 1000  | 601D108F100JP1 | 1.000                       | x 2.625 | 120.0                    | 54.0       | 3.14                               | 4.67       |
| 1200  | 601D128F100JS1 | 1.000                       | x 3.125 | 93.0                     | 43.0       | 3.83                               | 5.66       |
| 1500  | 601D158F100JT1 | 1.000                       | x 3.625 | 81.0                     | 37.0       | 4.37                               | 6.45       |



# TUBULAR AXIAL LEAD CAPACITORS

TYPE 601D

## STANDARD RATINGS

| μF  | Catalog Number | Nominal Case Size |         | Max. ESR     |            | Max. Ripple Current |            |
|---|----------------|-------------------|---------|--------------|------------|---------------------|------------|
|   |                | Inches            |         | @ +25°C (mΩ) |            | @ +85°C (A)         |            |
|   |                | D                 | x L     | 120Hz        | 20k-100kHz | 120Hz               | 20k-100kHz |
| <b>150 VOLTS DC WORKING; 200 VOLTS DC SURGE</b> |                |                   |         |              |            |                     |            |
| 33  | 601D336F150FE1 | 0.625             | x 1.125 | 3518.0       | 1485.0     | 0.310               | 0.478      |
| 68  | 601D686F150FJ1 | 0.625             | x 1.625 | 1677.0       | 709.0      | 0.522               | 0.802      |
| 100   | 601D107F150FL1 | 0.625             | x 2.125 | 1114.0       | 472.0      | 0.718               | 1.10       |
| 120   | 601D127F150FP1 | 0.625             | x 2.625 | 842.0        | 357.0      | 0.907               | 1.39       |
| 150   | 601D157F150FS1 | 0.625             | x 3.125 | 672.0        | 286.0      | 1.10                | 1.68       |
| 180   | 601D187F150FT1 | 0.625             | x 3.625 | 560.0        | 238.0      | 1.29                | 1.97       |
| 56  | 601D566F150GE1 | 0.750             | x 1.125 | 2089.0       | 884.0      | 0.451               | 0.693      |
| 100   | 601D107F150GJ1 | 0.750             | x 1.625 | 1033.0       | 438.0      | 0.740               | 1.14       |
| 150   | 601D157F150GL1 | 0.750             | x 2.125 | 683.0        | 291.0      | 1.02                | 1.56       |
| 220   | 601D227F150GP1 | 0.750             | x 2.625 | 511.0        | 218.0      | 1.29                | 1.97       |
| 270   | 601D277F150GS1 | 0.750             | x 3.125 | 409.0        | 175.0      | 1.56                | 2.38       |
| 330   | 601D337F150GT1 | 0.750             | x 3.625 | 341.0        | 146.0      | 1.82                | 2.78       |
| 82  | 601D826F150HE1 | 0.875             | x 1.125 | 1395.0       | 593.0      | 0.608               | 0.932      |
| 150   | 601D157F150HJ1 | 0.875             | x 1.625 | 695.0        | 297.0      | 0.989               | 1.51       |
| 270   | 601D277F150HL1 | 0.875             | x 2.125 | 451.0        | 193.0      | 1.37                | 2.09       |
| 330   | 601D337F150HP1 | 0.875             | x 2.625 | 345.0        | 148.0      | 1.71                | 2.61       |
| 390   | 601D397F150HS1 | 0.875             | x 3.125 | 273.0        | 118.0      | 2.08                | 3.16       |
| 470   | 601D477F150HT1 | 0.875             | x 3.625 | 226.0        | 98.0       | 2.44                | 3.70       |
| 100   | 601D107F150JE1 | 1.000             | x 1.125 | 1082.0       | 463.0      | 0.753               | 1.15       |
| 220   | 601D227F150JJ1 | 1.000             | x 1.625 | 502.0        | 216.0      | 1.26                | 1.93       |
| 330   | 601D337F150JL1 | 1.000             | x 2.125 | 328.0        | 142.0      | 1.74                | 2.64       |
| 470   | 601D477F150JP1 | 1.000             | x 2.625 | 244.0        | 107.0      | 2.20                | 3.33       |
| 560   | 601D567F150JS1 | 1.000             | x 3.125 | 195.0        | 86.0       | 2.65                | 4.00       |
| 680   | 601D687F150JT1 | 1.000             | x 3.625 | 165.0        | 73.0       | 3.07                | 4.63       |
| <b>200 VOLTS DC WORKING; 250 VOLTS DC SURGE</b> |                |                   |         |              |            |                     |            |
| 27  | 601D276F200FE1 | 0.625             | x 1.125 | 3985.0       | 1501.0     | 0.292               | 0.48       |
| 56  | 601D566F200FJ1 | 0.625             | x 1.625 | 1892.0       | 714.0      | 0.491               | 0.80       |
| 82  | 601D826F200FL1 | 0.625             | x 2.125 | 1242.0       | 469.0      | 0.680               | 1.11       |
| 100   | 601D107F200FP1 | 0.625             | x 2.625 | 925.0        | 350.0      | 0.865               | 1.41       |
| 120   | 601D127F200FS1 | 0.625             | x 3.125 | 761.0        | 288.0      | 1.032               | 1.67       |
| 150   | 601D157F200FT1 | 0.625             | x 3.625 | 651.0        | 248.0      | 1.19                | 1.94       |
| 47  | 601D476F200GE1 | 0.750             | x 1.125 | 2354.0       | 889.0      | 0.424               | 0.69       |
| 82  | 601D826F200GJ1 | 0.750             | x 1.625 | 1142.0       | 433.0      | 0.704               | 1.14       |
| 120   | 601D127F200GL1 | 0.750             | x 2.125 | 774.0        | 294.0      | 0.956               | 1.55       |
| 180   | 601D187F200GP1 | 0.750             | x 2.625 | 578.0        | 220.0      | 1.21                | 1.96       |
| 220   | 601D227F200GS1 | 0.750             | x 3.125 | 462.0        | 176.0      | 1.46                | 2.37       |
| 270   | 601D277F200GT1 | 0.750             | x 3.625 | 385.0        | 147.0      | 1.71                | 2.77       |
| 68  | 601D686F200HE1 | 0.875             | x 1.125 | 1569.0       | 596.0      | 0.573               | 0.930      |
| 120   | 601D127F200HJ1 | 0.875             | x 1.625 | 787.0        | 300.0      | 0.930               | 1.51       |
| 180   | 601D187F200HL1 | 0.875             | x 2.125 | 521.0        | 199.0      | 1.27                | 2.06       |
| 270   | 601D277F200HP1 | 0.875             | x 2.625 | 390.0        | 150.0      | 1.61                | 2.59       |
| 330   | 601D337F200HS1 | 0.875             | x 3.125 | 302.0        | 117.0      | 1.97                | 3.17       |
| 390   | 601D397F200HT1 | 0.875             | x 3.625 | 254.0        | 98.0       | 2.30                | 3.69       |
| 82  | 601D826F200JE1 | 1.000             | x 1.125 | 1128.0       | 432.0      | 0.737               | 1.19       |
| 180   | 601D187F200JJ1 | 1.000             | x 1.625 | 560.0        | 216.0      | 1.20                | 1.93       |
| 270   | 601D277F200JL1 | 1.000             | x 2.125 | 365.0        | 141.0      | 1.65                | 2.64       |
| 390   | 601D397F200JP1 | 1.000             | x 2.625 | 278.0        | 108.0      | 2.06                | 3.29       |
| 470   | 601D477F200JS1 | 1.000             | x 3.125 | 221.0        | 87.0       | 2.49                | 3.97       |
| 560   | 601D567F200JT1 | 1.000             | x 3.625 | 183.0        | 72.0       | 2.91                | 4.63       |



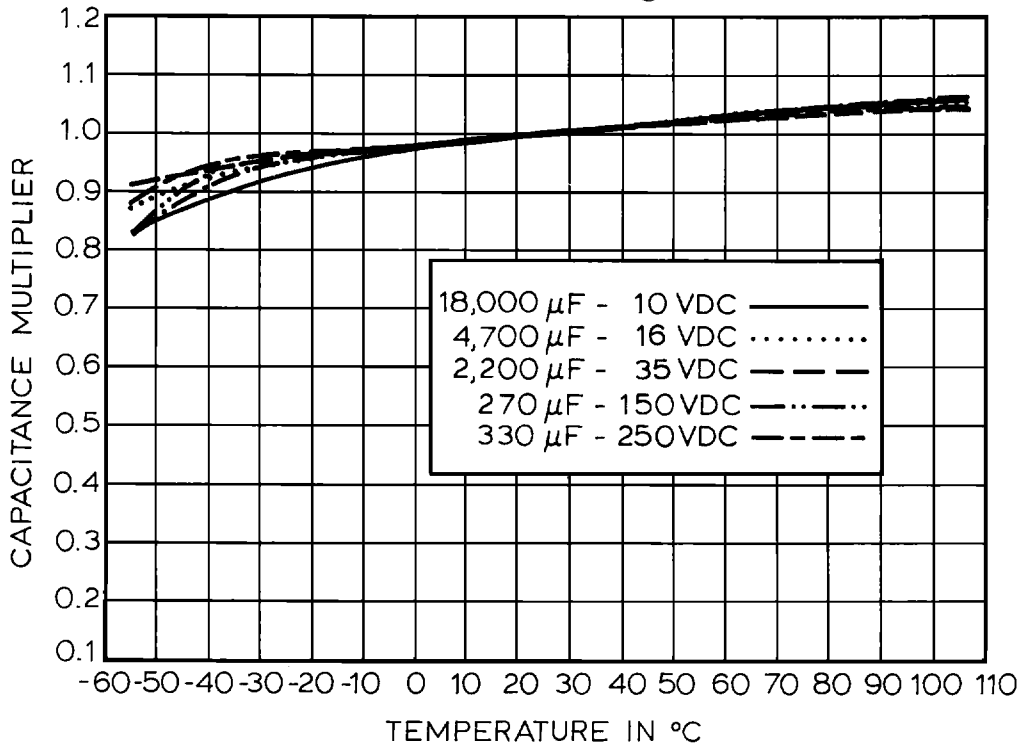
STANDARD RATINGS

| μF  | Catalog Number | Nominal Case Size<br>Inches |         | Max. ESR<br>@ +25°C (mΩ) |            | Max. Ripple Current<br>@ +85°C (A) |            |
|---|----------------|-----------------------------|---------|--------------------------|------------|------------------------------------|------------|
|   |                | D                           | x L     | 120Hz                    | 20k-100kHz | 120Hz                              | 20k-100kHz |
| <b>250 VOLTS DC WORKING; 300 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 15  | 601D156F250FE1 | 0.625                       | x 1.125 | 7136.0                   | 2854.0     | 0.22                               | 0.34       |
| 33  | 601D336F250FJ1 | 0.625                       | x 1.625 | 3228.0                   | 1292.0     | 0.38                               | 0.59       |
| 47  | 601D476F250FL1 | 0.625                       | x 2.125 | 2132.0                   | 854.0      | 0.52                               | 0.82       |
| 68  | 601D686F250FP1 | 0.625                       | x 2.625 | 1591.0                   | 638.0      | 0.66                               | 1.04       |
| 82  | 601D826F250FS1 | 0.625                       | x 3.125 | 1270.0                   | 510.0      | 0.80                               | 1.26       |
| 100   | 601D107F250FT1 | 0.625                       | x 3.625 | 1057.0                   | 425.0      | 0.94                               | 1.48       |
| 27  | 601D276F250GE1 | 0.750                       | x 1.125 | 3614.0                   | 1449.0     | 0.34                               | 0.54       |
| 56  | 601D566F250GJ1 | 0.750                       | x 1.625 | 1721.0                   | 691.0      | 0.57                               | 0.90       |
| 100   | 601D107F250GL1 | 0.750                       | x 2.125 | 1130.0                   | 454.0      | 0.79                               | 1.25       |
| 120   | 601D127F250GP1 | 0.750                       | x 2.625 | 880.0                    | 354.0      | 0.98                               | 1.55       |
| 150   | 601D157F250GS1 | 0.750                       | x 3.125 | 690.0                    | 278.0      | 1.20                               | 1.88       |
| 180   | 601D187F250GT1 | 0.750                       | x 3.625 | 568.0                    | 230.0      | 1.41                               | 2.22       |
| 47  | 601D476F250HE1 | 0.875                       | x 1.125 | 2369.0                   | 953.0      | 0.47                               | 0.74       |
| 100   | 601D107F250HJ1 | 0.875                       | x 1.625 | 1148.0                   | 463.0      | 0.77                               | 1.21       |
| 150   | 601D157F250HL1 | 0.875                       | x 2.125 | 753.0                    | 304.0      | 1.06                               | 1.67       |
| 180   | 601D187F250HP1 | 0.875                       | x 2.625 | 574.0                    | 232.0      | 1.33                               | 2.08       |
| 220   | 601D227F250HS1 | 0.875                       | x 3.125 | 464.0                    | 188.0      | 1.59                               | 2.50       |
| 270   | 601D277F250HT1 | 0.875                       | x 3.625 | 375.0                    | 153.0      | 1.89                               | 2.96       |
| 56  | 601D566F250JE1 | 1.000                       | x 1.125 | 1708.0                   | 689.0      | 0.60                               | 0.94       |
| 120   | 601D127F250JJ1 | 1.000                       | x 1.625 | 829.0                    | 336.0      | 0.98                               | 1.54       |
| 180   | 601D187F250JL1 | 1.000                       | x 2.125 | 548.0                    | 223.0      | 1.34                               | 2.11       |
| 270   | 601D277F250JP1 | 1.000                       | x 2.625 | 410.0                    | 167.0      | 1.69                               | 2.65       |
| 330   | 601D337F250JS1 | 1.000                       | x 3.125 | 328.0                    | 134.0      | 2.04                               | 3.18       |
| 390   | 601D397F250JT1 | 1.000                       | x 3.625 | 274.0                    | 112.0      | 2.38                               | 3.71       |
| <b>300 VOLTS DC WORKING; 350 VOLTS DC SURGE</b> |                |                             |         |                          |            |                                    |            |
| 12  | 601D126F300FE1 | 0.625                       | x 1.125 | 8217.0                   | 2896.0     | 0.20                               | 0.34       |
| 27  | 601D276F300FJ1 | 0.625                       | x 1.625 | 3809.0                   | 1344.0     | 0.35                               | 0.58       |
| 39  | 601D396F300FL1 | 0.625                       | x 2.125 | 2479.0                   | 875.0      | 0.48                               | 0.81       |
| 47  | 601D476F300FP1 | 0.625                       | x 2.625 | 1839.0                   | 650.0      | 0.61                               | 1.03       |
| 56  | 601D566F300FS1 | 0.625                       | x 3.125 | 1461.0                   | 517.0      | 0.75                               | 1.25       |
| 68  | 601D686F300FT1 | 0.625                       | x 3.625 | 1213.0                   | 430.0      | 0.87                               | 1.47       |
| 22  | 601D226F300GE1 | 0.750                       | x 1.125 | 4164.0                   | 1471.0     | 0.32                               | 0.54       |
| 47  | 601D476F300GJ1 | 0.750                       | x 1.625 | 1931.0                   | 683.0      | 0.54                               | 0.91       |
| 68  | 601D686F300GL1 | 0.750                       | x 2.125 | 1294.0                   | 459.0      | 0.74                               | 1.24       |
| 100   | 601D107F300GP1 | 0.750                       | x 2.625 | 953.0                    | 338.0      | 0.94                               | 1.58       |
| 120   | 601D127F300GS1 | 0.750                       | x 3.125 | 795.0                    | 283.0      | 1.12                               | 1.87       |
| 150   | 601D157F300GT1 | 0.750                       | x 3.625 | 672.0                    | 239.0      | 1.30                               | 2.17       |
| 33  | 601D336F300HE1 | 0.875                       | x 1.125 | 2712.0                   | 961.0      | 0.44                               | 0.73       |
| 68  | 601D686F300HJ1 | 0.875                       | x 1.625 | 1296.0                   | 460.0      | 0.72                               | 1.22       |
| 100   | 601D107F300HL1 | 0.875                       | x 2.125 | 886.0                    | 316.0      | 0.98                               | 1.64       |
| 150   | 601D157F300HP1 | 0.875                       | x 2.625 | 679.0                    | 242.0      | 1.22                               | 2.04       |
| 180   | 601D187F300HS1 | 0.875                       | x 3.125 | 519.0                    | 186.0      | 1.50                               | 2.51       |
| 220   | 601D227F300HT1 | 0.875                       | x 3.625 | 441.0                    | 158.0      | 1.74                               | 2.91       |
| 47  | 601D476F300JE1 | 1.000                       | x 1.125 | 1973.0                   | 702.0      | 0.56                               | 0.93       |
| 100   | 601D107F300JJ1 | 1.000                       | x 1.625 | 947.0                    | 338.0      | 0.92                               | 1.54       |
| 150   | 601D157F300JL1 | 1.000                       | x 2.125 | 637.0                    | 228.0      | 1.25                               | 2.08       |
| 180   | 601D187F300JP1 | 1.000                       | x 2.625 | 468.0                    | 169.0      | 1.59                               | 2.64       |
| 220   | 601D227F300JS1 | 1.000                       | x 3.125 | 386.0                    | 139.0      | 1.88                               | 3.13       |
| 270   | 601D277F300JT1 | 1.000                       | x 3.625 | 318.0                    | 115.0      | 2.21                               | 3.67       |



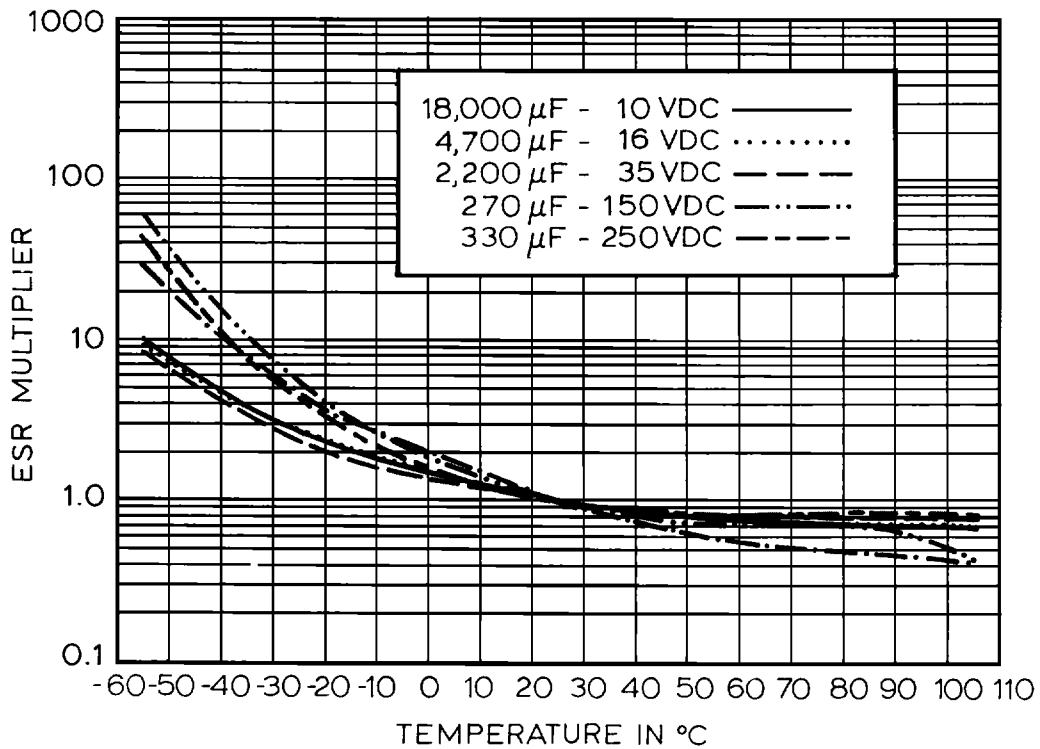
**TYPICAL CURVES**

**TYPE 601D — TYPICAL CAPACITANCE MULTIPLIER  
VS. TEMPERATURE @ 120 Hz**



Dwg. No. A-14,726

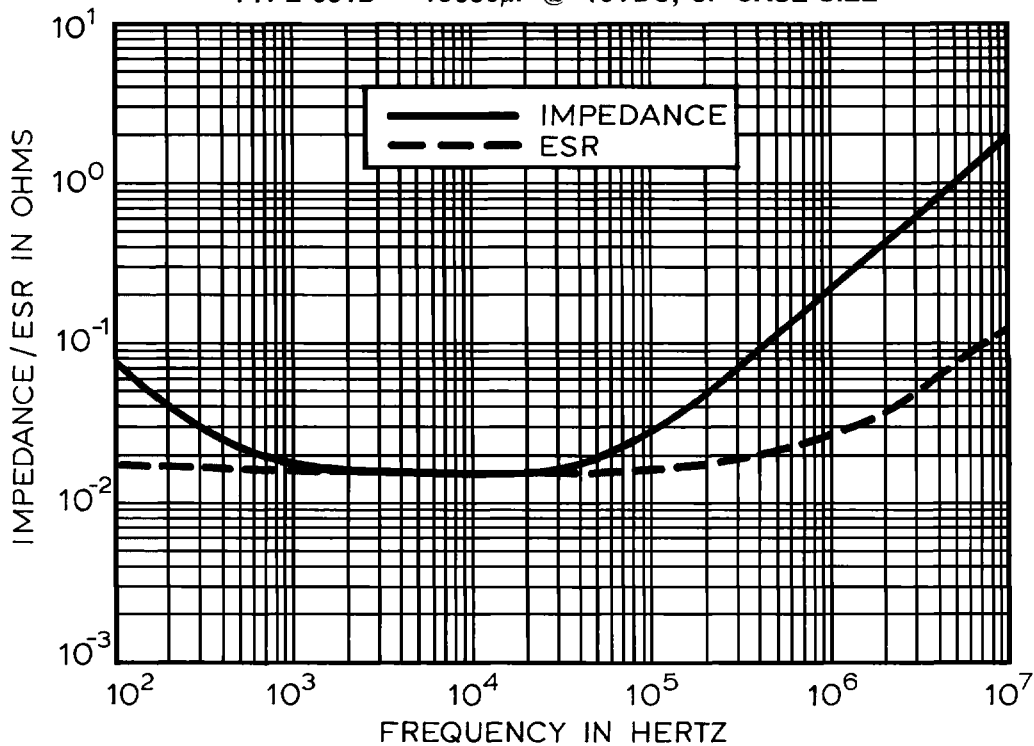
**TYPE 601D — TYPICAL ESR MULTIPLIER  
VS. TEMPERATURE @ 120 Hz**



Dwg. No. A-14,719

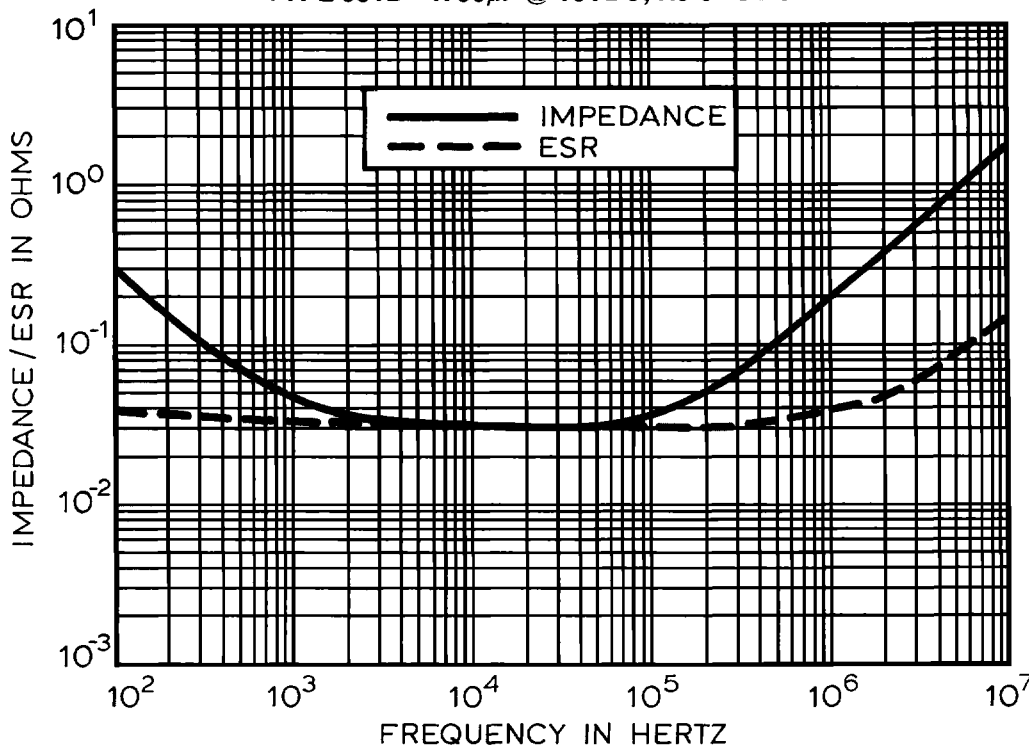
**TYPICAL CURVES @ +25°C**

**TYPE 601D — 18000 $\mu$ F @ 10VDC, JP CASE SIZE**



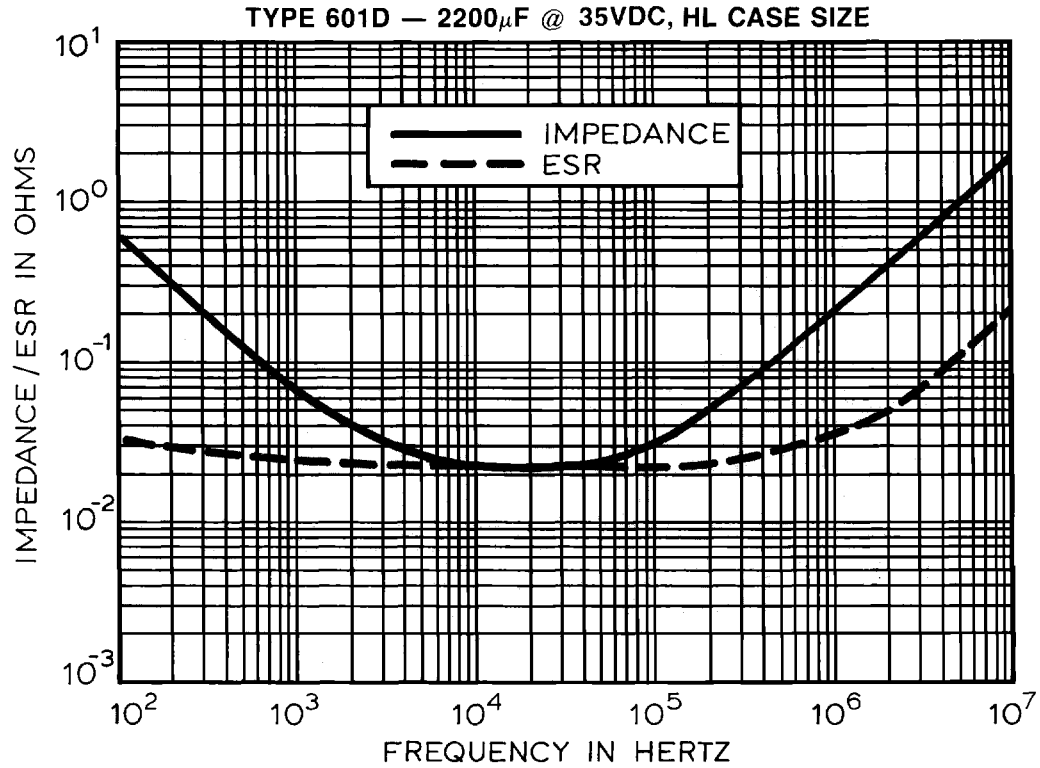
Dwg. No. A-14,663

**TYPE 601D - 4700 $\mu$ F @ 16VDC, HJ CASE SIZE**

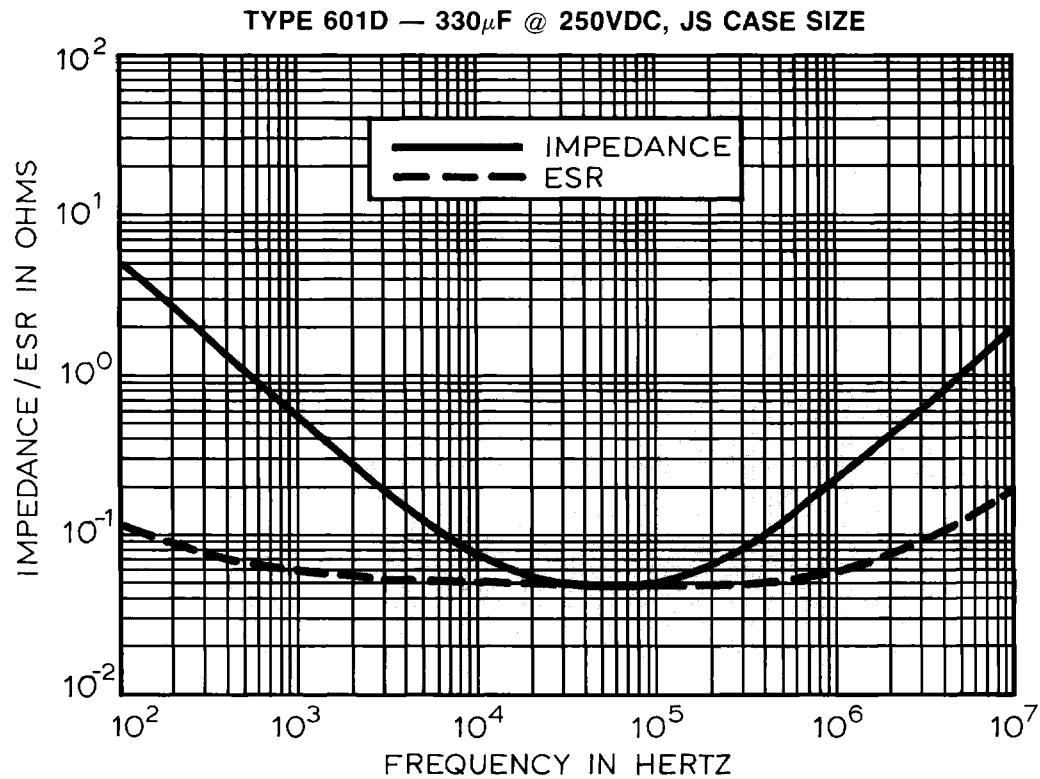


Dwg. No. A-14,662

**TYPICAL CURVES @ +25°C**



Dwg. No. A-14,661



Dwg. No. A-14,664