

**+ 85 °C and + 95 °C  
Large Can  
Aluminum  
Capacitors**

**Features —**

- The Industry Standard for Large Can Aluminum Capacitors
- Ideal for High Wattage Power Supplies and Energy Storage Applications
- Largest Capacitance Available
- Highest Voltage Available
- Metric Threads and Stud Mount Versions Included
- Replaces Type 36DY

**General Specifications —**

**Operating Temperature:**

- 40 °C to + 95 °C: 6.3 - 100 VDC.
- 40 °C to + 85 °C: 125 - 500 VDC.

**Voltage Range:** 6.3 - 500 VDC.

**Capacitance Range:** 100 μF - 2.2F.

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

**Case Size Range:** 1.375" x 1.625" - 3.0" x 8.675".

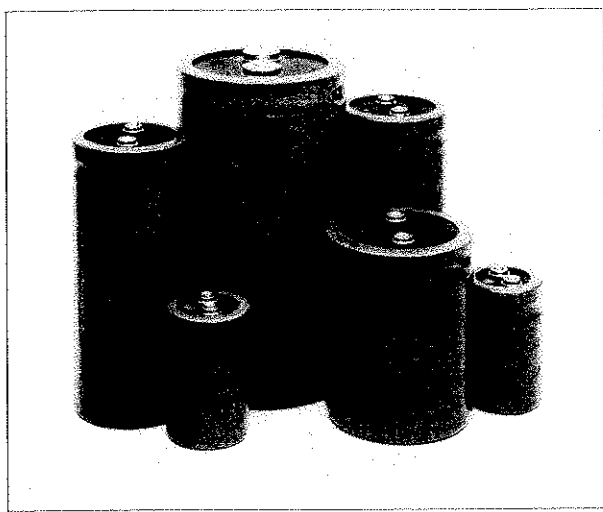
**Termination:** Screw insert or solderable terminals.

**Life Validation Test:** 2000 hours at +85 °C:

- Δ CAP ≤ 15% from initial measurement.
- Δ ESR ≤ 1.5x initial specified limit.
- Δ DCL ≤ initial specified limit.

**Shelf Test:** 500 hours at +85 °C:

- Δ CAP ≤ 15% from initial measurement.
- Δ ESR ≤ 1.2x initial specified limit.
- Δ DCL ≤ 2x initial specified limit.



L65-17

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

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

K = 4.0 at +25 °C; 32.0 at +85 °C.

C in μF, V in Volts, I in μA

**Ripple Current Multipliers:**

**TEMPERATURE**

Ambient Temperature	Multipliers
+85 °C	1.0
+75 °C	1.4
+65 °C	1.7
+55 °C & below	2.0

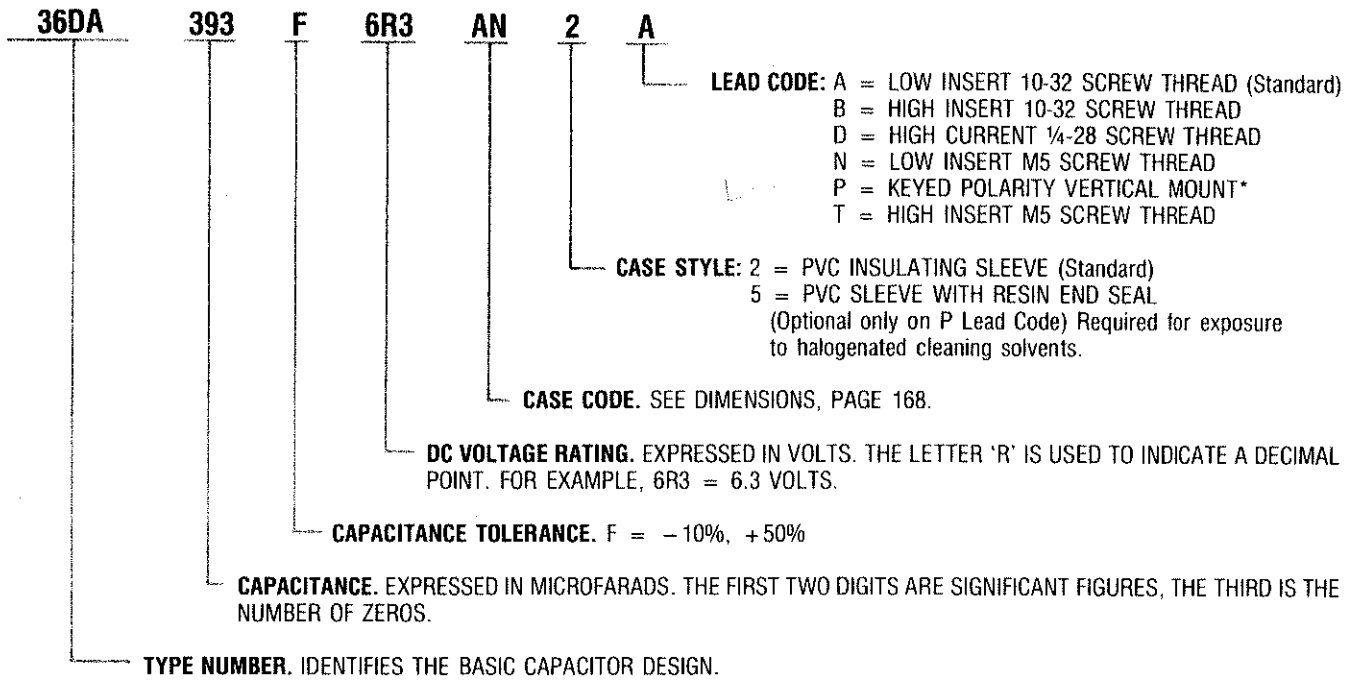
**FREQUENCY Hz**

Rated WVDC	120	400	1000 & Up
0-50	1.0	1.05	1.10
51-100	1.0	1.10	1.15
150-300	1.0	1.15	1.25
301-500	1.0	1.20	1.30

**Performance Characteristics —**

SEE PAGE 2.

**Catalog Numbering System**



\*Available on 1.375", 1.750" and 2.000" diameter units.



**STANDARD RATINGS**

μF	Catalog Number	Nominal Case	Max. ESR	Max. Ripple Current
		Size (inch) D x L	120Hz, +25°C (mΩ)	120Hz, +85°C (A)
<b>6.3 VOLTS DC WORKING; 8 VOLTS DC SURGE</b>				
39,000	36DA393F6R3AN2A	1.375 x 1.625	45.3	4.45
68,000	36DA683F6R3AA2A	1.375 x 2.125	28.9	6.13
82,000	36DA823F6R3AM2A	1.375 x 2.625	22.1	7.63
120,000	36DA124F6R3AB2A	1.375 x 3.125	18.3	9.00
150,000	36DA154F6R3AC2A	1.375 x 4.125	14.3	11.44
180,000	36DA184F6R3AD2A	1.375 x 4.625	13.1	12.54
220,000	36DA224F6R3AE2A	1.375 x 5.125	12.2	13.60
82,000	36DA823F6R3BY2A	2.000 x 1.875	21.9	8.62
120,000	36DA124F6R3BA2A	2.000 x 2.125	17.0	10.18
180,000	36DA184F6R3BM2A	2.000 x 2.625	12.1	13.02
220,000	36DA224F6R3BB2A	2.000 x 3.125	9.7	15.50
270,000	36DA274F6R3BL2A	2.000 x 3.625	8.3	17.73
330,000	36DA334F6R3BC2A	2.000 x 4.125	7.4	19.78
390,000	36DA394F6R3BD2A	2.000 x 4.625	6.7	21.80
470,000	36DA474F6R3BE2A	2.000 x 5.125	6.2	23.64
390,000	36DA394F6R3CB2A	2.500 x 3.125	6.3	22.22
560,000	36DA564F6R3CC2A	2.500 x 4.125	4.8	28.12
680,000	36DA684F6R3CD2D	2.500 x 4.625	4.4	30.70
820,000	36DA824F6R3CE2D	2.500 x 5.125	4.1	34.40
680,000	36DA684F6R3DL2A	3.000 x 3.625	5.5	28.10
820,000	36DA824F6R3DC2D	3.000 x 4.125	4.9	31.20
1,000,000	36DA105F6R3DD2D	3.000 x 4.625	4.5	34.00
1,200,000	36DA125F6R3DE2D	3.000 x 5.125	4.3	36.20
2,200,000	36DA225F6R3DJ2D	3.000 x 8.625	3.2	51.78
<b>10 VOLTS DC WORKING; 12 VOLTS DC SURGE</b>				
27,000	36DA273F010AN2A	1.375 x 1.625	46.3	4.40
47,000	36DA473F010AA2A	1.375 x 2.125	29.5	6.07
68,000	36DA683F010AM2A	1.375 x 2.625	22.5	7.56
82,000	36DA823F010AB2A	1.375 x 3.125	18.6	8.93
100,000	36DA104F010AL2A	1.375 x 3.625	16.2	10.16
120,000	36DA124F010AC2A	1.375 x 4.125	14.5	11.36
150,000	36DA154F010AD2A	1.375 x 4.625	13.3	12.44
180,000	36DA184F010AF2A	1.375 x 5.625	11.6	14.55
68,000	36DA683F010BY2A	2.000 x 1.875	22.3	8.54
82,000	36DA823F010BA2A	2.000 x 2.125	17.3	10.09
120,000	36DA124F010BM2A	2.000 x 2.625	12.3	12.91
180,000	36DA184F010BB2A	2.000 x 3.125	9.9	15.34
220,000	36DA224F010BL2A	2.000 x 3.625	8.4	17.62
270,000	36DA274F010BC2A	2.000 x 4.125	7.5	19.65
330,000	36DA334F010BE2A	2.000 x 5.125	6.3	23.45
390,000	36DA394F010BF2A	2.000 x 5.625	5.9	25.21
270,000	36DA274F010CB2A	2.500 x 3.125	6.4	21.90
470,000	36DA474F010CC2A	2.500 x 4.125	5.0	27.60
560,000	36DA564F010CE2A	2.500 x 5.125	4.8	28.30
680,000	36DA684F010CF2D	2.500 x 5.625	4.2	34.00
560,000	36DA564F010DL2A	3.000 x 3.625	5.5	28.10
680,000	36DA684F010DC2D	3.000 x 4.125	5.0	30.90
820,000	36DA824F010DD2D	3.000 x 4.625	4.5	34.00
1,000,000	36DA105F010DF2D	3.000 x 5.625	4.1	38.40
1,500,000	36DA155F010DJ2D	3.000 x 8.625	3.2	51.80



**STANDARD RATINGS**

μF	Catalog Number	Nominal Case Size (inch)		Max. ESR	Max. Ripple Current
		D	x L	120Hz, +25°C (mΩ)	120Hz, +85°C (A)
<b>16 VOLTS DC WORKING; 20 VOLTS DC SURGE</b>					
18,000	36DA183F016AN2A	1.375	x 1.625	47.7	4.30
33,000	36DA333F016AA2A	1.375	x 2.125	30.4	5.90
47,000	36DA473F016AM2A	1.375	x 2.625	23.1	7.40
56,000	36DA563F016AB2A	1.375	x 3.125	19.1	8.80
68,000	36DA683F016AL2A	1.375	x 3.625	16.6	10.00
82,000	36DA823F016AC2A	1.375	x 4.125	14.8	11.20
100,000	36DA104F016AD2A	1.375	x 4.625	13.6	12.30
120,000	36DA124F016AF2A	1.375	x 5.625	11.8	14.40
39,000	36DA393F016BY2A	2.000	x 1.875	23.0	8.40
56,000	36DA563F016BA2A	2.000	x 2.125	17.7	9.90
82,000	36DA823F016BM2A	2.000	x 2.625	12.6	12.70
120,000	36DA124F016BB2A	2.000	x 3.125	10.1	15.10
150,000	36DA154F016BL2A	2.000	x 3.625	8.6	17.40
180,000	36DA184F016BC2A	2.000	x 4.125	7.6	19.50
220,000	36DA224F016BE2A	2.000	x 5.125	6.4	23.20
270,000	36DA274F016BF2A	2.000	x 5.625	6.0	25.00
180,000	36DA184F016CB2A	2.500	x 3.125	6.6	21.60
270,000	36DA274F016CC2A	2.500	x 4.125	5.1	27.20
330,000	36DA334F016CD2A	2.500	x 4.625	4.8	29.40
390,000	36DA394F016CE2D	2.500	x 5.125	4.7	30.10
470,000	36DA474F016CF2D	2.500	x 5.625	4.2	33.30
390,000	36DA394F016DL2A	3.000	x 3.625	5.5	28.10
470,000	36DA474F016DC2D	3.000	x 4.125	5.3	30.80
560,000	36DA564F016DE2D	3.000	x 5.125	4.3	36.10
680,000	36DA684F016DF2D	3.000	x 5.625	4.1	38.30
1,000,000	36DA105F016DJ2D	3.000	x 8.625	3.2	51.70
<b>25 VOLTS DC WORKING; 30 VOLTS DC SURGE</b>					
8,200	36DA822F025AN2A	1.375	x 1.625	51.5	4.10
12,000	36DA123F025AA2A	1.375	x 2.125	32.6	5.70
18,000	36DA183F025AM2A	1.375	x 2.625	24.7	7.20
27,000	36DA273F025AB2A	1.375	x 3.125	20.3	8.50
33,000	36DA333F025AL2A	1.375	x 3.625	17.6	9.70
39,000	36DA393F025AC2A	1.375	x 4.125	15.7	10.90
47,000	36DA473F025AE2A	1.375	x 5.125	13.2	13.00
56,000	36DA563F025AF2A	1.375	x 5.625	12.4	14.00
18,000	36DA183F025BY2A	2.000	x 1.875	25.1	8.00
22,000	36DA223F025BA2A	2.000	x 2.125	19.3	9.50
39,000	36DA393F025BM2A	2.000	x 2.625	13.7	12.20
47,000	36DA473F025BB2A	2.000	x 3.125	10.9	14.60
68,000	36DA683F025BL2A	2.000	x 3.625	9.2	16.80
82,000	36DA823F025BC2A	2.000	x 4.125	8.1	18.90
100,000	36DA104F025BE2A	2.000	x 5.125	6.8	22.50
120,000	36DA124F025BF2A	2.000	x 5.625	6.3	24.30
82,000	36DA823F025CB2A	2.500	x 3.125	8.9	18.60
120,000	36DA124F025CC2A	2.500	x 4.125	6.7	23.80
150,000	36DA154F025CD2A	2.500	x 4.625	6.0	26.30
180,000	36DA184F025CE2A	2.500	x 5.125	5.6	28.40
150,000	36DA154F025DL2A	3.000	x 3.625	5.8	27.40
180,000	36DA184F025DC2D	3.000	x 4.125	5.2	30.30
220,000	36DA224F025DD2D	3.000	x 4.625	4.9	32.60
270,000	36DA274F025DE2D	3.000	x 5.125	4.5	35.30
470,000	36DA474F025DJ2D	3.000	x 8.625	3.5	49.50



STANDARD RATINGS

μF	Catalog Number	Nominal Case Size (inch)		Max. ESR 120Hz, +25°C (mΩ)	Max. Ripple Current 120Hz, +85°C (A)
		D	x L		
35 VOLTS DC WORKING; 40 VOLTS DC SURGE					
5,600	36DA562F035AN2A	1.375	x 1.625	63.9	3.70
10,000	36DA103F035AA2A	1.375	x 2.125	39.9	5.20
15,000	36DA153F035AM2A	1.375	x 2.625	29.9	6.50
18,000	36DA183F035AB2A	1.375	x 3.125	24.3	7.80
22,000	36DA223F035AL2A	1.375	x 3.625	20.9	8.90
27,000	36DA273F035AC2A	1.375	x 4.125	18.5	10.00
33,000	36DA333F035AD2A	1.375	x 4.625	16.7	11.10
39,000	36DA393F035AE2A	1.375	x 5.125	15.4	12.10
12,000	36DA123F035BY2A	2.000	x 1.875	33.1	7.00
18,000	36DA183F035BA2A	2.000	x 2.125	25.2	8.30
27,000	36DA273F035BM2A	2.000	x 2.625	17.6	10.70
39,000	36DA393F035BB2A	2.000	x 3.125	13.8	12.90
47,000	36DA473F035BL2A	2.000	x 3.625	11.5	15.00
56,000	36DA563F035BC2A	2.000	x 4.125	10.0	17.00
68,000	36DA683F035BD2A	2.000	x 4.625	9.0	18.80
82,000	36DA823F035BE2A	2.000	x 5.125	8.2	20.50
68,000	36DA683F035CB2A	2.500	x 3.125	8.9	18.60
100,000	36DA104F035CC2A	2.500	x 4.125	6.7	23.80
120,000	36DA124F035CD2A	2.500	x 4.625	6.2	25.90
150,000	36DA154F035CF2D	2.500	x 5.625	5.2	30.60
120,000	36DA124F035DL2A	3.000	x 3.625	9.8	21.00
150,000	36DA154F035DC2A	3.000	x 4.125	8.5	23.60
180,000	36DA184F035DD2A	3.000	x 4.625	7.5	26.30
220,000	36DA224F035DF2D	3.000	x 5.625	6.2	31.20
330,000	36DA334F035DJ2D	3.000	x 8.625	4.5	43.60
50 VOLTS DC WORKING; 63 VOLTS DC SURGE					
3,900	36DA392F050AN2A	1.375	x 1.625	64.0	3.70
6,800	36DA682F050AA2A	1.375	x 2.125	40.0	5.20
10,000	36DA103F050AM2A	1.375	x 2.625	29.0	6.60
12,000	36DA123F050AB2A	1.375	x 3.125	24.0	7.80
15,000	36DA153F050AL2A	1.375	x 3.625	20.0	9.10
18,000	36DA183F050AC2A	1.375	x 4.125	18.2	10.10
22,000	36DA223F050AD2A	1.375	x 4.625	16.3	11.20
27,000	36DA273F050AF2A	1.375	x 5.625	14.0	13.20
8,200	36DA822F050BY2A	2.000	x 1.875	31.0	7.20
12,000	36DA123F050BA2A	2.000	x 2.125	24.0	8.50
18,000	36DA183F050BM2A	2.000	x 2.625	16.9	11.00
27,000	36DA273F050BB2A	2.000	x 3.125	13.3	13.20
33,000	36DA333F050BL2A	2.000	x 3.625	11.9	14.80
39,000	36DA393F050BC2A	2.000	x 4.125	10.4	16.60
47,000	36DA473F050BD2A	2.000	x 4.625	8.9	18.90
56,000	36DA563F050BF2A	2.000	x 5.625	7.7	22.00
47,000	36DA473F050CB2A	2.500	x 3.125	9.5	18.10
68,000	36DA683F050CC2A	2.500	x 4.125	7.1	23.10
82,000	36DA823F050CD2A	2.500	x 4.625	6.4	25.50
100,000	36DA104F050CF2A	2.500	x 5.625	5.9	28.10
82,000	36DA823F050DL2A	3.000	x 3.625	6.2	26.50
100,000	36DA104F050DC2A	3.000	x 4.125	5.6	29.20
120,000	36DA124F050DD2D	3.000	x 4.625	5.1	31.90
150,000	36DA154F050DF2D	3.000	x 5.625	4.5	36.70
220,000	36DA224F050DJ2D	3.000	x 8.625	3.6	48.80



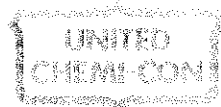
STANDARD RATINGS

μF	Catalog Number	Nominal Case	Max. ESR	Max. Ripple Current
		Size (inch) D x L	120Hz, +25°C (mΩ)	120Hz, +85°C (A)
<b>63 VOLTS DC WORKING; 79 VOLTS DC SURGE</b>				
2,700	36DA272F063AN2A	1.375 x 1.625	69.0	3.62
4,700	36DA472F063AA2A	1.375 x 2.125	42.0	5.10
6,800	36DA682F063AM2A	1.375 x 2.625	31.0	6.47
8,200	36DA822F063AB2A	1.375 x 3.125	25.0	7.72
10,000	36DA103F063AL2A	1.375 x 3.625	22.0	8.75
12,000	36DA123F063AC2A	1.375 x 4.125	19.2	9.87
15,000	36DA153F063AD2A	1.375 x 4.625	17.2	11.00
18,000	36DA183F063AE2A	1.375 x 5.125	15.7	12.00
6,800	36DA682F063BY2A	2.000 x 1.875	32.0	7.08
8,200	36DA822F063BA2A	2.000 x 2.125	25.0	8.42
12,000	36DA123F063BM2A	2.000 x 2.625	17.4	10.90
18,000	36DA183F063BB2A	2.000 x 3.125	13.9	13.00
22,000	36DA223F063BL2A	2.000 x 3.625	11.7	15.00
27,000	36DA273F063BC2A	2.000 x 4.125	10.2	16.90
33,000	36DA333F063BD2A	2.000 x 4.625	9.1	18.70
39,000	36DA393F063BF2A	2.000 x 5.625	7.8	21.90
27,000	36DA273F063CB2A	2.500 x 3.125	9.7	17.90
47,000	36DA473F063CC2A	2.500 x 4.125	7.3	22.80
56,000	36DA563F063CD2A	2.500 x 4.625	6.6	25.10
68,000	36DA683F063CF2A	2.500 x 5.625	5.7	29.20
56,000	36DA563F063DL2A	3.000 x 3.625	6.3	26.30
68,000	36DA683F063DC2A	3.000 x 4.125	5.7	28.90
82,000	36DA823F063DD2D	3.000 x 4.625	5.2	31.60
100,000	36DA104F063DF2D	3.000 x 5.625	4.5	36.70
150,000	36DA154F063DJ2D	3.000 x 8.625	3.7	48.20
<b>100 VOLTS DC WORKING; 125 VOLTS DC SURGE</b>				
1,200	36DA122F100AN2A	1.375 x 1.625	116.5	2.70
2,200	36DA222F100AA2A	1.375 x 2.125	70.9	3.90
3,300	36DA332F100AM2A	1.375 x 2.625	51.8	4.90
3,900	36DA392F100AB2A	1.375 x 3.125	41.4	5.90
4,700	36DA472F100AL2A	1.375 x 3.625	34.7	6.90
5,600	36DA562F100AC2A	1.375 x 4.125	30.2	7.80
6,800	36DA682F100AD2A	1.375 x 4.625	25.0	9.43
8,200	36DA822F100AF2A	1.375 x 5.625	22.3	10.40
2,700	36DA272F100BY2A	2.000 x 1.875	59.0	5.27
3,900	36DA392F100BA2A	2.000 x 2.125	46.0	6.19
5,600	36DA562F100BM2A	2.000 x 2.625	30.0	8.29
8,200	36DA822F100BB2A	2.000 x 3.125	23.0	10.00
10,000	36DA103F100BL2A	2.000 x 3.625	18.9	11.80
12,000	36DA123F100BC2A	2.000 x 4.125	16.3	13.30
15,000	36DA153F100BD2A	2.000 x 4.625	14.8	14.70
18,000	36DA183F100BF2A	2.000 x 5.625	12.3	17.40
15,000	36DA153F100CB2A	2.500 x 3.125	14.8	14.50
18,000	36DA183F100CC2A	2.500 x 4.125	10.4	19.10
22,000	36DA223F100CD2A	2.500 x 4.625	9.5	20.90
27,000	36DA273F100CE2A	2.500 x 5.125	8.6	22.90
33,000	36DA333F100CF2A	2.500 x 5.625	7.8	25.00
27,000	36DA273F100DL2A	3.000 x 3.625	11.2	19.70
33,000	36DA333F100DC2A	3.000 x 4.125	9.7	22.20
39,000	36DA393F100DD2A	3.000 x 4.625	8.6	24.50
47,000	36DA473F100DF2A	3.000 x 5.625	7.0	29.30
68,000	36DA683F100DJ2D	3.000 x 8.625	5.4	39.90



STANDARD RATINGS

μF	Catalog Number	Nominal Case	Max. ESR	Max. Ripple Current
		Size (inch)	120Hz, +25°C	120Hz, +85°C
		D x L	(mΩ)	(A)
160 VOLTS DC WORKING; 200 VOLTS DC SURGE				
560	36DA561F160AN2A	1.375 x 1.625	242.1	1.50
1,000	36DA102F160AA2A	1.375 x 2.125	145.0	2.20
1,500	36DA152F160AM2A	1.375 x 2.625	104.4	2.80
1,800	36DA182F160AB2A	1.375 x 3.125	82.1	3.40
2,200	36DA222F160AL2A	1.375 x 3.625	68.0	4.00
2,700	36DA272F160AC2A	1.375 x 4.125	58.2	4.60
3,300	36DA332F160AD2A	1.375 x 4.625	51.1	5.10
3,900	36DA392F160AE2A	1.375 x 5.125	45.7	5.70
1,200	36DA122F160BY2A	2.000 x 1.875	174.9	2.40
1,800	36DA182F160BA2A	2.000 x 2.125	131.2	2.90
2,700	36DA272F160BM2A	2.000 x 2.625	88.3	3.90
3,900	36DA392F160BB2A	2.000 x 3.125	67.3	4.80
4,700	36DA472F160BL2A	2.000 x 3.625	54.7	5.60
5,600	36DA562F160BC2A	2.000 x 4.125	46.4	6.40
6,800	36DA682F160BD2A	2.000 x 4.625	40.5	7.20
8,200	36DA822F160BE2A	2.000 x 5.125	36.1	7.90
6,800	36DA682F160CB2A	2.500 x 3.125	33.7	7.80
10,000	36DA103F160CC2A	2.500 x 4.125	23.3	10.40
12,000	36DA123F160CD2A	2.500 x 4.625	20.3	11.60
15,000	36DA153F160CF2A	2.500 x 5.625	16.4	14.00
12,000	36DA123F160DL2A	3.000 x 3.625	29.4	9.90
15,000	36DA153F160DC2A	3.000 x 4.125	24.9	11.30
18,000	36DA183F160DD2A	3.000 x 4.625	21.7	12.60
22,000	36DA223F160DF2A	3.000 x 5.625	17.4	15.20
33,000	36DA333F160DJ2A	3.000 x 8.625	11.5	22.30
200 VOLTS DC WORKING; 255 VOLTS DC SURGE				
470	36DA471F200AN2A	1.375 x 1.625	254.0	1.54
680	36DA681F200AA2A	1.375 x 2.125	150.0	2.20
1,000	36DA102F200AM2A	1.375 x 2.625	102.0	2.90
1,500	36DA152F200AB2A	1.375 x 3.125	84.0	3.43
1,800	36DA182F200AL2A	1.375 x 3.625	70.0	4.00
2,200	36DA222F200AD2A	1.375 x 4.625	57.9	4.80
2,700	36DA272F200AE2A	1.375 x 5.125	47.0	5.66
1,000	36DA102F200BY2A	2.000 x 1.875	158.0	2.62
1,200	36DA122F200BA2A	2.000 x 2.125	108.0	3.30
2,200	36DA222F200BM2A	2.000 x 2.625	72.0	4.36
2,700	36DA272F200BB2A	2.000 x 3.125	60.0	5.09
3,300	36DA332F200BL2A	2.000 x 3.625	49.0	5.97
3,900	36DA392F200BC2A	2.000 x 4.125	40.0	6.95
4,700	36DA472F200BD2A	2.000 x 4.625	33.0	8.02
5,600	36DA562F200BE2A	2.000 x 5.125	33.0	8.39
6,800	36DA682F200BF2A	2.000 x 5.625	23.0	10.42
4,700	36DA472F200CB2A	2.500 x 3.125	32.0	8.03
6,800	36DA682F200CC2A	2.500 x 4.125	22.0	10.73
8,200	36DA822F200CD2A	2.500 x 4.625	19.0	12.07
10,000	36DA103F200CE2A	2.500 x 5.125	19.7	12.80
8,200	36DA822F200DL2A	3.000 x 3.625	20.0	12.04
10,000	36DA103F200DC2A	3.000 x 4.125	20.0	12.50
12,000	36DA123F200DD2A	3.000 x 4.625	17.0	14.27
15,000	36DA153F200DE2A	3.000 x 5.125	14.0	16.36
27,000	36DA273F200DJ2A	3.000 x 8.625	8.0	26.75



STANDARD RATINGS

μF	Catalog Number	Nominal Case	Max. ESR	Max. Ripple Current
		Size (inch) D x L	120Hz, +25°C (mΩ)	120Hz, +85°C (A)
250 VOLTS DC WORKING; 300 VOLTS DC SURGE				
330	36DA331F250AN2A	1.375 x 1.625	275.0	1.48
560	36DA561F250AA2A	1.375 x 2.125	158.0	2.15
820	36DA821F250AM2A	1.375 x 2.625	132.0	2.55
1,000	36DA102F250AB2A	1.375 x 3.125	90.0	3.31
1,200	36DA122F250AL2A	1.375 x 3.625	74.0	3.89
1,500	36DA152F250AC2A	1.375 x 4.125	62.0	4.49
1,800	36DA182F250AD2A	1.375 x 4.625	65.4	4.55
2,200	36DA222F250AE2A	1.375 x 5.125	49.0	5.54
820	36DA821F250BY2A	2.000 x 1.875	165.0	2.56
1,000	36DA102F250BA2A	2.000 x 2.125	113.0	3.23
1,500	36DA152F250BM2A	2.000 x 2.625	77.0	4.21
2,200	36DA222F250BB2A	2.000 x 3.125	62.0	5.01
2,700	36DA272F250BL2A	2.000 x 3.625	51.0	5.85
3,300	36DA332F250BC2A	2.000 x 4.125	42.0	6.78
3,900	36DA392F250BD2A	2.000 x 4.625	34.0	7.90
4,700	36DA472F250BF2A	2.000 x 5.625	29.0	9.44
3,900	36DA392F250CB2A	2.500 x 3.125	34.0	7.79
5,600	36DA562F250CC2A	2.500 x 4.125	23.0	10.49
6,800	36DA682F250CD2A	2.500 x 4.625	19.0	12.07
8,200	36DA822F250CF2A	2.500 x 5.625	16.0	14.23
6,800	36DA682F250DL2A	3.000 x 3.625	24.0	10.99
8,200	36DA822F250DC2A	3.000 x 4.125	20.0	12.61
10,000	36DA103F250DD2A	3.000 x 4.625	17.0	14.27
12,000	36DA123F250DF2A	3.000 x 5.625	11.0	19.14
18,000	36DA183F250DJ2A	3.000 x 8.625	8.0	26.75
300 VOLTS DC WORKING; 350 VOLTS DC SURGE				
220	36DA221F300AN2A	1.375 x 1.625	833.0	0.85
390	36DA391F300AA2A	1.375 x 2.125	548.0	1.15
560	36DA561F300AM2A	1.375 x 2.625	351.0	1.56
680	36DA681F300AB2A	1.375 x 3.125	259.0	1.96
820	36DA821F300AL2A	1.375 x 3.625	220.0	2.25
1,000	36DA102F300AC2A	1.375 x 4.125	175.0	2.67
1,200	36DA122F300AD2A	1.375 x 4.625	162.0	2.91
1,500	36DA152F300AE2A	1.375 x 5.125	118.0	3.60
560	36DA561F300BY2A	2.000 x 1.875	386.0	1.68
680	36DA681F300BA2A	2.000 x 2.125	268.0	2.09
1,200	36DA122F300BM2A	2.000 x 2.625	191.0	2.68
1,500	36DA152F300BB2A	2.000 x 3.125	149.0	3.23
1,800	36DA182F300BL2A	2.000 x 3.625	124.0	3.74
2,200	36DA222F300BC2A	2.000 x 4.125	105.0	4.29
2,700	36DA272F300BD2A	2.000 x 4.625	98.0	4.65
3,300	36DA332F300BF2A	2.000 x 5.625	72.0	5.89
2,700	36DA272F300CB2A	2.500 x 3.125	88.0	4.84
3,900	36DA392F300CC2A	2.500 x 4.125	58.0	6.60
4,700	36DA472F300CD2A	2.500 x 4.625	48.0	7.59
5,600	36DA562F300CF2A	2.500 x 5.625	39.0	8.95
4,700	36DA472F300DL2A	3.000 x 3.625	50.0	7.61
5,600	36DA562F300DC2A	3.000 x 4.125	41.0	8.81
6,800	36DA682F300DD2A	3.000 x 4.625	34.9	9.95
8,200	36DA822F300DE2A	3.000 x 5.125	32.0	10.82
12,000	36DA123F300DJ2A	3.000 x 8.625	17.5	18.08





# LARGE CAN CAPACITORS

TYPE 36DA

## STANDARD RATINGS

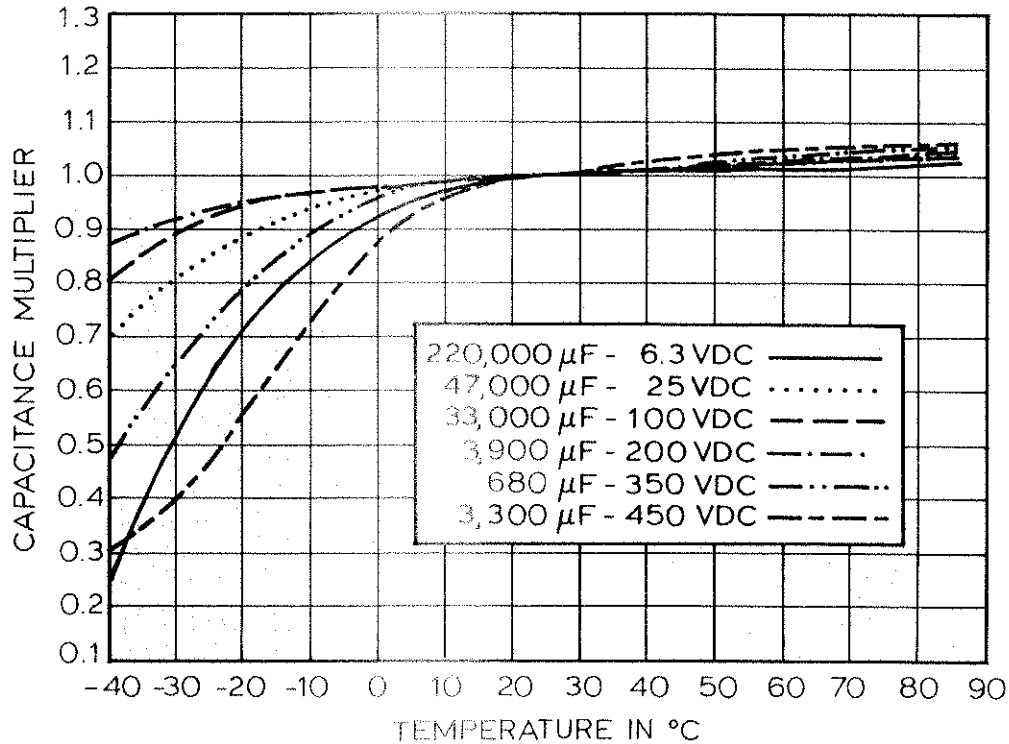
μF	Catalog Number	Nominal Case	Max. ESR 120Hz, +25°C (mΩ)	Max. Ripple Current 120Hz, +85°C (A)
		Size (inch) D x L		
350 VOLTS DC WORKING- 400 VOLTS DC SURGE				
180	36DA181F350AN2A	1.375 x 1.625	853.0	0.84
270	36DA271F350AA2A	1.375 x 2.125	590.6	1.12
470	36DA471F350AM2A	1.375 x 2.625	388.0	1.49
560	36DA561F350AB2A	1.375 x 3.125	272.0	1.91
680	36DA681F350AL2A	1.375 x 3.625	228.0	2.21
820	36DA821F350AC2A	1.375 x 4.125	188.0	2.58
1,000	36DA102F350AD2A	1.375 x 4.625	177.0	2.70
1,200	36DA122F350AF2A	1.375 x 5.625	128.0	3.58
390	36DA391F350BY2A	2.000 x 1.875	412.0	1.62
560	36DA561F350BA2A	2.000 x 2.125	289.0	2.02
820	36DA821F350BM2A	2.000 x 2.625	200.0	2.61
1,200	36DA122F350BB2A	2.000 x 3.125	166.0	3.06
1,500	36DA152F350BL2A	2.000 x 3.625	136.0	3.58
1,800	36DA182F350BC2A	2.000 x 4.125	113.0	4.13
2,200	36DA222F350BE2A	2.000 x 5.125	94.3	4.94
2,700	36DA272F350BF2A	2.000 x 5.625	76.0	5.73
1,800	36DA182F350CB2A	2.500 x 3.125	90.0	4.79
2,700	36DA272F350CC2A	2.500 x 4.125	61.0	6.44
3,300	36DA332F350CD2A	2.500 x 4.625	50.0	7.44
3,900	36DA392F350CE2A	2.500 x 5.125	48.0	7.92
4,700	36DA472F350CF2A	2.500 x 5.625	41.0	8.89
3,900	36DA392F350DL2A	3.000 x 3.625	53.0	7.39
4,700	36DA472F350DC2A	3.000 x 4.125	44.0	8.50
5,600	36DA562F350DD2A	3.000 x 4.625	37.0	9.68
6,800	36DA682F350DF2A	3.000 x 5.625	36.0	10.50
10,000	36DA103F350DJ2A	3.000 x 8.625	18.0	17.83
400 VOLTS DC WORKING- 450 VOLTS DC SURGE				
150	36DA151F400AN2A	1.375 x 1.625	964.0	0.79
270	36DA271F400AA2A	1.375 x 2.125	643.0	1.06
390	36DA391F400AM2A	1.375 x 2.625	429.0	1.41
470	36DA471F400AB2A	1.375 x 3.125	351.0	1.68
560	36DA561F400AL2A	1.375 x 3.625	246.0	2.13
680	36DA681F400AC2A	1.375 x 4.125	207.0	2.58
820	36DA821F400AD2A	1.375 x 4.625	192.0	2.67
1,000	36DA102F400AE2A	1.375 x 5.125	170.0	2.98
390	36DA391F400BY2A	2.000 x 1.875	466.0	1.54
470	36DA471F400BA2A	2.000 x 2.125	372.0	1.78
680	36DA681F400BM2A	2.000 x 2.625	219.0	2.50
1,000	36DA102F400BB2A	2.000 x 3.125	181.0	2.93
1,200	36DA122F400BL2A	2.000 x 3.625	150.0	3.41
1,500	36DA152F400BC2A	2.000 x 4.125	123.0	3.96
1,800	36DA182F400BD2A	2.000 x 4.625	102.0	4.56
2,200	36DA222F400BF2A	2.000 x 5.625	82.0	5.52
1,800	36DA182F400CB2A	2.500 x 3.125	101.0	4.52
2,700	36DA272F400CC2A	2.500 x 4.125	67.0	5.15
3,300	36DA332F400CE2A	2.500 x 5.125	55.0	7.39
3,900	36DA392F400CF2A	2.500 x 5.625	45.0	8.48
3,300	36DA332F400DL2A	3.000 x 3.625	59.0	7.01
3,900	36DA392F400DC2A	3.000 x 4.125	48.0	8.14
4,700	36DA472F400DD2A	3.000 x 4.625	39.0	9.42
5,600	36DA562F400DF2A	3.000 x 5.625	34.6	10.78
8,200	36DA822F400DJ2A	3.000 x 8.625	19.0	17.36



STANDARD RATINGS

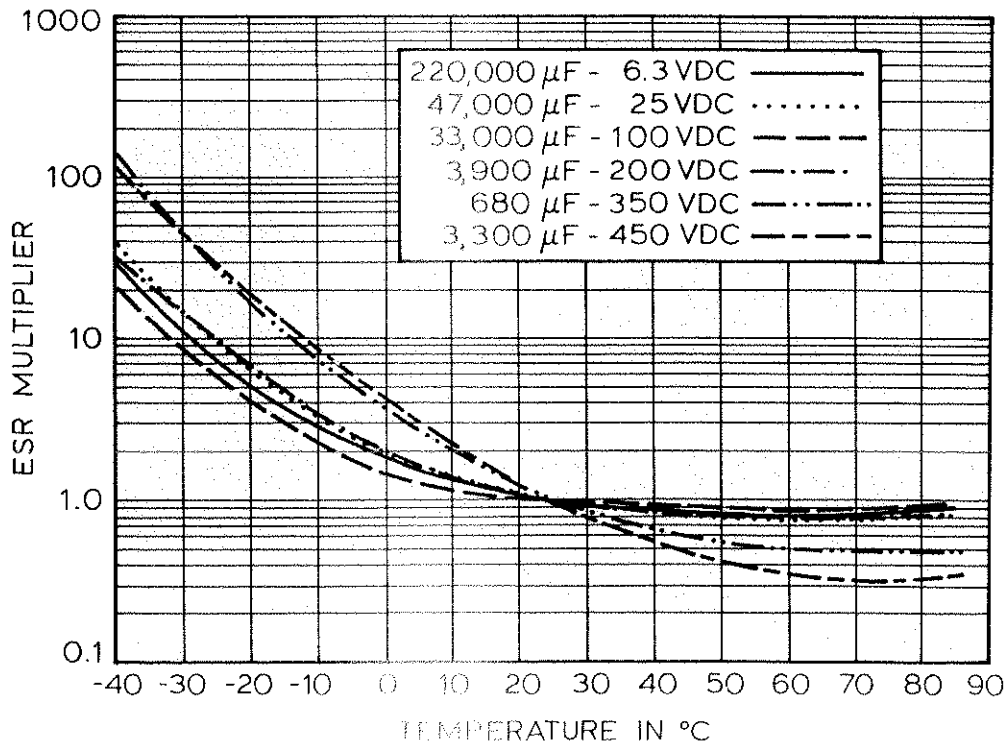
μF	Catalog Number	Nominal Case	Max. ESR	Max. Ripple Current
		Size (inch) D x L	120Hz, +25°C (mΩ)	120Hz, +85°C (A)
450 VOLTS DC WORKING; 500 VOLTS DC SURGE				
120	36DA121F450AN2A	1.375 x 1.625	1048.0	0.76
220	36DA221F450AA2A	1.375 x 2.125	582.0	1.12
330	36DA331F450AM2A	1.375 x 2.625	388.0	1.45
390	36DA391F450AB2A	1.375 x 3.125	317.0	1.77
470	36DA471F450AL2A	1.375 x 3.625	269.0	2.04
560	36DA561F450AC2A	1.375 x 4.125	223.0	2.37
680	36DA681F450AD2A	1.375 x 4.625	187.0	2.71
820	36DA821F450AE2A	1.375 x 5.125	164.0	3.13
270	36DA271F450BY2A	2.000 x 1.875	419.0	1.61
390	36DA391F450BA2A	2.000 x 2.125	343.0	1.85
560	36DA561F450BM2A	2.000 x 2.625	241.0	2.38
820	36DA821F450BB2A	2.000 x 3.125	166.0	3.06
1,000	36DA102F450BL2A	2.000 x 3.625	138.0	3.55
1,200	36DA122F450BC2A	2.000 x 4.125	113.0	4.13
1,500	36DA152F450BD2A	2.000 x 4.625	94.0	4.75
1,800	36DA182F450BF2A	2.000 x 5.625	75.0	5.77
1,500	36DA152F450CB2A	2.500 x 3.125	93.0	4.71
2,200	36DA222F450CC2A	2.500 x 4.125	62.0	6.39
2,700	36DA272F450CE2A	2.500 x 5.125	56.4	7.30
3,300	36DA332F450CF2A	2.500 x 5.625	42.0	8.78
2,700	36DA272F450DL2A	3.000 x 3.625	54.0	7.33
3,300	36DA332F450DC2A	3.000 x 4.125	44.0	8.50
3,900	36DA392F450DD2A	3.000 x 4.625	36.0	10.20
4,700	36DA472F450DF2A	3.000 x 5.625	34.0	10.88
6,800	36DA682F450DJ2A	3.000 x 8.625	21.0	16.51
500 VOLTS DC WORKING; 525 VOLTS DC SURGE				
100	36DA101F500AN2A	1.375 x 1.625	1535.6	0.60
150	36DA151F500AA2A	1.375 x 2.125	907.8	0.80
220	36DA221F500AM2A	1.375 x 2.625	645.3	1.10
270	36DA271F500AB2A	1.375 x 3.125	501.1	1.40
390	36DA391F500AL2A	1.375 x 3.625	409.9	1.60
470	36DA471F500AD2A	1.375 x 4.625	301.1	2.10
560	36DA561F500AE2A	1.375 x 5.125	266.1	2.30
680	36DA681F500AF2A	1.375 x 5.625	238.5	2.60
220	36DA221F500BY2A	2.000 x 1.875	719.0	1.20
270	36DA271F500BA2A	2.000 x 2.125	534.8	1.40
470	36DA471F500BM2A	2.000 x 2.625	354.6	1.90
560	36DA561F500BB2A	2.000 x 3.125	265.9	2.40
680	36DA681F500BL2A	2.000 x 3.625	213.1	2.80
820	36DA821F500BC2A	2.000 x 4.125	178.1	3.20
1,000	36DA102F500BD2A	2.000 x 4.625	153.2	3.70
1,200	36DA122F500BE2A	2.000 x 5.125	134.6	4.10

**TYPE 36DA — TYPICAL CAPACITANCE MULTIPLIER  
VS. TEMPERATURE @ 120 Hz**

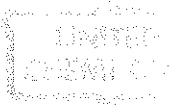


Dwg. No. A-14,714

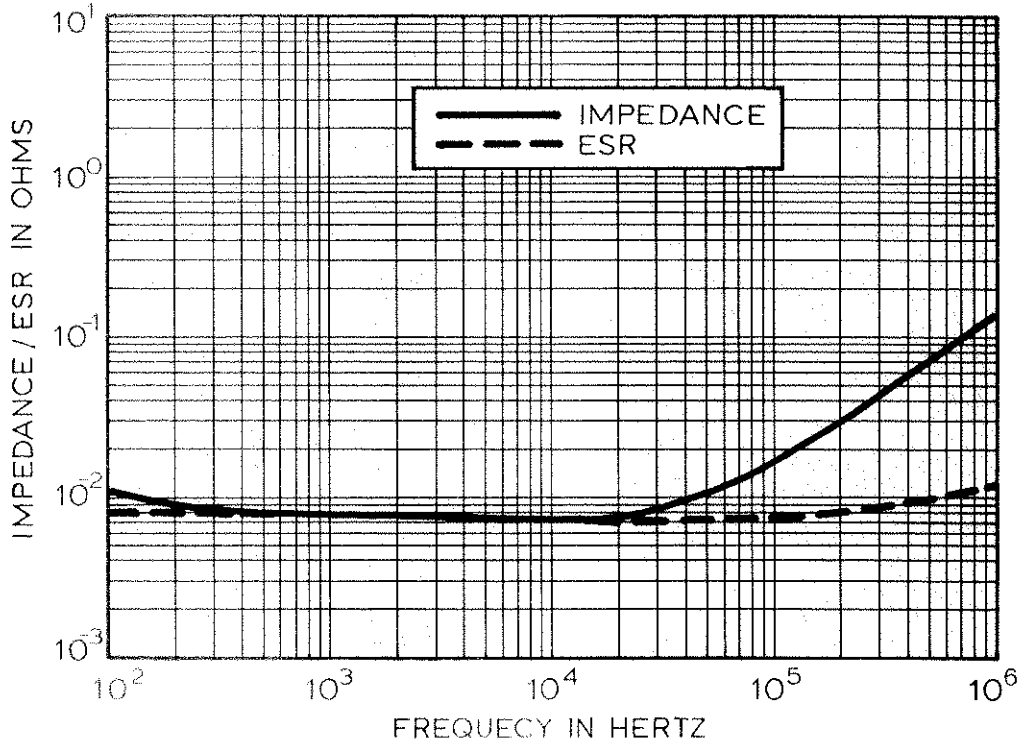
**TYPE 36DA — TYPICAL ESR MULTIPLIER  
VS. TEMPERATURE @ 120 Hz**



Dwg. No. A-14,722

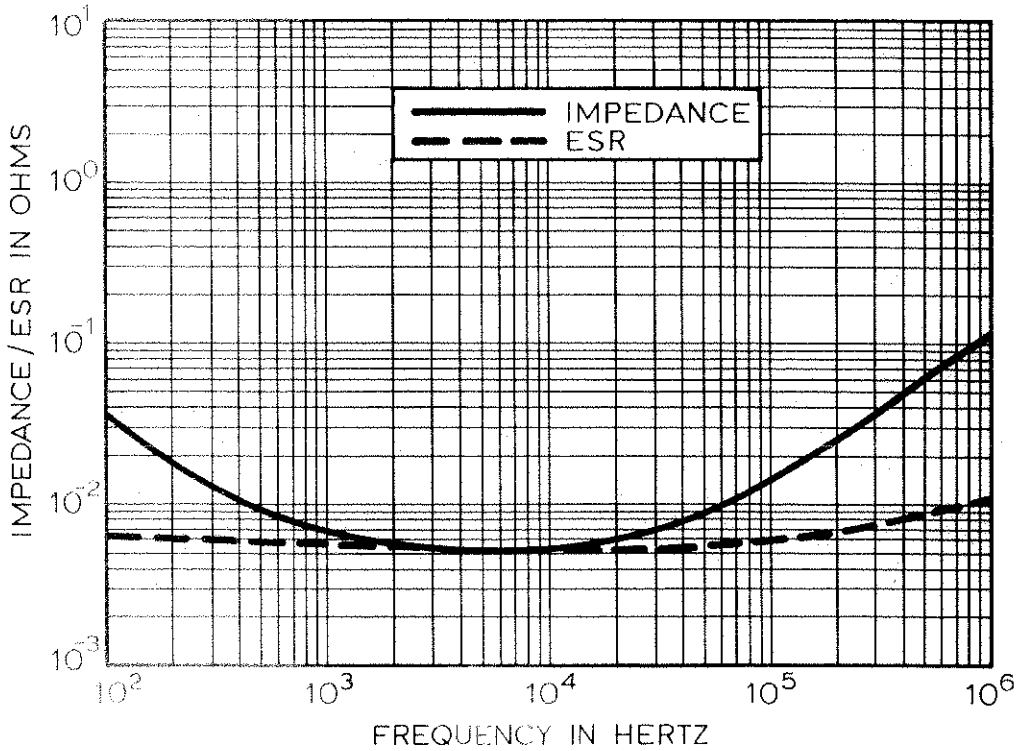


TYPE 36DA — 220,000  $\mu$ F @ 6.3VDC, BB CASE SIZE



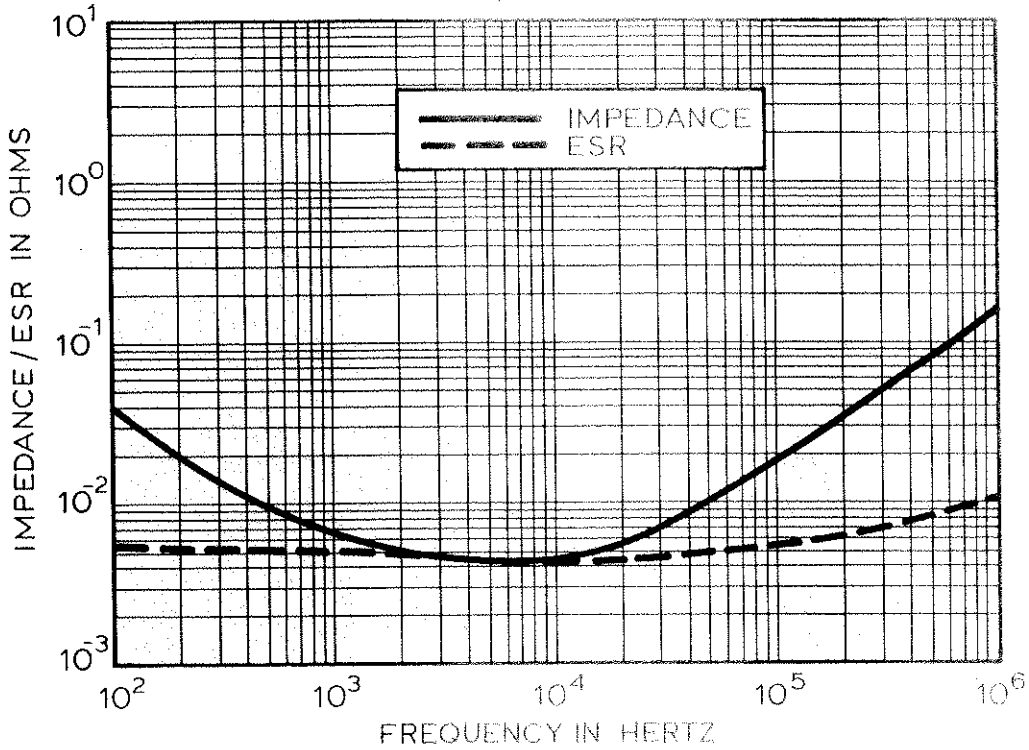
Dwg. No. A-14,642

TYPE 36DA — 47000  $\mu$ F @ 25VDC, BB CASE SIZE



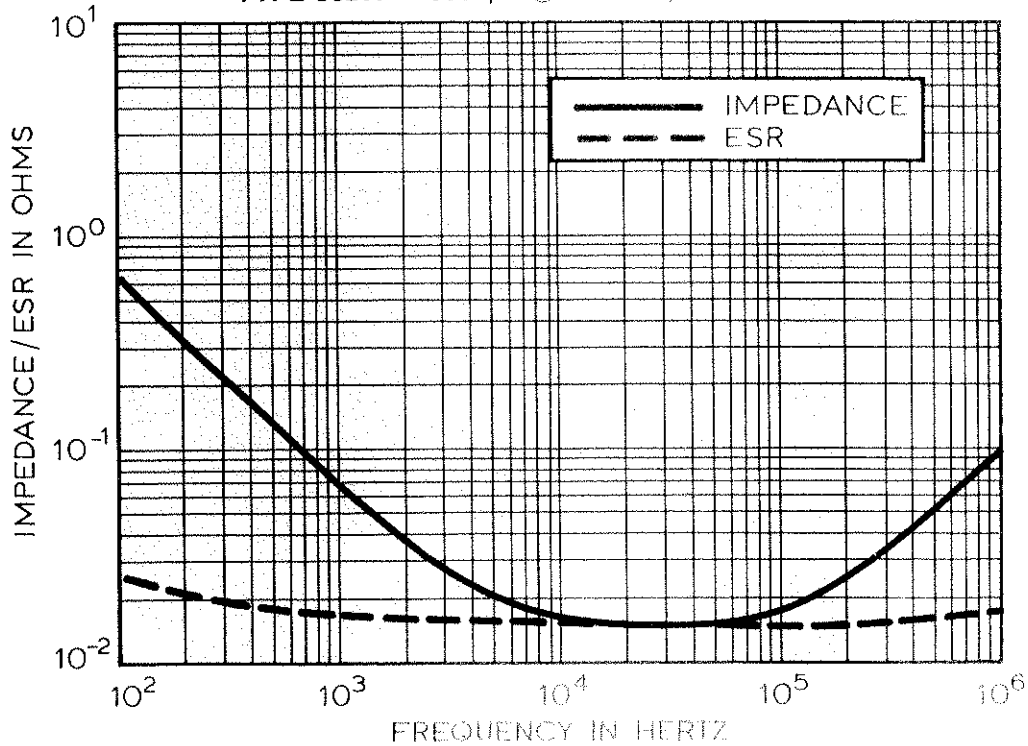
Dwg. No. A-14,641

**TYPE 36DA — 33000 $\mu$ F @ 100VDC, DC CASE SIZE**



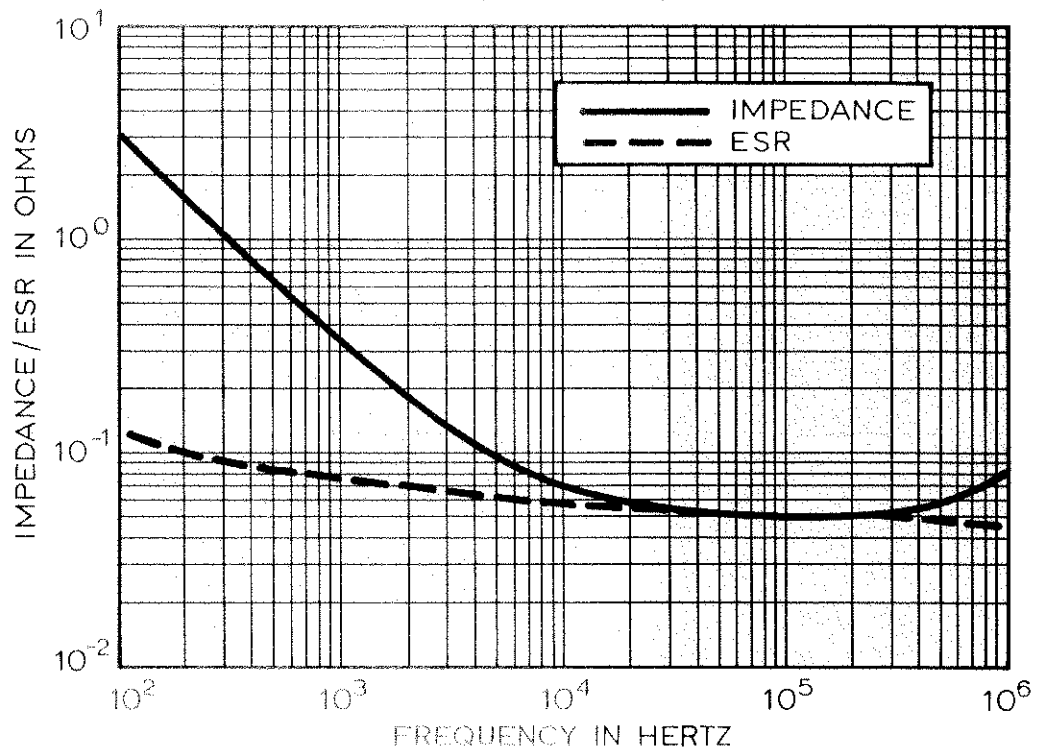
Dwg. No. A-14,648

**TYPE 36DA — 3900 $\mu$ F @ 200VDC, BC CASE SIZE**



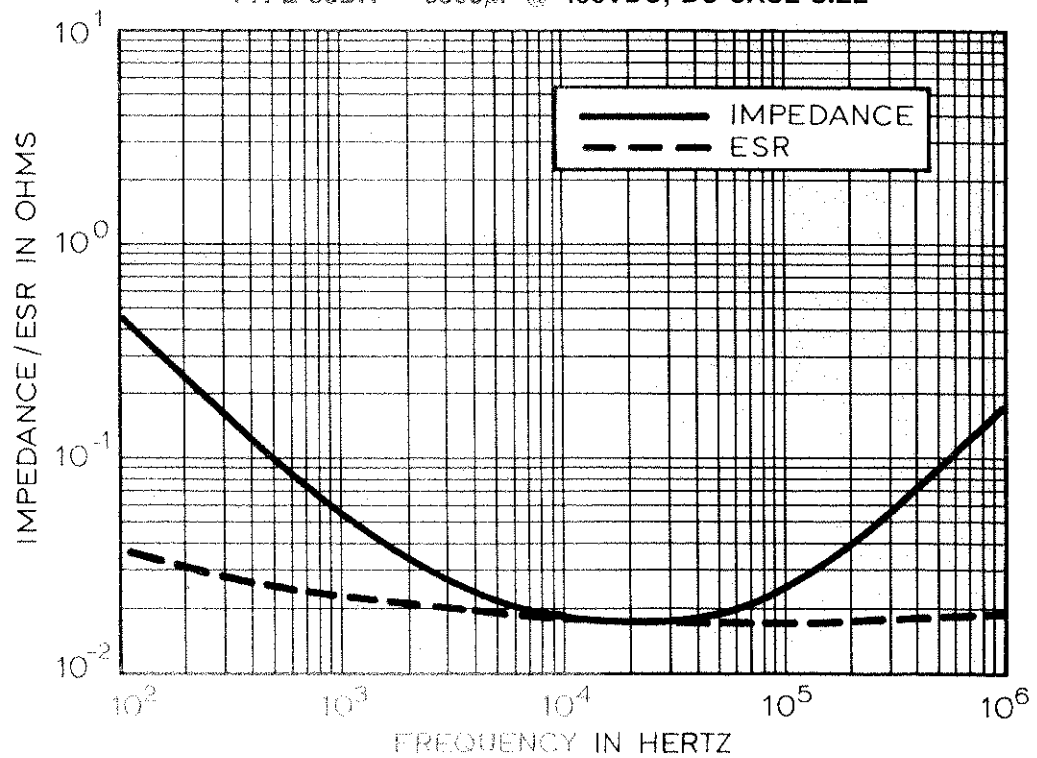
Dwg. No. A-14,648

TYPE 36DA — 680 $\mu$ F @ 350VDC, AL CASE SIZE



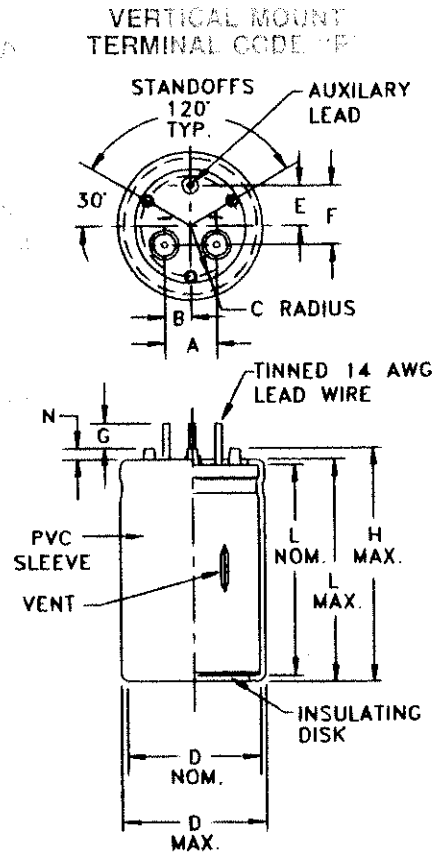
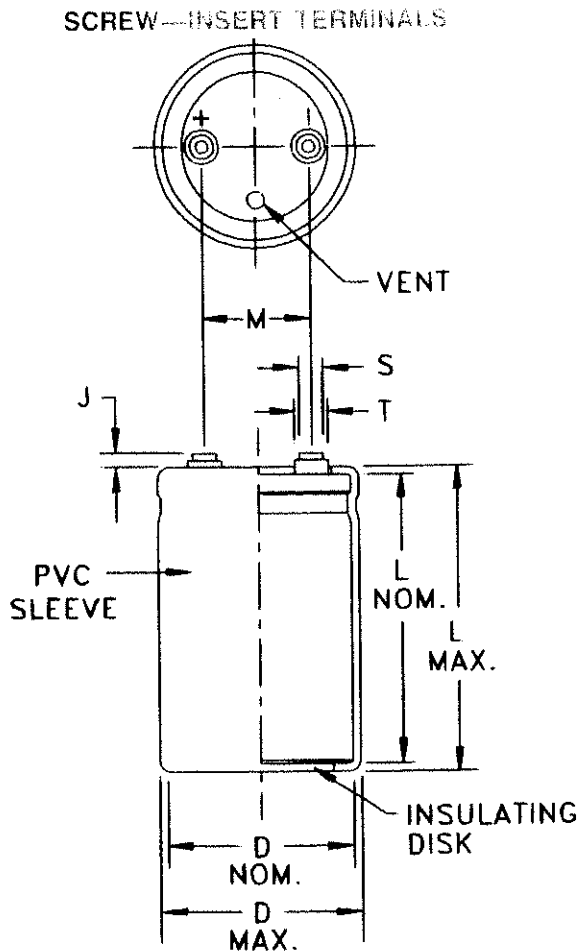
Dwg. No. A-14,638

TYPE 36DA — 3300 $\mu$ F @ 450VDC, DC CASE SIZE



Dwg. No. A-14,637

OUTLINE DRAWING



CIRCUIT BOARD VERTICAL MOUNT AVAILABLE ON "A", "E", AND "B" DIAMETER CODES ONLY ( $\leq 2.0$  inch - 51 mm-dia.)

SCREW INSERT TERMINAL DIMENSIONS

Terminal Code	Thread	Inches				Millimeters				Notes
		Thread Depth	Height $J \pm 0.032$	Diameter $S \pm 0.010$	Diameter $T \pm 0.010$	Thread Depth	Height $J \pm 0.8$	Diameter $S \pm 0.25$	Diameter $T \pm 0.25$	
A	10-32 NF-28	0.219	0.063	0.313	0.438	5.6	1.6	8.0	11.1	All sizes
B	10-32 NF-28	0.375	0.250	0.313	0.438	9.5	6.4	8.0	11.1	All sizes
D	1/4-28 NF-28	0.344	0.093	0.688*	---	8.7	2.4	17.5	---	C & D Dia. Codes Only
I	M5	0.375	0.250	0.313	---	9.5	6.4	8.0	---	602D, 622D, Series Only
N	M5	0.219	0.063	0.313	0.438	5.6	1.6	8.0	11.1	36D Series Only
T	M5	0.375	0.250	0.313	0.438	9.5	6.4	8.0	11.1	36D Series Only

CIRCUIT BOARD MOUNT "P" TERMINAL DIMENSIONS

Inches Nominal Case Diameter	Inches							
	$A \pm 0.032$	$B \pm 0.032$	$C^* \pm 0.032$	$E \pm 0.032$	$F \pm 0.032$	$G^* \pm 0.020$	N Min.	
1.375	0.500	0.250	0.469	0.375	0.550	0.312	0.050	
2.000	0.800	0.400	0.750	0.575	1.000	0.312	0.050	
Millimeters Nominal Case Diameter	Millimeters							
	$A \pm 0.8$	$B \pm 0.8$	$C^* \pm 0.8$	$E \pm 0.8$	$F \pm 0.8$	$G^* \pm 0.5$	N Min.	
35	12.7	6.4	11.9	9.5	14.0	7.9	1.3	
51	20.3	10.2	19.1	14.6	25.4	7.9	1.3	



DIMENSIONS FOR LARGE CAN CAPACITORS

DIMENSIONS IN INCHES

DIMENSIONS IN MILLIMETERS

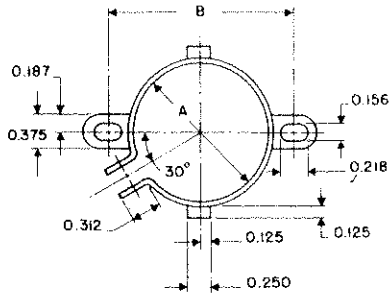
Case Code	Nominal		With Insulating Sleeve			Terminal Spacing	Case Code	Nominal		With Insulating Sleeve			Terminal Spacing	Typical Weight (Grams)
	D ± 0.032"	L ± 0.063"	D Max.	L Max.	(P Term) H Max.	M ± 0.016"		D ± .82mm	L ± 1.6mm	D Max.	L Max.	(P Term) H Max.	M ± 0.4mm	
AN	1.375	1.625	1.453	1.750	1.849	0.500	AN	35	41	36.9	44.5	47.0	12.7	43
AY	1.375	1.875	1.453	2.000	2.099	0.500	AY	35	48	36.9	50.8	53.3	12.7	54
AA	1.375	2.125	1.453	2.250	2.349	0.500	AA	35	54	36.9	57.2	59.7	12.7	63
AM	1.375	2.625	1.453	2.750	2.849	0.500	AM	35	67	36.9	69.9	72.4	12.7	82
AB	1.375	3.125	1.453	3.250	3.349	0.500	AB	35	79	36.9	82.6	85.1	12.7	105
AL	1.375	3.625	1.453	3.750	3.849	0.500	AL	35	92	36.9	95.3	97.8	12.7	122
AC	1.375	4.125	1.453	4.250	4.349	0.500	AC	35	105	36.9	108.0	110.5	12.7	129
AD	1.375	4.625	1.453	4.750	4.849	0.500	AD	35	117	36.9	120.7	123.2	12.7	162
AE	1.375	5.125	1.453	5.250	5.349	0.500	AE	35	130	36.9	133.4	125.9	12.7	179
AF	1.375	5.625	1.453	5.750	5.849	0.500	AF	35	143	36.9	146.1	148.6	12.7	201
EN	1.750	1.625	1.828	1.750	1.849	0.750	EN	44	41	46.4	44.5	47.0	19.1	71
EY	1.750	1.875	1.828	2.000	2.099	0.750	EY	44	48	46.4	50.8	53.3	19.1	88
EA	1.750	2.125	1.828	2.250	2.349	0.750	EA	44	54	46.4	57.2	59.7	19.1	102
EM	1.750	2.625	1.828	2.750	2.849	0.750	EM	44	67	46.4	69.9	72.4	19.1	133
EB	1.750	3.125	1.828	3.250	3.349	0.750	EB	44	79	46.4	82.6	85.1	19.1	167
EL	1.750	3.625	1.828	3.750	3.849	0.750	EL	44	92	46.4	95.3	97.8	19.1	198
EC	1.750	4.125	1.828	4.250	4.349	0.750	EC	44	105	46.4	108.0	110.5	19.1	230
ED	1.750	4.625	1.828	4.750	4.849	0.750	ED	44	117	46.4	120.7	123.2	19.1	252
EE	1.750	5.125	1.828	5.250	5.349	0.750	EE	44	130	46.4	133.4	135.9	19.1	269
EF	1.750	5.625	1.828	5.750	5.849	0.750	EF	44	143	46.4	146.1	148.6	19.1	318
BY	2.000	1.875	2.078	2.000	2.099	0.875	BY	51	48	52.8	50.8	53.3	22.2	113
BA	2.000	2.125	2.078	2.250	2.349	0.875	BA	51	54	52.8	57.2	59.7	22.2	133
BM	2.000	2.625	2.078	2.750	2.849	0.875	BM	51	67	52.8	69.9	72.4	22.2	176
BB	2.000	3.125	2.078	3.250	3.349	0.875	BB	51	79	52.8	82.6	85.1	22.2	213
BL	2.000	3.625	2.078	3.750	3.849	0.875	BL	51	92	52.8	95.3	97.8	22.2	261
BC	2.000	4.125	2.078	4.250	4.349	0.875	BC	51	105	52.8	108.0	110.5	22.2	381
BD	2.000	4.625	2.078	4.750	4.849	0.875	BD	51	117	52.8	120.7	123.2	22.2	326
BE	2.000	5.125	2.078	5.250	5.349	0.875	BE	51	130	52.8	133.4	135.9	22.2	337
BF	2.000	5.625	2.078	5.750	5.849	0.875	BF	51	143	52.8	146.1	148.6	22.2	408
CB	2.500	3.125	2.578	3.250	N/A	1.125	CB	64	79	65.5	82.6	N/A	28.6	329
CL	2.500	3.625	2.578	3.750	N/A	1.125	CL	64	92	65.5	95.3	N/A	28.6	400
CC	2.500	4.125	2.578	4.250	N/A	1.125	CC	64	105	65.5	108.0	N/A	28.6	473
CD	2.500	4.625	2.578	4.750	N/A	1.125	CD	64	117	65.5	120.7	N/A	28.6	562
CE	2.500	5.125	2.578	5.250	N/A	1.125	CE	64	130	65.5	133.4	N/A	28.6	607
CF	2.500	5.625	2.578	5.750	N/A	1.125	CF	64	143	65.5	146.1	N/A	28.6	675
DB	3.000	3.125	3.078	3.250	N/A	1.250	DB	76	79	78.2	82.6	N/A	31.8	496
DL	3.000	3.625	3.078	3.750	N/A	1.250	DL	76	92	78.2	95.3	N/A	31.8	598
DC	3.000	4.125	3.078	4.250	N/A	1.250	DC	76	105	78.2	108.0	N/A	31.8	700
DD	3.000	4.625	3.078	4.750	N/A	1.250	DD	76	117	78.2	120.7	N/A	31.8	802
DE	3.000	5.125	3.078	5.250	N/A	1.250	DE	76	130	78.2	133.4	N/A	31.8	944
DF	3.000	5.625	3.078	5.750	N/A	1.250	DF	76	143	78.2	146.1	N/A	31.8	1004
DJ	3.000	8.625	3.078	8.750	N/A	1.250	DJ	76	219	78.2	222.3	N/A	31.8	1403



**LARGE CAN BRACKETS (INCHES)**

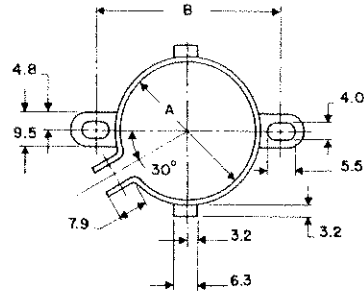
**LARGE CAN BRACKETS (MILLIMETERS)**

FIGURE 1



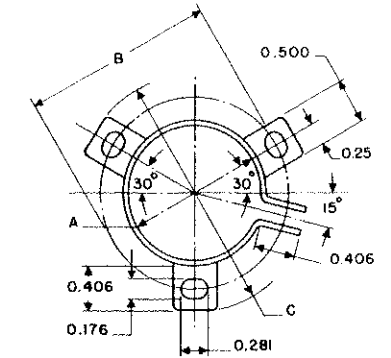
Dwg. No. A-14,749

FIGURE 1



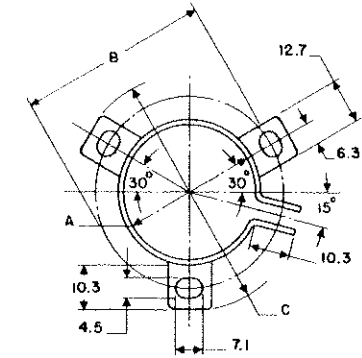
Dwg. No. A-14,750

FIGURE 2



Dwg. No. A-14,855

FIGURE 2



Dwg. No. A-14,856

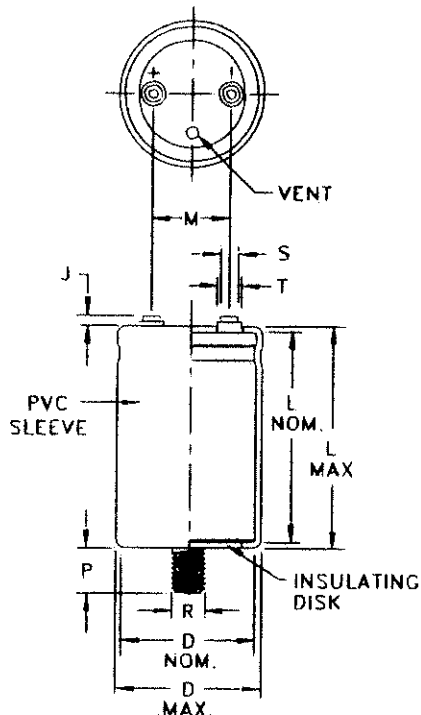
**BRACKETS \***

Type	Part Number	Bare Can Dia.	B	C	Figure Number
2 Feet	4586-97A	1.375	1.781	2.218	1
3 Feet	4586-48	2.000	2.500	2.875	2
3 Feet	4586-1	2.500	3.000	3.375	2
3 Feet	4586-2	3.000	3.500	3.875	2

Brackets are steel with zinc electroplate, plus a gold chromate post treatment.  
Bracket hardware is included.

OUTLINE DRAWING  
FOR STUD MOUNT OPTION (AS SPECIAL ORDER)  
LARGE CAN CAPACITORS

SCREW INSERT TERMINALS



(NOT AVAILABLE ON "DJ" CASE CODE,  
"E" DIAMETERS, AND "P" TERMINAL OPTION)

TERMINAL DIMENSIONS

SEE PAGE 167 FOR DIMENSIONS

STUD DIMENSIONS

Case Diameter	R Thread	P ±1.0mm Height
A	M8	12
B, C, D	M12	16
E	N/A	N/A

LARGE CAN MOUNTING KITS (INSULATED)

LARGE CAN MOUNTING KITS (UNINSULATED)

FIGURE 2

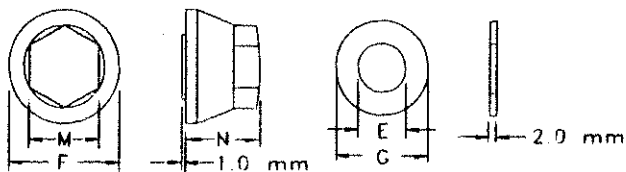
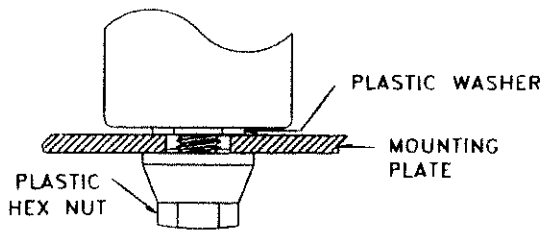
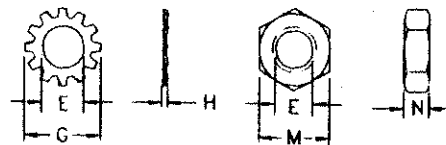
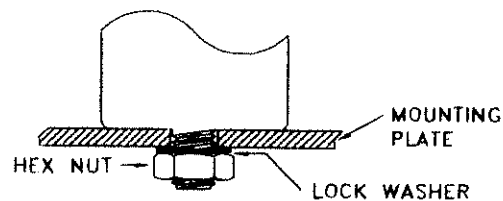


FIGURE 3



MOUNTING KITS

(Dimensions in Millimeters)

Type	Part Number	E	F	G	H	M	N	Figure Number
Insulated M8	50-8	8.4	25	25.0	-	17	15	2
Uninsulated M8	50-8A	8.4	-	14.0	0.8	13	4	3
Insulated M12	50-8B	13.0	30	25.0	-	19	20	2
Uninsulated M12	50-8C	13.0	-	20.5	1.0	19	7	3

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for Aluminium Electrolytic Capacitors - Screw Terminal category:*

*Click to view products by United Chemicon manufacturer:*

Other Similar products are found below :

[A331FH221M500A](#) [A331FB472M063A](#) [A331FD153M040A](#) [A331FD682M063A](#) [A331LH223M063A](#) [A331PM682M200A](#)  
[36DA332F350CD2A](#) [ETOR401CTH902QEG8N](#) [C1808N680J302T](#) [A331PM472M250A](#) [500X822U450DG1B](#) [A331LH683M025A](#)  
[A331LM333M063A](#) [A331TW682M500A](#) [500332U050BB2B](#) [ALS31B1003NX](#) [E32D600LPN133TDA5M](#) [550152M200BC2B](#)  
[36DX253G075DC2A](#) [101C282U063AK2A](#) [DB301V-3.5-3P-GN](#) [DB301V-3.5-2P-GN](#) [WR479M1JT1LO5](#) [OBJ35](#) [OBJ35A](#)  
[WL338M2WU1AD6](#) [WL 10000U/100V](#) [WL 4700U/200V](#) [B43310A5109M000](#) [B43310C9228M000](#) [B43310A9828M000](#)  
[GT1H109M35060SB](#) [GT1H229M35100SB](#) [GT1J229M35120SB](#) [GT2A229M51100SB](#) [GT2W227M35060SB](#) [GT2W228M64120SB](#)  
[WR229M1JS80O5](#) [WR188M2WS1MO5](#) [WL158M2WS1AO5](#) [WR478M2WU1PD6](#) [2738](#) [ALS30A151DB500](#) [ALS30A152KF350](#)  
[ALS30A682DF100](#) [ALS31A103DE063](#) [ALS40A223DB025](#) [ALS40A223KF063](#) [ALS40A472DF100](#) [ALS40A473DF025](#)