

Type 450C 105 °C Ultra-Ripple, Long-life, Inverter Grade, Radial Leaded

The Ultimate in Ripple for Plug-in



Type 450C is the 105 °C version of the Type 420C Inverter Grade capacitor, and it is the PC-mount version of the Type 550C. It delivers the ripple-current capability and exceptional life needed for motor-drive and inverter bus capacitors. It is a significantly better value than comparable 105 °C snap-in capacitors. The extended cathode foil of the 450C assures cool operation and heat flow from the capacitor element to the can in all orientations.

Highlights

- Better value than large 105 °C snap-in capacitors
- Especially for motor drives and UPS systems
- ESRs to 6.9 mΩ
- Printed-circuit mounting
- Thermal-Pak™ extended cathode construction

Specifications

Operating Temperature:	-40 °C to 105 °C
Rated Voltage:	100 to 500 Vdc
Capacitance:	150 µF to 24,000 µF ± 20%
DC Leakage Current:	≤ 3 √CV µA, 4 mA max, 5 minutes
Cold Impedance:	20 °C multiple of 25 °C Z ≤ 3
Ripple Current Multipliers:	Ambient Temperature

45 °C	55 °C	65 °C	75 °C	85 °C
1.80	1.63	1.45	1.25	1.00

Frequency

	50 Hz	60 Hz	120 Hz	360 Hz	1 kHz	5 kHz	10 kHz
1 3/8" & 1 3/4" Diameters							
100 to 350 V	0.91	0.93	1.00	1.06	1.08	1.09	1.09
400 to 500 V	0.82	0.86	1.00	1.14	1.20	1.23	1.23
2" Diameters							
100 to 350 V	0.92	0.94	1.00	1.05	1.07	1.08	1.08
400 to 500 V	0.82	0.86	1.00	1.14	1.20	1.23	1.27

EIA Ripple Life: 5000 h at 85 °C per EIA IS-749 with 85 °C ripple current

Δ Capacitance ± 20%
ESR 200 % of limit
DCL 100 % of limit

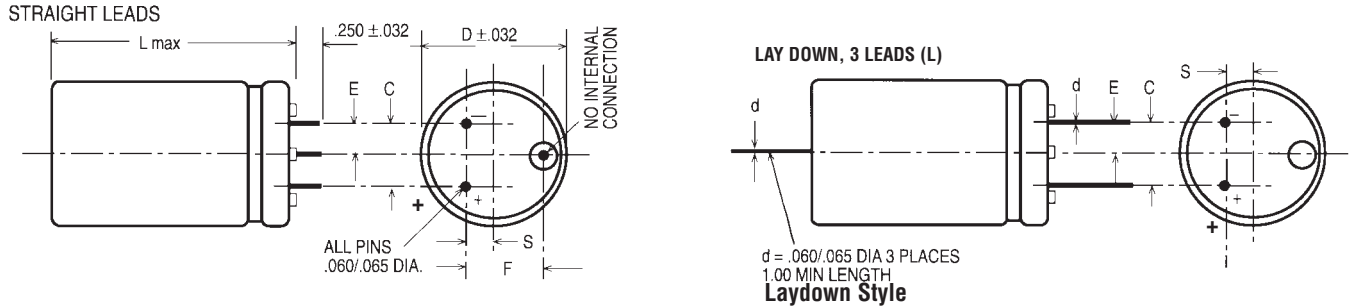
Life Test: 10,000 h at 105 °C with rated voltage

Δ Capacitance ± 10%
ESR 200 % of limit
DCL 100 % of limit

Shelf Life Test: 500 h at 105 °C. Capacitance, ESR and DCL meet initial requirements

Vibration: 10 to 55 Hz, 0.06" and 10 g max, 2 h each plane

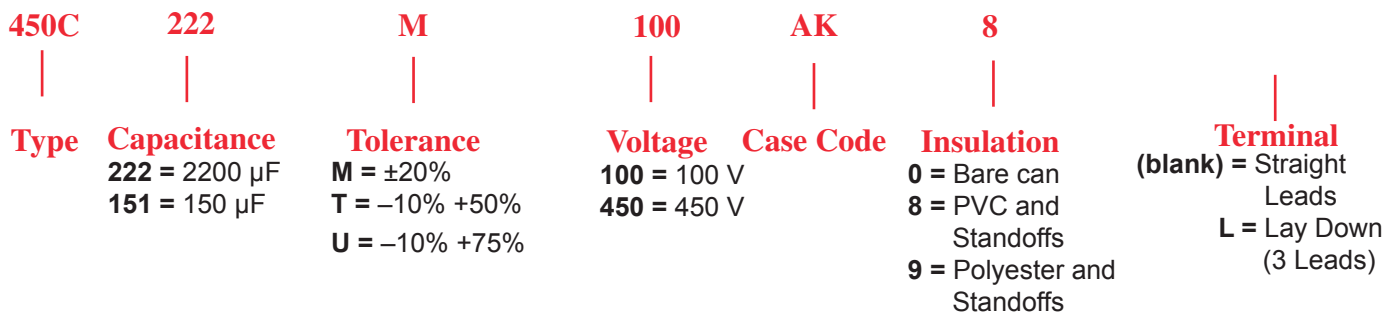
Type 450C 105 °C Ultra-Ripple, Long-life, Inverter Grade, Radial Leaded Outline Drawings



Case Dimensions

Case Code	Inches						Millimeters					
	D ±.031	L MAX	C ±.015	S ±.031	E ±.031	F ±.015	D ±.78	L MAX	C ±.78	S ±.78	E ±.78	F ±.38
AK	1.375	1.75	0.50	0.175	0.25	0.55	34.93	44.45	12.70	4.45	6.35	13.97
AA	1.375	2.25	0.50	0.175	0.25	0.55	34.93	57.15	12.70	4.45	6.35	13.97
AH	1.375	2.75	0.50	0.175	0.25	0.55	34.98	69.85	12.70	4.45	6.35	13.97
AB	1.375	3.25	0.50	0.175	0.25	0.55	34.93	82.55	12.70	4.45	6.35	13.97
AJ	1.375	3.75	0.50	0.175	0.25	0.55	34.93	95.25	12.70	4.45	6.35	13.97
AC	1.375	4.25	0.50	0.175	0.25	0.55	34.93	107.95	12.70	4.45	6.35	13.97
AD	1.375	4.75	0.50	0.175	0.25	0.55	34.93	120.65	12.70	4.45	6.35	13.97
AE	1.375	5.25	0.50	0.175	0.25	0.55	34.93	133.35	12.70	4.45	6.35	13.97
AF	1.375	5.75	0.50	0.175	0.25	0.55	34.93	146.05	12.70	4.45	6.35	13.97
EA	1.75	2.25	0.70	0.375	0.35	0.90	44.45	57.15	17.78	9.53	8.89	22.86
EH	1.75	2.75	0.70	0.375	0.35	0.90	44.45	69.85	17.78	9.53	8.89	22.86
EB	1.75	3.25	0.70	0.375	0.35	0.90	44.45	82.55	17.78	9.53	8.89	22.86
EJ	1.75	3.75	0.70	0.375	0.35	0.90	44.45	95.25	17.78	9.53	8.89	22.86
EC	1.75	4.25	0.70	0.375	0.35	0.90	44.45	107.95	17.78	9.53	8.89	22.86
ED	1.75	4.75	0.70	0.375	0.35	0.90	44.45	120.65	17.78	9.53	8.89	22.86
EE	1.75	5.25	0.70	0.375	0.35	0.90	44.45	133.35	17.78	9.53	8.89	22.86
EF	1.75	5.75	0.70	0.375	0.35	0.90	44.45	146.05	17.78	9.53	8.89	22.86
BA	2.00	2.25	0.80	0.425	0.40	1.00	50.80	57.15	20.32	10.80	10.16	25.40
BH	2.00	2.75	0.80	0.425	0.40	1.00	50.80	69.85	20.32	10.80	10.16	25.40
BB	2.00	3.25	0.80	0.425	0.40	1.00	50.80	82.55	20.32	10.80	10.16	25.40
BJ	2.00	3.75	0.80	0.425	0.40	1.00	50.80	95.25	20.32	10.80	10.16	25.40
BC	2.00	4.25	0.80	0.425	0.40	1.00	50.80	107.95	20.32	10.80	10.16	25.40
BD	2.00	4.75	0.80	0.425	0.40	1.00	50.80	120.65	20.32	10.80	10.16	25.40
BE	2.00	5.25	0.80	0.425	0.40	1.00	50.80	133.25	20.32	10.80	10.16	25.40
BF	2.00	5.75	0.80	0.425	0.40	1.00	50.80	146.05	20.32	10.80	10.16	25.40

Part Numbering System



Type 450C 105 °C Ultra-Ripple, Long-life, Inverter Grade, Radial Leaded Ratings

Cap. (µF)	Catalog Part Number	ESR Max. 25 °C		Ripple Amps, 85 °C		Nominal Size D X L (in)
		120 Hz (mΩ)	20 kHz (mΩ)	120 Hz (A)	20 kHz (A)	
100 Vdc (125 Vdc Surge)						
2200	450C222M100AK8	74.90	50.90	4.20	5.20	1 3/8 X 1 3/4
3300	450C332M100AA8	50.30	34.20	5.80	7.30	1 3/8 X 2 1/4
4000	450C402M100AH8	36.80	24.90	7.00	8.80	1 3/8 X 2 3/4
4800	450C482M100EA8	40.10	27.20	7.50	9.40	1 3/4 X 2 1/4
5800	450C582M100AB8	28.50	19.40	8.60	10.70	1 3/8 X 3 1/4
6100	450C612M100BA8	37.00	25.10	8.40	10.50	2 X 2 1/4
6600	450C662M100EH8	28.70	19.50	9.50	11.90	1 3/4 X 2 3/4
7100	450C712M100AJ8	23.50	15.90	9.90	12.40	1 3/8 X 3 3/4
8200	450C822M100BH8	26.30	17.80	10.70	13.40	2 X 2 3/4
8400	450C842M100AC8	20.10	13.60	11.30	14.10	1 3/8 X 4 1/4
8700	450C872M100EB8	22.20	15.10	11.70	14.60	1 3/4 X 3 1/4
9800	450C982M100AD8	17.70	12.00	12.60	15.80	1 3/8 X 4 3/4
11000	450C113M100AE8	15.90	10.80	13.90	17.40	1 3/8 X 5 1/4
11000	450C113M100EJ8	18.30	12.40	13.30	16.60	1 3/4 X 3 3/4
11000	450C113M100BB8	20.40	13.80	12.90	16.10	2 X 3 1/4
12000	450C123M100AF8	18.10	12.30	13.70	17.10	1 3/8 X 5 3/4
13000	450C133M100EC8	15.60	10.60	14.90	18.60	1 3/4 X 4 1/4
14000	450C143M100BJ8	16.80	11.40	15.90	19.90	2 X 3 3/4
15000	450C153M100ED8	13.70	9.30	16.80	21.00	1 3/4 X 4 3/4
16000	450C163M100BC8	14.40	9.80	17.30	21.60	2 X 4 1/4
17000	450C173M100EE8	12.30	8.40	18.80	23.40	1 3/4 X 5 1/4
18000	450C183M100BD8	12.70	8.60	19.00	23.70	2 X 4 3/4
19000	450C193M100EF8	11.30	7.60	21.00	26.20	1 3/4 X 5 3/4
22000	450C223M100BE8	11.10	7.50	21.00	26.20	2 X 5 1/4
24000	450C243M100BF8	10.20	6.90	22.70	28.40	2 X 5 3/4
160 Vdc (200 Vdc Surge)						
1200	450C122M160AK8	113.00	65.20	4.20	5.60	1 3/8 X 1 3/4
1800	450C182M160AA8	75.70	44.10	5.90	7.70	1 3/8 X 2 1/4
2600	450C262M160EA8	56.20	36.80	7.50	9.30	1 3/4 X 2 1/4
3000	450C302M160AH8	53.20	31.30	7.30	9.50	1 3/8 X 2 3/4
3300	450C332M160AB8	41.40	24.70	8.90	11.50	1 3/8 X 3 1/4
3300	450C332M160BA8	47.90	34.10	8.30	9.90	2 X 2 1/4
3600	450C362M160EH8	40.20	26.00	9.50	11.80	1 3/4 X 2 3/4
4000	450C402M160AJ8	34.20	20.60	10.20	13.10	1 3/8 X 3 3/4
4500	450C452M160BH8	33.90	23.80	10.70	12.70	2 X 2 3/4
4700	450C472M160EB8	31.20	20.40	11.70	14.40	1 3/4 X 3 1/4
4800	450C482M160AC8	29.40	18.00	11.60	14.80	1 3/8 X 4 1/4
5300	450C532M160AD8	26.90	16.50	12.70	16.20	1 3/8 X 4 3/4
5800	450C582M160EJ8	25.70	16.90	13.30	16.30	1 3/4 X 3 3/4
6000	450C602M160BB8	26.40	18.60	12.70	15.10	2 X 3 1/4
6100	450C612M160AE8	24.20	15.10	14.00	17.80	1 3/8 X 5 1/4
6700	450C672M160AF8	22.20	14.10	15.40	19.30	1 3/8 X 5 3/4
6900	450C692M160EC8	22.00	14.70	14.90	18.20	1 3/4 X 4 1/4
7400	450C742M160BJ8	21.70	15.50	15.70	18.60	2 X 3 3/4
8000	450C802M160ED8	19.40	13.10	16.70	20.30	1 3/4 X 4 3/4
8700	450C872M160BC8	18.70	13.40	17.10	20.10	2 X 4 1/4
9100	450C912M160EE8	17.50	11.90	18.60	22.60	1 3/4 X 5 1/4
10000	450C103M160EF8	16.00	11.00	20.80	25.10	1 3/4 X 5 3/4
10000	450C103M160BD8	16.50	11.90	18.70	22.00	2 X 4 3/4
12000	450C123M160BE8	14.50	10.70	20.70	24.10	2 X 5 1/4
13000	450C133M160BF8	13.40	9.90	22.30	25.90	2 X 5 3/4
200 Vdc (250 Vdc Surge)						
880	450C881M200AK8	142.00	78.90	3.80	5.00	1 3/8 X 1 3/4
1300	450C132M200AA8	95.50	53.30	5.30	7.00	1 3/8 X 2 1/4
1900	450C192M200EA8	68.40	42.50	6.80	8.70	1 3/4 X 2 1/4
2000	450C202M200AH8	66.90	37.70	6.50	8.60	1 3/8 X 2 3/4
2500	450C252M200AB8	51.90	29.50	7.90	10.50	1 3/8 X 3 1/4

Cap. (µF)	Catalog Part Number	ESR Max. 25 °C		Ripple Amps, 85 °C		Nominal Size D X L (in)
		120 Hz (mΩ)	20 kHz (mΩ)	120 Hz (A)	20 kHz (A)	
2500	450C252M200BA8	56.70	38.10	7.70	9.30	2 X 2 1/4
2700	450C272M200EH8	49.00	30.10	8.60	11.00	1 3/4 X 2 3/4
3000	450C302M200AJ8	42.70	24.60	9.10	12.00	1 3/8 X 3 3/4
3300	450C332M200BH8	40.30	26.70	9.80	12.00	2 X 2 3/4
3500	450C352M200EB8	37.90	23.50	10.60	13.40	1 3/4 X 3 1/4
3600	450C362M200AC8	36.50	21.30	10.40	13.60	1 3/8 X 4 1/4
4000	450C402M200AD8	33.40	19.50	11.40	14.90	1 3/8 X 4 3/4
4300	450C432M200EJ8	31.20	19.50	12.10	15.20	1 3/4 X 3 3/4
4400	450C442M200BB8	31.20	20.90	11.70	14.30	2 X 3 1/4
4500	450C452M200AE8	29.90	17.70	12.60	16.40	1 3/8 X 5 1/4
5000	450C502M200AF8	27.30	16.40	13.90	17.90	1 3/8 X 5 3/4
5100	450C512M200EC8	26.60	16.80	13.50	17.00	1 3/4 X 4 1/4
5500	450C552M200BJ8	25.70	17.30	14.50	17.60	2 X 3 3/4
6000	450C602M200ED8	23.40	14.90	15.20	19.00	1 3/4 X 4 3/4
6400	450C642M200BC8	22.00	14.90	15.70	19.10	2 X 4 1/4
6700	450C672M200EE8	21.00	13.50	17.00	21.20	1 3/4 X 5 1/4
7400	450C742M200BD8	19.40	13.30	17.30	20.90	2 X 4 3/4
7600	450C762M200EF8	19.10	12.50	19.00	23.60	1 3/4 X 5 3/4
8900	450C892M200BE8	16.90	11.80	19.10	22.90	2 X 5 1/4
9800	450C982M200BF8	15.50	10.90	20.70	24.70	2 X 5 3/4
250 Vdc (300 Vdc Surge)						
550	450C551M250AK8	210.00	87.30	3.10	4.80	1 3/8 X 1 3/4
830	450C831M250AA8	141.00	58.90	4.30	6.70	1 3/8 X 2 1/4
1000	450C102M250AH8	98.10	41.60	5.40	8.20	1 3/8 X 2 3/4
1200	450C122M250EA8	96.10	45.90	5.80	8.30	1 3/4 X 2 1/4
1500	450C152M250BA8	76.50	40.60	6.60	9.00	2 X 2 1/4
1600	450C162M250AB8	75.70	32.50	6.50	10.00	1 3/8 X 3 1/4
1700	450C172M250EH8	69.20	32.60	7.20	10.60	1 3/4 X 2 3/4
1900	450C192M250AJ8	62.00	27.00	7.60	11.50	1 3/8 X 3 3/4
2100	450C212M250BH8	54.70	28.50	8.40	11.60	2 X 2 3/4
2200	450C222M250EB8	53.40	25.40	8.90	12.90	1 3/4 X 3 1/4
2300	450C232M250AC8	52.70	23.30	8.70	13.00	1 3/8 X 4 1/4
2500	450C252M250AD8	48.20	21.30	9.50	14.20	1 3/8 X 4 3/4
2700	450C272M250EJ8	43.60	21.00	10.20	14.70	1 3/4 X 3 3/4
2800	450C282M250BB8	42.20	22.20	10.10	13.90	2 X 3 1/4
2900	450C292M250AE8	43.00	19.40	10.50	15.70	1 3/8 X 5 1/4
3100	450C312M250AF8	38.90	17.90	11.60	17.10	1 3/8 X 5 3/4
3200	450C322M250EC8	37.10	18.10	11.50	16.40	1 3/4 X 4 1/4
3400	450C342M250BJ8	34.60	18.40	12.50	17.10	2 X 3 3/4
3800	450C382M250ED8	32.40	16.00	12.90	18.40	1 3/4 X 4 3/4
4100	450C412M250BC8	29.40	15.90	13.60	18.50	2 X 4 1/4
4200	450C422M250EE8	28.90	14.50	14.50	20.50	1 3/4 X 5 1/4
4700	450C472M250BD8	26.00	14.10	14.90	20.30	2 X 4 3/4
4800	450C482M250EF8	26.20	13.40	16.30	22.80	1 3/4 X 5 3/4
5600	450C562M250BE8	22.40	12.50	16.60	22.30	2 X 5 1/4
6200	450C622M250BF8	20.40	11.50	18.00	24.00	2 X 5 3/4
300 Vdc (350 Vdc Surge)						
380	450C381M300AK8	283.00	134.00	2.40	3.50	1 3/8 X 1 3/4
570	450C571M300AA8	189.00	89.90	3.30	4.80	1 3/8 X 2 1/4
800	450C801M300AH8	131.00	63.10	4.10	6.00	1 3/8 X 2 3/4
960	450C961M300EA8	119.00	56.70	4.80	6.90	1 3/4 X 2 1/4
1100	450C112M300AB8	101.00	49.00	5.10	7.30	1 3/8 X 3 1/4
1200	450C122M300BA8	106.00	53.20	5.50	7.80	2 X 2 1/4
1300	450C132M300EH8	87.00	40.80	6.00	8.70	1 3/4 X 2 3/4
1300	450C132M300AJ8	82.40	40.40	5.90	8.40	1 3/8 X 3 3/4
1500	450C152M300AC8	69.70	34.60	6.70	9.50	1 3/8 X 4 1/4
1600	450C162M300BH8	75.80	37.70	7.00	9.90	2 X 2 3/4
1700	450C172M300EB8	66.90	31.70	7.30	10.70	1 3/4 X 3 1/4

Type 450C 105 °C Ultra-Ripple, Long-life, Inverter Grade, Radial Leaded

Cap. (µF)	Catalog Part Number	ESR Max. 25 °C		Ripple Amps, 85 °C		Nominal Size D X L (in)
		120 Hz	20 kHz (mΩ)	120 Hz	20 kHz (A)	
1800	450C182M300AD8	60.60	30.50	7.50	10.60	1 3/8 X 4 3/4
2100	450C212M300AE8	53.70	27.50	8.40	11.70	1 3/8 X 5 1/4
2100	450C212M300EJ8	54.50	26.10	8.40	12.10	1 3/4 X 3 3/4
2100	450C212M300BB8	58.40	29.30	8.40	11.90	2 X 3 1/4
2300	450C232M300AF8	48.40	25.10	9.30	12.90	1 3/8 X 5 3/4
2500	450C252M300EC8	48.10	23.30	9.50	13.60	1 3/4 X 4 1/4
2600	450C262M300BJ8	47.60	24.10	10.40	14.70	2 X 3 3/4
2900	450C292M300ED8	41.80	20.50	10.70	15.30	1 3/4 X 4 3/4
3100	450C312M300BC8	41.10	21.50	11.30	15.60	2 X 4 1/4
3300	450C332M300EE8	37.10	18.40	12.00	17.10	1 3/4 X 5 1/4
3600	450C362M300BD8	35.50	18.30	12.50	17.50	2 X 4 3/4
3700	450C372M300EF8	33.50	16.90	13.50	19.10	1 3/4 X 5 3/4
4300	450C432M300BE8	30.50	16.10	14.00	19.30	2 X 5 1/4
4700	450C472M300BF8	27.60	14.80	15.30	20.80	2 X 5 3/4
350 Vdc (400 Vdc Surge)						
300	450C301M350AK8	325.00	150.00	2.20	3.30	1 3/8 X 1 3/4
460	450C461M350AA8	217.00	100.00	3.10	4.60	1 3/8 X 2 1/4
600	450C601M350AH8	151.00	70.30	3.80	5.60	1 3/8 X 2 3/4
770	450C771M350EA8	135.00	61.90	4.50	6.60	1 3/4 X 2 1/4
860	450C861M350AB8	116.00	54.50	4.70	6.90	1 3/8 X 3 1/4
960	450C961M350BA8	119.00	57.40	5.20	7.50	2 X 2 1/4
1000	450C102M350EH8	99.00	44.70	5.60	8.30	1 3/4 X 2 3/4
1000	450C102M350AJ8	94.40	44.90	5.50	8.00	1 3/8 X 3 3/4
1200	450C122M350AC8	79.80	38.40	6.30	9.10	1 3/8 X 4 1/4
1300	450C132M350BH8	85.60	40.70	6.60	9.60	2 X 2 3/4
1400	450C142M350EB8	76.10	34.70	6.90	10.20	1 3/4 X 3 1/4
1500	450C152M350AD8	69.30	33.80	7.00	10.10	1 3/8 X 4 3/4
1700	450C172M350EJ8	62.00	28.50	7.90	11.60	1 3/4 X 3 3/4
1700	450C172M350BB8	65.80	31.60	7.90	11.40	2 X 3 1/4
1700	450C172M350AE8	61.40	30.30	7.80	11.20	1 3/8 X 5 1/4
1800	450C182M350AF8	55.20	27.70	8.70	12.30	1 3/8 X 5 3/4
2000	450C202M350EC8	54.60	25.40	8.90	13.00	1 3/4 X 4 1/4
2100	450C212M350BJ8	53.70	26.00	9.80	14.10	2 X 3 3/4
2300	450C232M350ED8	47.40	22.30	10.00	14.60	1 3/4 X 4 3/4
2500	450C252M350BC8	46.20	23.10	10.70	15.10	2 X 4 1/4
2600	450C262M350EE8	42.00	20.00	11.30	16.40	1 3/4 X 5 1/4
2900	450C292M350BD8	40.00	19.70	11.80	16.80	2 X 4 3/4
3000	450C302M350EF8	37.80	18.30	12.70	18.30	1 3/4 X 5 3/4
3500	450C352M350BE8	34.20	17.30	13.20	18.60	2 X 5 1/4
3800	450C382M350BF8	30.90	15.80	14.40	20.10	2 X 5 3/4
400 Vdc (450 Vdc Surge)						
270	450C271M400AK8	356.00	161.00	2.10	3.10	1 3/8 X 1 3/4
410	450C411M400AA8	238.00	108.00	3.00	4.40	1 3/8 X 2 1/4
600	450C601M400AH8	166.00	75.70	3.70	5.40	1 3/8 X 2 3/4
690	450C691M400EA8	147.00	65.80	4.30	6.40	1 3/4 X 2 1/4
770	450C771M400AB8	127.00	58.70	4.50	6.60	1 3/8 X 3 1/4
860	450C861M400BA8	129.00	60.60	5.00	7.30	2 X 2 1/4
930	450C931M400EH8	108.00	47.60	5.30	8.10	1 3/4 X 2 3/4
930	450C931M400AJ8	103.40	48.20	5.20	7.70	1 3/8 X 3 3/4
1100	450C112M400AC8	87.40	41.20	6.00	8.70	1 3/8 X 4 1/4
1200	450C122M400EB8	83.00	36.90	6.60	9.90	1 3/4 X 3 1/4
1200	450C122M400BH8	92.90	43.00	6.30	9.30	2 X 2 3/4
1300	450C132M400AD8	75.90	36.20	6.70	9.70	1 3/8 X 4 3/4
1500	450C152M400BB8	71.40	33.30	7.60	11.10	2 X 3 1/4
1500	450C152M400AE8	67.20	32.50	7.50	10.80	1 3/8 X 5 1/4
1500	450C152M400EJ8	67.50	30.30	7.50	11.30	1 3/4 X 3 3/4
1600	450C162M400AF8	60.40	29.60	8.30	11.90	1 3/8 X 5 3/4
1800	450C182M400EC8	59.40	26.90	8.50	12.60	1 3/4 X 4 1/4
1900	450C192M400BJ8	58.20	27.40	9.40	13.70	2 X 3 3/4

Cap. (µF)	Catalog Part Number	ESR Max. 25 °C		Ripple Amps, 85 °C		Nominal Size D X L (in)
		120 Hz	20 kHz (mΩ)	120 Hz	20 kHz (A)	
2100	450C212M400ED8	51.60	23.70	9.60	14.20	1 3/4 X 4 3/4
2200	450C222M400BC8	50.10	24.30	10.20	14.70	2 X 4 1/4
2300	450C232M400EE8	45.70	21.20	10.80	15.90	1 3/4 X 5 1/4
2600	450C262M400EF8	41.10	19.40	12.20	17.80	1 3/4 X 5 3/4
2600	450C262M400BD8	43.30	20.70	11.40	16.40	2 X 4 3/4
3100	450C312M400BE8	37.00	18.10	12.70	18.20	2 X 5 1/4
3400	450C342M400BF8	33.40	16.60	13.90	19.70	2 X 5 3/4
450 Vdc (500 Vdc Surge)						
210	450C211M450AK8	384.00	171.00	2.00	3.10	1 3/8 X 1 3/4
310	450C311M450AA8	256.00	115.00	2.90	4.30	1 3/8 X 2 1/4
400	450C401M450AH8	178.00	80.40	3.50	5.30	1 3/8 X 2 3/4
520	450C521M450EA8	157.00	69.20	4.10	6.30	1 3/4 X 2 1/4
580	450C581M450AB8	137.00	62.30	4.30	6.40	1 3/8 X 3 1/4
650	450C651M450BA8	138.00	63.30	4.80	7.10	2 X 2 1/4
700	450C701M450EH8	116.00	50.10	5.20	7.90	1 3/4 X 2 3/4
710	450C711M450AJ8	111.00	51.10	5.10	7.50	1 3/8 X 3 3/4
840	450C841M450AC8	93.90	43.60	5.80	8.50	1 3/8 X 4 1/4
870	450C871M450BH8	99.20	45.00	6.10	9.10	2 X 2 3/4
920	450C921M450EB8	88.90	38.80	6.40	9.60	1 3/4 X 3 1/4
990	450C991M450AD8	81.50	38.30	6.50	9.50	1 3/8 X 4 3/4
1100	450C112M450EJ8	72.30	31.80	7.30	11.00	1 3/4 X 3 3/4
1100	450C112M450AE8	72.10	34.30	7.20	10.50	1 3/8 X 5 1/4
1200	450C122M450AF8	64.80	31.20	8.00	11.60	1 3/8 X 5 3/4
1200	450C122M450BB8	76.30	34.90	7.40	10.90	2 X 3 1/4
1400	450C142M450BJ8	62.10	28.70	9.10	13.50	2 X 3 3/4
1400	450C142M450EC8	63.60	28.30	8.20	12.30	1 3/4 X 4 1/4
1600	450C162M450ED8	55.20	24.80	9.30	13.90	1 3/4 X 4 3/4
1700	450C172M450BC8	53.40	25.40	9.90	14.40	2 X 4 1/4
1800	450C182M450EE8	48.90	22.30	10.50	15.50	1 3/4 X 5 1/4
2000	450C202M450EF8	44.00	20.30	11.80	17.40	1 3/4 X 5 3/4
2000	450C202M450BD8	46.20	21.60	11.00	16.10	2 X 4 3/4
2300	450C232M450BE8	39.40	18.90	12.30	17.80	2 X 5 1/4
2600	450C262M450BF8	35.60	17.30	13.40	19.30	2 X 5 3/4
500 Volts (550 Volts Surge)						
150	450C151M500AK8	440.00	158.00	1.90	3.20	1 3/8 X 1 3/4
230	450C231M500AA8	294.00	106.00	2.70	4.50	1 3/8 X 2 1/4
330	450C331M500AH8	204.00	73.80	3.30	5.50	1 3/8 X 2 3/4
350	450C351M500EA8	262.00	146.00	3.70	6.00	1 3/4 X 2 1/4
430	450C431M500AB8	157.00	57.00	4.10	6.70	1 3/8 X 3 1/4
440	450C441M500BA8	208.00	122.00	4.40	6.90	2 X 2 1/4
500	450C501M500EH8	182.00	102.00	4.80	7.70	1 3/4 X 2 3/4
530	450C531M500AJ8	128.00	46.70	4.70	7.80	1 3/8 X 3 3/4
620	450C621M500BH8	144.00	85.30	5.70	9.00	2 X 2 3/4
630	450C631M500AC8	145.00	82.80	5.40	8.90	1 3/8 X 4 1/4
660	450C661M500EB8	140.00	78.60	5.90	9.50	1 3/4 X 3 1/4
700	450C701M500AD8	93.50	34.70	6.10	9.90	1 3/8 X 4 3/4
820	450C821M500EJ8	114.00	64.40	6.80	10.90	1 3/4 X 3 3/4
830	450C831M500BB8	111.00	66.00	6.90	10.70	2 X 3 1/4
830	450C831M500AE8	82.70	31.00	6.80	11.00	1 3/8 X 5 1/4
930	450C931M500AF8	74.30	28.20	7.50	12.20	1 3/8 X 5 3/4
970	450C971M500EC8	96.00	54.80	7.60	12.20	1 3/4 X 4 1/4
1000	450C102M500BJ8	90.40	54.10	8.50	13.30	2 X 3 3/4
1100	450C112M500ED8	83.30	48.00	8.60	13.70	1 3/4 X 4 3/4
1200	450C122M500BC8	76.40	46.20	9.30	14.50	2 X 4 1/4
1300	450C132M500EE8	73.70	42.80	9.70	15.40	1 3/4 X 5 1/4
1400	450C142M500EF8	66.30	38.90	11.00	17.30	1 3/4 X 5 3/4
1400	450C142M500BD8	66.40	40.50	10.30	15.90	2 X 4 3/4
1700	450C172M500BE8	57.30	35.40	11.50	17.70	2 X 5 1/4
1900	450C192M500BF8	51.80	32.30	12.60	19.10	2 X 5 3/4