

## Aluminum Capacitors + 85 °C, Miniature, General Purpose

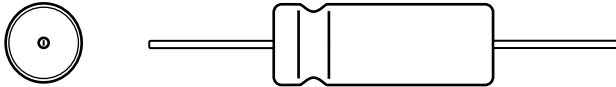


Fig.1 Component outline

### FEATURES

- Increased CV efficiency
- New 0.709" [18.0 mm] diameter case size
- Axial lead



QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case size Ø D x L in mm	0.248" x 0.512" [6.3 x 13.0] to 0.709" x 1.574" [18.0 x 40.0]
Operating temperature	- 40 °C to + 85 °C (3 WV <sub>DC</sub> to 250 WV <sub>DC</sub> ) - 20 °C to + 85 °C (251 WV <sub>DC</sub> to 450 WV <sub>DC</sub> )
Rated capacitance range, C <sub>R</sub>	0.22 µF to 10 000 µF
Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	6.3 WV <sub>DC</sub> to 450 WV <sub>DC</sub>
Life validation test at 85 °C	2000 h: Δ CAP ≤ 20 % from initial measurement. Δ ESR ≤ 1.5 x initial specified limit. Δ DCL ≤ initial specified limit.
Shelf life at 85 °C	500 h: Δ CAP ≤ 20 % from initial measurement. Δ ESR ≤ 1.5 x initial specified limit. Δ DCL ≤ 2.0 x initial specified limit.
DC leakage current	3 WV <sub>DC</sub> to 100 WV <sub>DC</sub> I = 0.01 CV + 10 101 WV <sub>DC</sub> to 450 WV <sub>DC</sub> I = 0.03 CV + 20 I in µA, C in µF, V in Volts

RIPPLE CURRENT MULTIPLIERS				
TEMPERATURE				
AMBIENT TEMPERATURE		MULTIPLIERS		
+ 85 °C		1.0		
+ 75 °C		1.25		
≤ 65 °C		1.5		
FREQUENCY (Hz)				
WV <sub>DC</sub>	50 to 60	100 to 120	300 to 400	1K to 100K
0 to 50	0.85	1.0	1.05	1.1
51 to 450	0.80	1.0	1.30	1.5

DIMENSIONS in inches [millimeters]						
CASE CODE	NOMINAL		STYLE 2		STYLE 5	
	D	L	D (max.)	L (max.)	D (max.)	L (max.)
BA	0.248 [6.300]	0.512 [13.000]	0.276 [7.000]	0.567 [14.400]	0.276 [7.000]	0.626 [15.900]
BB	0.248 [6.300]	0.689 [17.500]	0.276 [7.000]	0.756 [19.200]	0.276 [7.000]	0.815 [20.700]
CB	0.315 [8.000]	0.689 [17.500]	0.339 [8.600]	0.756 [19.200]	0.339 [8.600]	0.815 [20.700]
CC	0.315 [8.000]	0.807 [20.500]	0.339 [8.600]	0.878 [22.300]	0.339 [8.600]	0.937 [23.800]
DC	0.374 [9.500]	0.807 [20.500]	0.402 [10.200]	0.878 [22.300]	0.402 [10.200]	0.937 [23.800]
DD	0.374 [9.500]	0.945 [24.000]	0.402 [10.200]	1.01 [25.500]	0.402 [10.200]	1.063 [27.000]
DF	0.374 [9.500]	1.260 [32.000]	0.402 [10.200]	1.319 [33.500]	0.402 [10.200]	1.378 [35.000]
DH	0.374 [9.500]	1.496 [38.000]	0.402 [10.200]	1.567 [39.800]	0.402 [10.200]	1.626 [41.300]



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DIMENSIONS in inches [millimeters]						
CASE CODE	NOMINAL		STYLE 2		STYLE 5	
	D	L	D (max.)	L (max.)	D (max.)	L (max.)
EF	0.433 [11.000]	1.260 [32.000]	0.465 [11.800]	1.319 [33.500]	0.465 [11.800]	1.378 [35.000]
EH	0.433 [11.000]	1.496 [38.000]	0.465 [11.800]	1.567 [39.800]	0.465 [11.800]	1.626 [41.300]
FH	0.492 [12.500]	1.496 [38.000]	0.516 [13.100]	1.567 [39.800]	0.516 [13.100]	1.626 [41.300]
FK	0.492 [12.500]	1.752 [44.500]	0.516 [13.100]	1.831 [46.500]	0.516 [13.100]	1.890 [48.000]
GH	0.630 [16.000]	1.496 [38.000]	0.654 [16.600]	1.567 [39.800]	0.654 [16.600]	1.626 [41.300]
GK	0.630 [16.000]	1.752 [44.500]	0.654 [16.600]	1.831 [46.500]	0.654 [16.600]	1.890 [48.000]
LS	0.709 [18.000]	1.575 [40.000]	0.736 [18.700]	1.673 [42.500]	0.736 [18.700]	1.693 [43.000]

ORDERING EXAMPLE

Electrolytic capacitor 500D series: 500D 686 M 6R3 BA 2 A

DESCRIPTION	
CODE	EXPLANATION
500D	Product type
686	Capacitance value (68 µF)
M	Tolerance (M = ± 20 %)
6R3	Voltage rating at 85 °C (6R3 = 6.3 V)
BA	Can size (see dimensions table)
2	Sleeve and sealing (2 = P.V.C. sleeve)
A	Packaging (A = bulk)

Note

- For lead (Pb)-free/RoHS compliant products add suffix "E3" to part number.  
Example: 500D686M6R3BA2AE3

ELECTRICAL DATA AND ORDERING INFORMATION		
CAPACITANCE (µF)	PART NUMBER	NOMINAL CASE SIZE D x L
<b>6.3 WV<sub>DC</sub> at + 85 °C, SURGE = 8 V</b>		
68	500D686M6R3BA2A	0.248 x 0.512 [6.3 x 13.0]
150	500D157M6R3BB2A	0.248 x 0.689 [6.3 x 17.5]
220	500D227M6R3CB2A	0.315 x 0.689 [8.0 x 17.5]
330	500D337M6R3CC2A	0.315 x 0.807 [8.0 x 20.5]
680	500D687M6R3DC2A	0.374 x 0.807 [9.5 x 20.5]
820	500D827M6R3DD2A	0.374 x 0.945 [9.5 x 24.0]
1200	500D128M6R3DF2A	0.374 x 1.260 [9.5 x 32.0]
2200	500D228M6R3DH2A	0.374 x 1.496 [9.5 x 38.0]
2200	500D228M6R3EF2A	0.433 x 1.260 [11.0 x 32.0]
3300	500D338M6R3EH2A	0.433 x 1.496 [11.0 x 38.0]
3300	500D338M6R3FH2A	0.492 x 1.496 [12.5 x 38.0]
4700	500D478M6R3FK2A	0.492 x 1.752 [12.5 x 44.5]
5600	500D568M6R3GH2A	0.630 x 1.496 [16.0 x 38.0]
8200	500D828M6R3GK2A	0.630 x 1.752 [16.0 x 44.5]
10 000	500D109M6R3LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>10 WV<sub>DC</sub> at + 85 °C, SURGE = 12 V</b>		
47	500D476M010BA2A	0.248 x 0.512 [6.3 x 13.0]
100	500D107M010BB2A	0.248 x 0.689 [6.3 x 17.5]

Note

- (1) Original part numbers not recommended for new equipment designs. For epoxy end seal, change "2" designation to "5". "5" is not normally stocked

**ELECTRICAL DATA AND ORDERING INFORMATION**

CAPACITANCE ( $\mu\text{F}$ )	PART NUMBER	NOMINAL CASE SIZE D x L
<b>10 WV<sub>DC</sub> at + 85 °C, SURGE = 12 V</b>		
220	500D227M010CB2A	0.315 x 0.689 [8.0 x 17.5]
330	500D337M010CC2A	0.315 x 0.807 [8.0 x 20.5]
470	500D477M010DC2A	0.374 x 0.807 [9.5 x 20.5]
680	500D687M010DD2A	0.374 x 0.945 [9.5 x 24.0]
1000	500D108M010DF2A	0.374 x 1.260 [9.5 x 32.0]
1500	500D158M010DH2A	0.374 x 1.496 [9.5 x 38.0]
1800	500D188M010EF2A	0.433 x 1.260 [11.0 x 32.0]
2200.0 <sup>(1)</sup>	500D228M010EH2	0.433 x 1.496 [11.0 x 38.0]
2700	500D278M010EH2A	0.433 x 1.496 [11.0 x 38.0]
2700	500D278M010FH2A	0.492 x 1.496 [12.5 x 38.0]
3300.0 <sup>(1)</sup>	500D338M010GH2	0.630 x 1.496 [16.0 x 38.0]
3900	500D398M010FK2A	0.492 x 1.752 [12.5 x 44.5]
4700	500D478M010GH2A	0.630 x 1.496 [16.0 x 38.0]
6800	500D688M010GK2A	0.630 x 1.752 [16.0 x 44.5]
8200	500D828M010LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>12 WV<sub>DC</sub> at + 85 °C, SURGE = 15 V</b>		
39	500D396M012BA2A	0.248 x 0.512 [6.3 x 13.0]
68	500D686M012BB2A	0.248 x 0.689 [6.3 x 17.5]
150	500D157M012CB2A	0.315 x 0.689 [8.0 x 17.5]
220	500D227M012CC2A	0.315 x 0.807 [8.0 x 20.5]
330	500D337M012DC2A	0.374 x 0.807 [9.5 x 20.5]
560	500D567M012DD2A	0.374 x 0.807 [9.5 x 20.5]
820	500D827M012DF2A	0.374 x 1.260 [9.5 x 32.0]
1200	500D128M012DH2A	0.374 x 1.496 [9.5 x 38.0]
1500	500D158M012EF2A	0.433 x 1.260 [11.0 x 32.0]
2200	500D228M012EH2A	0.433 x 1.496 [11.0 x 38.0]
2200	500D228M012FH2A	0.492 x 1.496 [12.5 x 38.0]
2700	500D278M012FK2A	0.492 x 1.752 [12.5 x 44.5]
3900	500D398M012GH2A	0.630 x 1.496 [16.0 x 38.0]
5600	500D568M012GK2A	0.630 x 1.752 [16.0 x 44.5]
6800	500D688M012LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>16 WV<sub>DC</sub> at + 85 °C, SURGE = 20 V</b>		
33	500D336M016BA2A	0.248 x 0.512 [6.3 x 13.0]
68	500D686M016BB2A	0.248 x 0.689 [6.3 x 17.5]
100.0 <sup>(1)</sup>	500D107M016CB2	0.315 x 0.689 [8.0 x 17.5]
150	500D157M016CB2A	0.315 x 0.689 [8.0 x 17.5]
220	500D227M016CC2A	0.315 x 0.807 [8.0 x 20.5]
330	500D337M016DC2A	0.374 x 0.807 [9.5 x 20.5]
470	500D477M016DD2A	0.374 x 0.945 [9.5 x 24.0]
680	500D687M016DF2A	0.374 x 1.260 [9.5 x 32.0]
1000.0 <sup>(1)</sup>	500D108M016DH2	0.374 x 1.496 [9.5 x 38.0]
1200	500D128M016DH2A	0.374 x 1.496 [9.5 x 38.0]
1200	500D128M016EF2A	0.433 x 1.260 [11.0 x 32.0]

**Note**

<sup>(1)</sup> Original part numbers not recommended for new equipment designs. For epoxy end seal, change "2" designation to "5". "5" is not normally stocked



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<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>		
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>
<b>16 WV<sub>DC</sub> at + 85 °C, SURGE = 20 V</b>		
1500.0 <sup>(1)</sup>	500D158M016EH2	0.433 x 1.496 [11.0 x 38.0]
1800	500D188M016EH2A	0.433 x 1.496 [11.0 x 38.0]
1800	500D188M016FH2A	0.492 x 1.496 [12.5 x 38.0]
2200.0 <sup>(1)</sup>	500D228M016FK2	0.492 x 1.752 [12.5 x 44.5]
2700	500D278M016FK2A	0.492 x 1.752 [12.5 x 44.5]
3300	500D338M016GH2A	0.630 x 1.496 [16.0 x 38.0]
3300.0 <sup>(1)</sup>	500D338M016GK2	0.630 x 1.752 [16.0 x 44.5]
4700	500D478M016GK2A	0.630 x 1.752 [16.0 x 44.5]
5600	500D568M016LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>25 WV<sub>DC</sub> at + 85 °C, SURGE = 35 V</b>		
22	500D226M025BA2A	0.248 x 0.512 [6.3 x 13.0]
33.0 <sup>(1)</sup>	500D336M025BB2	0.248 x 0.689 [6.3 x 17.5]
47	500D476M025BB2A	0.248 x 0.689 [6.3 x 17.5]
68	500D686M025CB2A	0.315 x 0.689 [8.0 x 17.5]
100	500D107M025CC2A	0.315 x 0.807 [8.0 x 20.5]
150.0 <sup>(1)</sup>	500D157M025DC2	0.374 x 0.807 [9.5 x 20.5]
220	500D227M025DC2A	0.374 x 0.807 [9.5 x 20.5]
330	500D337M025DD2A	0.374 x 0.945 [9.5 x 24.0]
330.0 <sup>(1)</sup>	500D337M025DF2	0.374 x 1.260 [9.5 x 32.0]
470	500D477M025DF2A	0.374 x 1.260 [9.5 x 32.0]
820	500D827M025DH2A	0.374 x 1.496 [9.5 x 38.0]
680	500D687M025EF2A	0.433 x 1.260 [11.0 x 32.0]
1000.0 <sup>(1)</sup>	500D108M025FH2	0.492 x 1.496 [12.5 x 38.0]
1200	500D128M025EH2A	0.433 x 1.496 [11.0 x 38.0]
1200	500D128M025FH2A	0.492 x 1.496 [12.5 x 38.0]
1800	500D188M025FK2A	0.492 x 1.752 [12.5 x 44.5]
1800	500D188M025GH2A	0.630 x 1.496 [16.0 x 38.0]
2200.0 <sup>(1)</sup>	500D228M025GK2	0.630 x 1.752 [16.0 x 44.5]
2700	500D278M025GK2A	0.630 x 1.752 [16.0 x 44.5]
3300	500D338M025LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>35 WV<sub>DC</sub> at + 85 °C, SURGE = 40 V</b>		
15.0 <sup>(1)</sup>	500D156M035BA2	0.248 x 0.512 [6.3 x 13.0]
47.0 <sup>(1)</sup>	500D476M035CB2	0.315 x 0.689 [8.0 x 17.5]
330.0 <sup>(1)</sup>	500D337M035DH2	0.374 x 1.496 [9.5 x 38.0]
470.0 <sup>(1)</sup>	500D477M035EH2	0.433 x 1.496 [11.0 x 38.0]
680.0 <sup>(1)</sup>	500D687M035FK2	0.492 x 1.752 [12.5 x 44.5]
1000.0 <sup>(1)</sup>	500D108M035GH2	0.630 x 1.496 [16.0 x 38.0]
<b>40 WV<sub>DC</sub> at + 85 °C, SURGE = 50 V</b>		
15	500D156M040BA2A	0.248 x 0.512 [6.3 x 13.0]
22	500D226M040BB2A	0.248 x 0.689 [6.3 x 17.5]
47	500D476M040CB2A	0.315 x 0.689 [8.0 x 17.5]
68	500D686M040CC2A	0.315 x 0.807 [8.0 x 20.5]
100	500D107M040DC2A	0.374 x 0.807 [9.5 x 20.5]
180	500D187M040DD2A	0.374 x 0.945 [9.5 x 24.0]

**Note**

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<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>		
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>
<b>40 WV<sub>DC</sub> at + 85 °C, SURGE = 50 V</b>		
270	500D277M040DF2A	0.374 x 1.260 [9.5 x 32.0]
470	500D477M040DH2A	0.374 x 1.496 [9.5 x 38.0]
470	500D477M040EF2A	0.433 x 1.260 [11.0 x 32.0]
680	500D687M040EH2A	0.433 x 1.496 [11.0 x 38.0]
680	500D687M040FH2A	0.492 x 1.496 [12.5 x 38.0]
1000	500D108M040FK2A	0.492 x 1.752 [12.5 x 44.5]
1200	500D128M040GH2A	0.630 x 1.496 [16.0 x 38.0]
1800	500D188M040GK2A	0.630 x 1.752 [16.0 x 44.5]
2200	500D228M040LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>50 WV<sub>DC</sub> at + 85 °C, SURGE = 65 V</b>		
10	500D106M050BA2A	0.248 x 0.512 [6.3 x 13.0]
22	500D226M050BB2A	0.248 x 0.689 [6.3 x 17.5]
33	500D336M050CB2A	0.315 x 0.689 [8.0 x 17.5]
68	500D686M050CC2A	0.315 x 0.807 [8.0 x 20.5]
100	500D107M050DC2A	0.374 x 0.807 [9.5 x 20.5]
150	500D157M050DD2A	0.374 x 0.945 [9.5 x 24.0]
220	500D227M050DF2A	0.374 x 1.260 [9.5 x 32.0]
330	500D337M050DH2A	0.374 x 1.496 [9.5 x 38.0]
330	500D337M050EF2A	0.433 x 1.260 [11.0 x 32.0]
560	500D567M050EH2A	0.433 x 1.496 [11.0 x 38.0]
470	500D477M050FH2A	0.492 x 1.496 [12.5 x 38.0]
680.0 <sup>(1)</sup>	500D687M050GH2	0.630 x 1.496 [16.0 x 38.0]
820	500D827M050FK2A	0.492 x 1.752 [12.5 x 44.5]
820	500D827M050GH2A	0.630 x 1.496 [16.0 x 38.0]
1000.0 <sup>(1)</sup>	500D108M050GK2	0.630 x 1.752 [16.0 x 44.5]
1500	500D158M050GK2A	0.630 x 1.752 [16.0 x 44.5]
1800	500D188M050LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>63 WV<sub>DC</sub> at + 85 °C, SURGE = 75 V</b>		
6.8	500D685M063BA2A	0.248 x 0.512 [6.3 x 13.0]
15	500D156M063BB2A	0.248 x 0.689 [6.3 x 17.5]
22.0 <sup>(1)</sup>	500D226M063CB2	0.315 x 0.689 [8.0 x 17.5]
33	500D336M063CB2A	0.315 x 0.689 [8.0 x 17.5]
47	500D476M063CC2A	0.315 x 0.807 [8.0 x 20.5]
68	500D686M063DC2A	0.374 x 0.807 [9.5 x 20.5]
100	500D107M063DD2A	0.374 x 0.945 [9.5 x 24.0]
150	500D157M063DF2A	0.374 x 1.260 [9.5 x 32.0]
220.0 <sup>(1)</sup>	500D227M063DH2	0.374 x 1.496 [9.5 x 38.0]
220	500D227M063EF2A	0.433 x 1.260 [11.0 x 32.0]
270	500D277M063DH2A	0.374 x 1.496 [9.5 x 38.0]
390	500D397M063FH2A	0.492 x 1.496 [12.5 x 38.0]
470	500D477M063EH2A	0.433 x 1.496 [11.0 x 38.0]
470.0 <sup>(1)</sup>	500D477M063FK2	0.492 x 1.752 [12.5 x 44.5]

**Note**

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<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>		
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>
<b>63 WV<sub>DC</sub> at + 85 °C, SURGE = 75 V</b>		
560	500D567M063FK2A	0.492 x 1.752 [12.5 x 44.5]
560	500D567M063GH2A	0.630 x 1.496 [16.0 x 38.0]
1000	500D108M063GK2A	0.630 x 1.752 [16.0 x 44.5]
1200	500D128M063LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>80 WV<sub>DC</sub> at + 85 °C, SURGE = 100 V</b>		
4.7 <sup>(1)</sup>	500D475M080BA2	0.248 x 0.512 [6.3 x 13.0]
47.0 <sup>(1)</sup>	500D476M080DC2	0.374 x 0.807 [9.5 x 20.5]
<b>100 WV<sub>DC</sub> at + 85 °C, SURGE = 125 V</b>		
1.0 <sup>(1)</sup>	500D105M100BA2	0.248 x 0.512 [6.3 x 13.0]
2.2 <sup>(1)</sup>	500D225M100BA2	0.248 x 0.512 [6.3 x 13.0]
3.3	500D335M100BA2A	0.248 x 0.512 [6.3 x 13.0]
4.7	500D475M100BB2A	0.248 x 0.689 [6.3 x 17.5]
10	500D106M100CB2A	0.315 x 0.689 [8.0 x 17.5]
15	500D156M100CC2A	0.315 x 0.807 [8.0 x 20.5]
22	500D226M100DC2A	0.374 x 0.807 [9.5 x 20.5]
33.0 <sup>(1)</sup>	500D336M100DD2	0.374 x 0.945 [9.5 x 24.0]
39	500D396M100DD2A	0.374 x 0.945 [9.5 x 24.0]
47.0 <sup>(1)</sup>	500D476M100DF2	0.374 x 1.260 [9.5 x 32.0]
56	500D566M100DF2A	0.374 x 1.260 [9.5 x 32.0]
100	500D107M100DH2A	0.374 x 1.496 [9.5 x 38.0]
100	500D107M100EF2A	0.433 x 1.260 [11.0 x 32.0]
100.0 <sup>(1)</sup>	500D107M100EH2	0.433 x 1.496 [11.0 x 38.0]
150	500D157M100EH2A	0.433 x 1.496 [11.0 x 38.0]
150	500D157M100FH2A	0.492 x 1.496 [12.5 x 38.0]
220	500D227M100FK2A	0.492 x 1.752 [12.5 x 44.5]
220	500D227M100GH2A	0.630 x 1.496 [16.0 x 38.0]
220.0 <sup>(1)</sup>	500D227M100GK2	0.630 x 1.752 [16.0 x 44.5]
390	500D397M100GK2A	0.630 x 1.752 [16.0 x 44.5]
470	500D477M100LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>150 WV<sub>DC</sub> at + 85 °C, SURGE = 175 V</b>		
1.0 <sup>(1)</sup>	500D105M150BA2	0.248 x 0.512 [6.3 x 13.0]
10.0 <sup>(1)</sup>	500D106M150DC2	0.374 x 0.807 [9.5 x 20.5]
22.0 <sup>(1)</sup>	500D226M150DF2	0.374 x 1.260 [9.5 x 32.0]
33.0 <sup>(1)</sup>	500D336M150EF2	0.433 x 1.260 [11.0 x 32.0]
47.0 <sup>(1)</sup>	500D476M150EH2	0.433 x 1.496 [11.0 x 38.0]
<b>160 WV<sub>DC</sub> at + 85 °C, SURGE = 180 V</b>		
1.5	500D155M160BA2A	0.248 x 0.512 [6.3 x 13.0]
2.7	500D275M160BB2A	0.248 x 0.689 [6.3 x 17.5]
3.3	500D335M160CB2A	0.315 x 0.689 [8.0 x 17.5]
6.8	500D685M160CC2A	0.315 x 0.807 [8.0 x 20.5]
10	500D106M160DC2A	0.374 x 0.807 [9.5 x 20.5]
15	500D156M160DD2A	0.374 x 0.945 [9.5 x 24.0]
22	500D226M160DF2A	0.374 x 1.260 [9.5 x 32.0]

**Note**

<sup>(1)</sup> Original part numbers not recommended for new equipment designs. For epoxy end seal, change "2" designation to "5". "5" is not normally stocked



<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>		
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>
<b>160 WV<sub>DC</sub> at + 85 °C, SURGE = 180 V</b>		
27	500D276M160DH2A	0.374 x 1.496 [9.5 x 38.0]
33	500D336M160EF2A	0.433 x 1.260 [11.0 x 32.0]
47	500D476M160EH2A	0.433 x 1.496 [11.0 x 38.0]
47	500D476M160FH2A	0.492 x 1.496 [12.5 x 38.0]
56	500D566M160FK2A	0.492 x 1.752 [12.5 x 44.5]
82	500D826M160GH2A	0.630 x 1.496 [16.0 x 38.0]
100	500D107M160GK2A	0.630 x 1.752 [16.0 x 44.5]
120	500D127M160LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>200 WV<sub>DC</sub> at + 85 °C, SURGE = 250 V</b>		
1.2	500D125M200BA2A	0.248 x 0.512 [6.3 x 13.0]
2.2	500D225M200BB2A	0.248 x 0.689 [6.3 x 17.5]
2.2 <sup>(1)</sup>	500D225M200CB2	0.315 x 0.689 [8.0 x 17.5]
2.7	500D275M200CB2A	0.315 x 0.689 [8.0 x 17.5]
3.3 <sup>(1)</sup>	500D335M200CC2	0.315 x 0.807 [8.0 x 20.5]
4.7	500D475M200CC2A	0.315 x 0.807 [8.0 x 20.5]
8.2	500D825M200DC2A	0.374 x 0.807 [9.5 x 20.5]
10	500D106M200DD2A	0.374 x 0.945 [9.5 x 24.0]
15	500D156M200DF2A	0.374 x 1.260 [9.5 x 32.0]
22	500D226M200DH2A	0.374 x 1.496 [9.5 x 38.0]
27	500D276M200EF2A	0.433 x 1.260 [11.0 x 32.0]
33	500D336M200EH2A	0.433 x 1.496 [11.0 x 38.0]
33.0 <sup>(1)</sup>	500D336M200FK2	0.492 x 1.752 [12.5 x 44.5]
39	500D396M200FH2A	0.492 x 1.496 [12.5 x 38.0]
47	500D476M200FK2A	0.492 x 1.752 [12.5 x 44.5]
68	500D686M200GH2A	0.630 x 1.496 [16.0 x 38.0]
82	500D826M200GK2A	0.630 x 1.752 [16.0 x 44.5]
100	500D107M200LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>250 WV<sub>DC</sub> at + 85 °C, SURGE = 300 V</b>		
1	500D105M250BA2A	0.248 x 0.512 [6.3 x 13.0]
1.5 <sup>(1)</sup>	500D155M250CB2	0.315 x 0.689 [8.0 x 17.5]
1.8	500D185M250BB2A	0.248 x 0.689 [6.3 x 17.5]
2.2	500D225M250CB2A	0.315 x 0.689 [8.0 x 17.5]
2.2 <sup>(1)</sup>	500D225M250CC2	0.315 x 0.807 [8.0 x 20.5]
3.3	500D335M250CC2A	0.315 x 0.807 [8.0 x 20.5]
4.7 <sup>(1)</sup>	500D475M250DC2	0.374 x 0.807 [9.5 x 20.5]
6.8	500D685M250DC2A	0.374 x 0.807 [9.5 x 20.5]
8.2	500D825M250DD2A	0.374 x 0.945 [9.5 x 24.0]
10.0 <sup>(1)</sup>	500D106M250DF2	0.374 x 1.260 [9.5 x 32.0]
12	500D126M250DF2A	0.374 x 1.260 [9.5 x 32.0]
15.0 <sup>(1)</sup>	500D156M250EF2	0.433 x 1.260 [11.0 x 32.0]
18	500D186M250DH2A	0.374 x 1.496 [9.5 x 38.0]
18	500D186M250EF2A	0.433 x 1.260 [11.0 x 32.0]

**Note**

<sup>(1)</sup> Original part numbers not recommended for new equipment designs. For epoxy end seal, change "2" designation to "5". "5" is not normally stocked



Aluminum Capacitors  
+ 85 °C, Miniature, General Purpose

Vishay Sprague

<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>		
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>
<b>250 WV<sub>DC</sub> at + 85 °C, SURGE = 300 V</b>		
22.0 <sup>(1)</sup>	500D226M250EH2	0.433 x 1.496 [11.0 x 38.0]
27	500D276M250EH2A	0.433 x 1.496 [11.0 x 38.0]
27	500D276M250FH2A	0.492 x 1.496 [12.5 x 38.0]
39	500D396M250FK2A	0.492 x 1.752 [12.5 x 44.5]
47	500D476M250GH2A	0.630 x 1.496 [16.0 x 38.0]
47.0 <sup>(1)</sup>	500D476M250GK2	0.630 x 1.752 [16.0 x 44.5]
56	500D566M250GK2A	0.630 x 1.752 [16.0 x 44.5]
82	500D826M250LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>350 WV<sub>DC</sub> at + 85 °C, SURGE = 400 V</b>		
0.47	500D474M350BA2A	0.248 x 0.512 [6.3 x 13.0]
0.82	500D824M350BB2A	0.248 x 0.689 [6.3 x 17.5]
1.0 <sup>(1)</sup>	500D105M350CB2	0.315 x 0.689 [8.0 x 17.5]
1.2	500D125M350CB2A	0.315 x 0.689 [8.0 x 17.5]
1.8	500D185M350CC2A	0.315 x 0.807 [8.0 x 20.5]
2.2 <sup>(1)</sup>	500D225M350DC2	0.374 x 0.807 [9.5 x 20.5]
3.3	500D335M350DC2A	0.374 x 0.807 [9.5 x 20.5]
3.9	500D395M350DD2A	0.374 x 0.945 [9.5 x 24.0]
4.7 <sup>(1)</sup>	500D475M350DF2	0.374 x 1.260 [9.5 x 32.0]
5.6	500D565M350DF2A	0.374 x 1.260 [9.5 x 32.0]
8.2	500D825M350DH2A	0.374 x 1.496 [9.5 x 38.0]
10	500D106M350EF2A	0.433 x 1.260 [11.0 x 32.0]
10.0 <sup>(1)</sup>	500D106M350EH2	0.433 x 1.496 [11.0 x 38.0]
12	500D126M350EH2A	0.433 x 1.496 [11.0 x 38.0]
15	500D156M350FH2A	0.492 x 1.496 [12.5 x 38.0]
18	500D186M350FK2A	0.492 x 1.752 [12.5 x 44.5]
22	500D226M350GH2A	0.630 x 1.496 [16.0 x 38.0]
33	500D336M350GK2A	0.630 x 1.752 [16.0 x 44.5]
39	500D396M350LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>400 WV<sub>DC</sub> at + 85 °C, SURGE = 450 V</b>		
0.27	500D274M400BA2A	0.248 x 0.512 [6.3 x 13.0]
0.56	500D564M400BB2A	0.248 x 0.689 [6.3 x 17.5]
0.68	500D684M400CB2A	0.315 x 0.689 [8.0 x 17.5]
1	500D105M400CC2A	0.315 x 0.807 [8.0 x 20.5]
1.5 <sup>(1)</sup>	500D155M400DC2	0.374 x 0.807 [9.5 x 20.5]
2.2	500D225M400DC2A	0.374 x 0.807 [9.5 x 20.5]
2.7	500D275M400DD2A	0.374 x 0.945 [9.5 x 24.0]
3.9	500D395M400DF2A	0.374 x 1.260 [9.5 x 32.0]
5.6	500D565M400DH2A	0.374 x 1.496 [9.5 x 38.0]
6.8	500D685M400EF2A	0.433 x 1.260 [11.0 x 32.0]
10	500D106M400EH2A	0.433 x 1.496 [11.0 x 38.0]
10.0 <sup>(1)</sup>	500D106M400FK2	0.492 x 1.752 [12.5 x 44.5]
12	500D126M400FH2A	0.492 x 1.496 [12.5 x 38.0]
15	500D156M400FK2A	0.492 x 1.752 [12.5 x 44.5]

**Note**

<sup>(1)</sup> Original part numbers not recommended for new equipment designs. For epoxy end seal, change "2" designation to "5". "5" is not normally stocked



**ELECTRICAL DATA AND ORDERING INFORMATION**

CAPACITANCE ( $\mu$ F)	PART NUMBER	NOMINAL CASE SIZE D x L
<b>400 WV<sub>DC</sub> at + 85 °C, SURGE = 450 V</b>		
18	500D186M400GH2A	0.630 x 1.496 [16.0 x 38.0]
22	500D226M400GK2A	0.630 x 1.752 [16.0 x 44.5]
39	500D396M400LS2A	0.709 x 1.575 [18.0 x 40.0]
<b>450 WV<sub>DC</sub> at + 85 °C, SURGE = 500 V</b>		
0.22	500D224M450BA2A	0.248 x 0.512 [6.3 x 13.0]
0.47	500D474M450BB2A	0.248 x 0.689 [6.3 x 17.5]
0.56	500D564M450CB2A	0.315 x 0.689 [8.0 x 17.5]
0.82	500D824M450CC2A	0.315 x 0.807 [8.0 x 20.5]
1.0 <sup>(1)</sup>	500D105M450DC2	0.374 x 0.807 [9.5 x 20.5]
1.8	500D185M450DC2A	0.374 x 0.807 [9.5 x 20.5]
2.2	500D225M450DD2A	0.374 x 0.945 [9.5 x 24.0]
2.2 <sup>(1)</sup>	500D225M450DF2	0.374 x 1.260 [9.5 x 32.0]
3.3	500D335M450DF2A	0.374 x 1.260 [9.5 x 32.0]
4.7	500D475M450DH2A	0.374 x 1.496 [9.5 x 38.0]
5.6	500D565M450EF2A	0.433 x 1.260 [11.0 x 32.0]
8.2	500D825M450EH2A	0.433 x 1.496 [11.0 x 38.0]
10	500D106M450FH2A	0.492 x 1.496 [12.5 x 38.0]
10.0 <sup>(1)</sup>	500D106M450GK2	0.630 x 1.752 [16.0 x 44.5]
12	500D126M450FK2A	0.492 x 1.752 [12.5 x 44.5]
15	500D156M450GH2A	0.630 x 1.496 [16.0 x 38.0]
18	500D186M450GK2A	0.630 x 1.752 [16.0 x 44.5]
33	500D336M450LS2A	0.709 x 1.575 [18.0 x 40.0]

**Note**

<sup>(1)</sup> Original part numbers not recommended for new equipment designs. For epoxy end seal, change "2" designation to "5". "5" is not normally stocked



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