

# +125°C Miniature Axial Lead, Aluminum Electrolytic Capacitors Timing Circuit & Hi-Rel Applications

## Features-

- Extended Temperature Range
- Economical
- High Reliability Design
- For Timing Circuit Applications
- Low DCL Option
- Tight Cap Tolerance Option

## General Specifications-

Operating Temperature:  
-55 to +125°C

**Voltage Range:**  
3 – 250 VDC

**Capacitance Range:**  
1.8µF to 5,600µF

**Capacitance Tolerance:**  
±20% (Std.)

**Case Size Range:**  
6.0 X 17.5mm – 16.0 X 44.5mm

**Termination:**  
20 ga. Axial leads with lead forming  
available.

**Life Validation Test: +125°C**

Case Size	Hours
BB thru CB	500
CC thru DF	1000
DH+	2000

- Δ CAP ≤ 20% From initial measurement.
- Δ ESR ≤ 1.5X Initial specified limit.
- Δ DCL ≤ Initial specified limit.



**Shelf Test: 1,000hrs @ +105°C**

- Δ CAP ≤ 20% From initial measurement.
- Δ ESR ≤ 1.5X Initial specified limit.
- Δ DCL ≤ 2X Initial specified limit.

**DC Leakage Current:**

For 3-63VDC  $I = 0.004CV + 3$

For 64-250VDC  $I = 0.2\sqrt{CV} + 2$

Where:

I is in µA

C is in µF

V is in Volts

*Lower DCL limits available upon request.*

**Ripple Current Multipliers:**

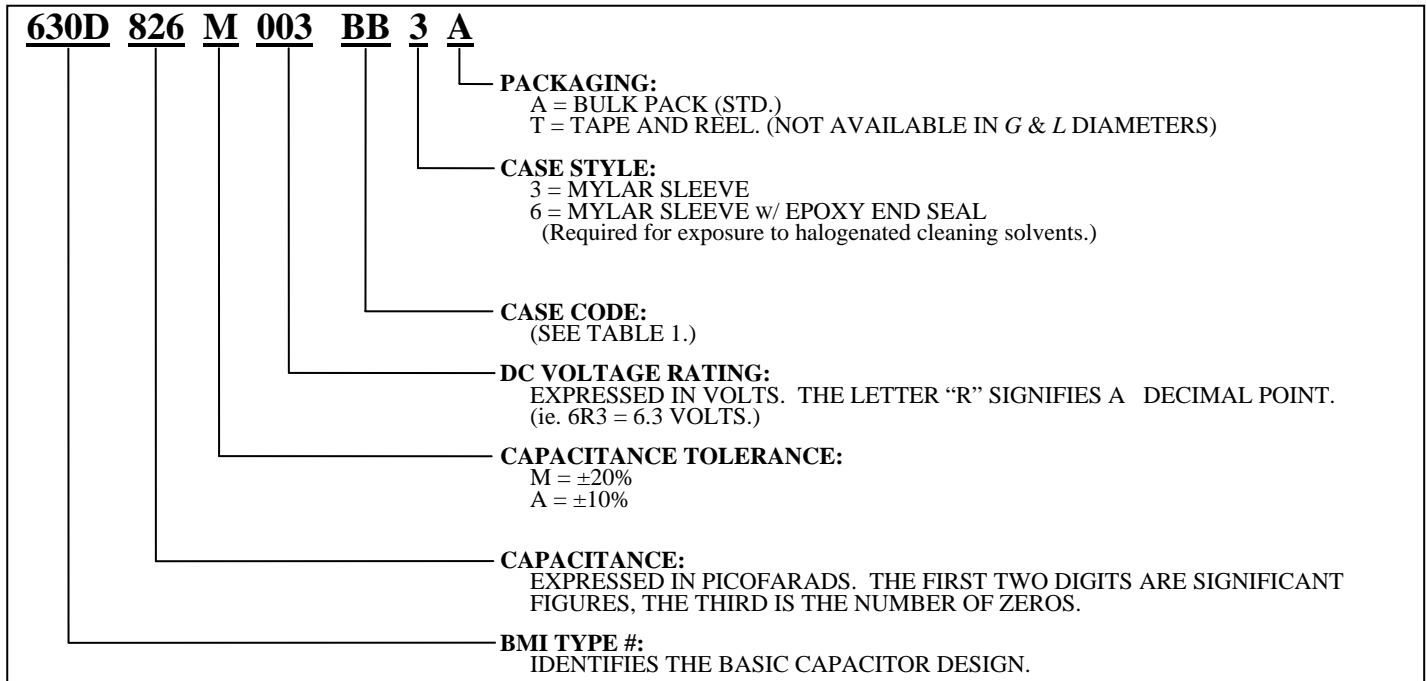
Temperature:

Ambient Temp.	+105°C	+85°C	±65°C
Multiplier	0.5	1.0	2.0

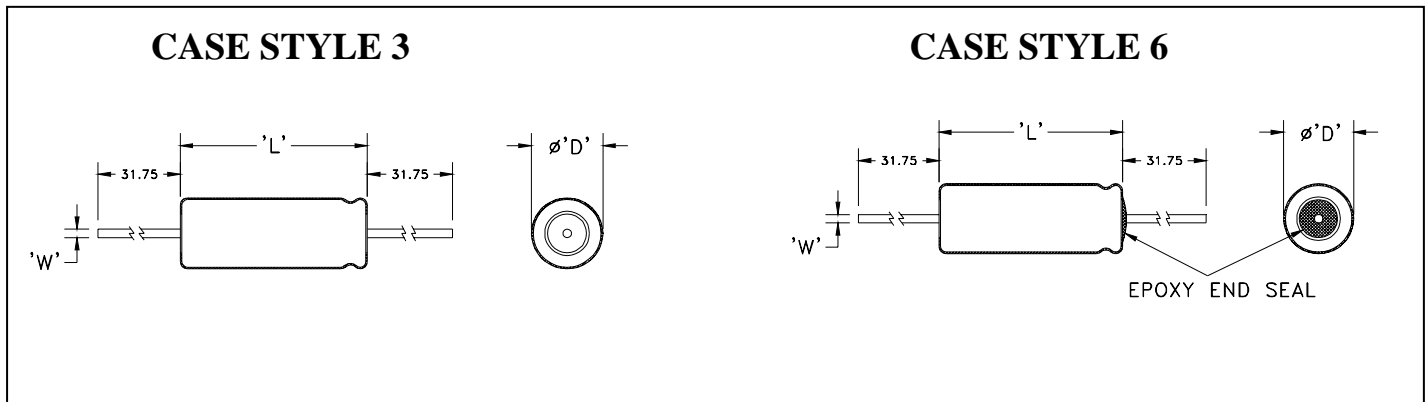
Frequency (Hz):

VDC	50-60	100-120	300-400	1k-100k
3-50	0.9	1.0	1.1	1.4
51-450	0.8	1.0	1.2	1.6

## PART NUMBER BREAK-DOWN:



## Axial-Leaded Capacitor Dimensions



**Table 1. Case Dimensions mm(in.)**

CASE CODE	NOMINAL		STYLE 3		STYLE 6 (w/EPOXY)		WIRE GAUGE 'W'
	'D'	'L'	'D' MAX.	'L' MAX.	'D' MAX.	'L' MAX.	
BB	6.3 (0.248)	17.5 (0.689)	7.0 (0.276)	19.2 (0.756)	7.0 (0.276)	20.7 (0.815)	No. 20 AWG (0.032)
CB	8.0 (0.315)	17.5 (0.689)	8.6 (0.339)	19.2 (0.756)	8.6 (0.339)	20.7 (0.815)	No. 20 AWG (0.032)
CC	8.0 (0.315)	20.5 (0.807)	8.6 (0.339)	22.3 (0.878)	8.6 (0.339)	23.8 (0.937)	No. 20 AWG (0.032)
DB	9.5 (0.374)	17.5 (0.689)	10.2 (0.402)	19.2 (0.756)	10.2 (0.402)	20.7 (0.815)	No. 20 AWG (0.032)
DC	9.5 (0.374)	20.5 (0.807)	10.2 (0.402)	22.3 (0.878)	10.2 (0.402)	23.8 (0.937)	No. 20 AWG (0.032)
DD	9.5 (0.374)	24.0 (0.945)	10.2 (0.402)	25.5 (1.004)	10.2 (0.402)	27.0 (1.063)	No. 20 AWG (0.032)
DF	9.5 (0.374)	32.0 (1.260)	10.2 (0.402)	33.5 (1.319)	10.2 (0.402)	35.0 (1.378)	No. 20 AWG (0.032)
DH	9.5 (0.374)	38.0 (1.496)	10.2 (0.402)	39.8 (1.567)	10.2 (0.402)	41.3 (1.626)	No. 20 AWG (0.032)
EF	11.0 (0.433)	32.0 (1.260)	11.8 (0.465)	33.5 (1.319)	11.8 (0.465)	35.0 (1.378)	No. 20 AWG (0.032)
EH	11.0 (0.433)	38.0 (1.496)	11.8 (0.465)	39.8 (1.567)	11.8 (0.465)	41.3 (1.626)	No. 20 AWG (0.032)
FF	12.5 (0.492)	32.0 (1.260)	13.1 (0.516)	33.5 (1.319)	13.1 (0.516)	35.0 (1.378)	No. 20 AWG (0.032)
FH	12.5 (0.492)	38.0 (1.496)	13.1 (0.516)	39.8 (1.567)	13.1 (0.516)	41.3 (1.626)	No. 20 AWG (0.032)
FK	12.5 (0.492)	44.5 (1.752)	13.1 (0.516)	46.5 (1.831)	13.1 (0.516)	48.0 (1.890)	No. 20 AWG (0.032)
GH	16.0 (0.630)	38.0 (1.496)	16.6 (0.654)	39.8 (1.567)	16.6 (0.654)	41.3 (1.626)	No. 20 AWG (0.032)
GK	16.0 (0.630)	44.5 (1.752)	16.6 (0.654)	46.5 (1.831)	16.6 (0.654)	48.0 (1.890)	No. 20 AWG (0.032)

## STANDARD RATINGS FOR TYPE 630D

Rated Capacitance (μF)	Catalog Number	Nominal Case Size D x L (mm)	Max. ESR	Max. ESR	Max. Ripple	Max. Z
			+25°C 120Hz (Ω)	+25°C 20kHz (Ω)	Current +85°C 120Hz (A <sub>rms</sub> )	+25°C 100kHz (Ω)
<b>3 VOLTS DC WORKING; 5 VOLTS DC SURGE</b>						
82	630D826M003BB3A	6.3 x 17.5	5.070	2.000	0.173	2.000
120	630D127M003CB3A	8.0 x 17.5	3.450	1.090	0.240	1.090
180	630D187M003CC3A	8.0 x 20.5	2.310	0.800	0.314	0.805
270	630D277M003DC3A	9.5 x 20.5	1.570	0.600	0.424	0.605
820	630D827M003DD3A	9.5 x 24.0	0.510	0.300	0.790	0.305
1,200	630D128M003DF3A	9.5 x 32.0	0.350	0.222	1.080	0.225
1,500	630D158M003DH3A	9.5 x 38.0	0.310	0.169	1.260	0.170
2,200	630D228M003EF3A	11.0 x 32.0	0.210	0.129	1.530	0.130
2,700	630D278M003EH3A	11.0 x 38.0	0.180	0.110	1.790	0.110
2,700	630D278M003FH3A	12.5 x 38.0	0.180	0.090	1.940	0.090
3,900	630D398M003FK3A	12.5 x 44.5	0.130	0.065	2.460	0.065
4,700	630D478M003GH3A	16.0 x 38.0	0.100	0.056	2.530	0.056
5,600	630D568M003GK3A	16.0 x 44.5	0.080	0.046	3.020	0.046
<b>6.3 VOLTS DC WORKING; 9 VOLTS DC SURGE</b>						
82	630D826M6R3BB3A	6.3 x 17.5	4.870	1.950	0.160	1.960
100	630D107M6R3CB3A	8.0 x 17.5	4.040	1.080	0.202	1.090
150	630D157M6R3CC3A	8.0 x 20.5	2.760	0.800	0.287	0.810
270	630D277M6R3DC3A	9.5 x 20.5	1.500	0.600	0.391	0.610
680	630D687M6R3DD3A	9.5 x 24.0	0.600	0.300	0.732	0.310
1,200	630D128M6R3DF3A	9.5 x 32.0	0.330	0.220	1.010	0.230
1,500	630D158M6R3DH3A	9.5 x 38.0	0.290	0.170	1.210	0.170
1,800	630D188M6R3EF3A	11.0 x 32.0	0.230	0.130	1.290	0.130
2,200	630D228M6R3EH3A	11.0 x 38.0	0.200	0.110	1.690	0.110
2,700	630D278M6R3FH3A	12.5 x 38.0	0.170	0.090	1.970	0.095
3,300	630D338M6R3FK3A	12.5 x 44.5	0.140	0.060	2.310	0.063
4,200	630D428M6R3GH3A	16.0 x 38.0	0.100	0.055	2.410	0.056
5,300	630D538M6R3GK3A	16.0 x 44.5	0.080	0.046	3.020	0.046
<b>7.5 VOLTS DC WORKING; 10 VOLTS DC SURGE</b>						
68	630D686M7R5BB3A	6.3 x 17.5	5.910	1.930	0.160	1.950
82	630D826M7R5CB3A	8.0 x 17.5	4.850	1.080	0.202	1.080
150	630D157M7R5CC3A	8.0 x 20.5	2.750	0.790	0.287	0.800
220	630D227M7R5DC3A	9.5 x 20.5	1.830	0.600	0.391	0.600
680	630D687M7R5DD3A	9.5 x 24.0	0.590	0.300	0.732	0.305
1,000	630D108M7R5DF3A	9.5 x 32.0	0.430	0.220	1.010	0.222
1,200	630D128M7R5DH3A	9.5 x 38.0	0.330	0.160	1.210	0.160
1,500	630D158M7R5EF3A	11.0 x 32.0	0.290	0.120	1.290	0.125
2,200	630D228M7R5EH3A	11.0 x 38.0	0.200	0.110	1.690	0.115
2,700	630D278M7R5FH3A	12.5 x 38.0	0.170	0.090	1.970	0.092
3,300	630D338M7R5FK3A	12.5 x 44.5	0.140	0.060	2.310	0.064
3,700	630D378M7R5GH3A	16.0 x 38.0	0.110	0.056	2.390	0.057
4,700	630D478M7R5GK3A	16.0 x 44.5	0.090	0.045	2.850	0.046
<b>10 VOLTS DC WORKING; 15 VOLTS DC SURGE</b>						
56	630D566M010BB3A	6.3 x 17.5	6.120	1.900	0.156	1.950
68	630D686M010CB3A	8.0 x 17.5	5.210	1.000	0.196	1.050
100	630D107M010CC3A	8.0 x 20.5	3.560	0.750	0.252	0.760
180	630D187M010DC3A	9.5 x 20.5	1.940	0.580	0.381	0.590
560	630D567M010DD3A	9.5 x 24.0	0.620	0.300	0.714	0.310
820	630D827M010DF3A	9.5 x 32.0	0.430	0.210	0.972	0.220
1,000	630D108M010DH3A	9.5 x 38.0	0.360	0.160	1.161	0.160
1,200	630D128M010EF3A	11.0 x 32.0	0.291	0.120	1.291	0.120

## STANDARD RATINGS FOR TYPE 630D

Rated Capacitance (μF)	Catalog Number	Nominal Case Size D x L (mm)	Max. ESR	Max. ESR	Max. Ripple	Max. Z
			+25°C 120Hz (Ω)	+25°C 20kHz (Ω)	Current +85°C 120Hz (A <sub>rms</sub> )	+25°C 100kHz (Ω)
<b>10 VOLTS DC WORKING; 15 VOLTS DC SURGE (CONTINUED)</b>						
1,800	630D188M010EH3A	11.0 x 38.0	0.203	0.100	1.671	0.100
1,800	630D188M010FH3A	12.5 x 38.0	0.203	0.090	1.811	0.090
2,200	630D228M010FK3A	12.5 x 44.5	0.176	0.070	2.071	0.070
3,300	630D338M010GH3A	16.0 x 38.0	0.111	0.060	2.401	0.060
3,700	630D378M010GK3A	16.0 x 44.5	0.101	0.050	2.701	0.050
<b>12 VOLTS DC WORKING; 16 VOLTS DC SURGE</b>						
47	630D476M012BB3A	6.3 x 17.5	6.794	1.800	0.150	1.850
68	630D686M012CB3A	8.0 x 17.5	4.732	0.991	0.205	0.995
100	630D107M012CC3A	8.0 x 20.5	3.231	0.745	0.265	0.750
180	630D187M012DC3A	9.5 x 20.5	1.766	0.575	0.399	0.580
470	630D477M012DD3A	9.5 x 24.0	0.679	0.295	0.683	0.300
680	630D687M012DF3A	9.5 x 32.0	0.473	0.205	0.926	0.210
820	630D827M012DH3A	9.5 x 38.0	0.389	0.150	1.110	0.155
1,200	630D128M012EF3A	11.0 x 32.0	0.265	0.115	1.350	0.118
1,500	630D158M012EH3A	11.0 x 38.0	0.231	0.098	1.560	0.100
1,800	630D188M012FH3A	12.5 x 38.0	0.185	0.084	1.890	0.085
2,200	630D228M012FK3A	12.5 x 44.5	0.162	0.064	2.160	0.065
2,700	630D278M012GH3A	16.0 x 38.0	0.125	0.055	2.250	0.055
3,300	630D338M012GK3A	16.0 x 44.5	0.101	0.045	2.700	0.045
<b>16 VOLTS DC WORKING; 20 VOLTS DC SURGE</b>						
47	630D476M016BB3A	6.3 x 17.5	5.460	1.700	0.153	1.705
56	630D566M016CB3A	8.0 x 17.5	5.360	0.950	0.192	0.955
82	630D826M016CC3A	8.0 x 20.5	3.705	0.740	0.248	0.745
150	630D157M016DC3A	9.5 x 20.5	2.110	0.570	0.366	0.575
390	630D397M016DD3A	9.5 x 24.0	0.763	0.290	0.644	0.295
560	630D567M016DF3A	9.5 x 32.0	0.536	0.200	0.871	0.205
820	630D827M016DH3A	9.5 x 38.0	0.371	0.150	1.140	0.155
1,000	630D108M016EF3A	11.0 x 32.0	0.307	0.110	1.250	0.115
1,200	630D128M016EH3A	11.0 x 38.0	0.252	0.095	1.510	0.100
1,500	630D158M016FH3A	12.5 x 38.0	0.221	0.080	1.730	0.085
1,800	630D188M016FK3A	12.5 x 44.5	0.176	0.065	2.070	0.066
2,200	630D228M016GH3A	16.0 x 38.0	0.140	0.055	2.140	0.056
2,700	630D278M016GK3A	16.0 x 44.5	0.110	0.045	2.570	0.046
<b>20 VOLTS DC WORKING; 25 VOLTS DC SURGE</b>						
27	630D276M020BB3A	6.3 x 17.5	10.82	1.680	0.118	1.690
39	630D396M020CB3A	8.0 x 17.5	7.212	0.920	0.165	0.950
56	630D566M020CC3A	8.0 x 20.5	5.063	0.730	0.212	0.740
100	630D107M020DC3A	9.5 x 20.5	2.902	0.560	0.312	0.565
270	630D277M020DD3A	9.5 x 24.0	1.081	0.285	0.541	0.288
390	630D397M020DF3A	9.5 x 32.0	0.721	0.200	0.750	0.200
560	630D567M020DH3A	9.5 x 38.0	0.506	0.180	0.970	0.180
680	630D687M020EF3A	11.0 x 32.0	0.425	0.148	1.070	0.149
820	630D827M020EH3A	11.0 x 38.0	0.350	0.108	1.270	0.105
1,000	630D108M020FH3A	12.5 x 38.0	0.290	0.092	1.510	0.093
1,200	630D128M020FK3A	12.5 x 44.5	0.238	0.064	1.780	0.065
1,500	630D158M020GH3A	16.0 x 38.0	0.200	0.055	1.850	0.055
1,800	630D188M020GK3A	16.0 x 44.5	0.155	0.045	2.170	0.045
<b>25 VOLTS DC WORKING; 30 VOLTS DC SURGE</b>						
27	630D276M025BB3A	6.3 x 17.5	12.50	2.810	0.110	2.850
33	630D336M025CB3A	8.0 x 17.5	8.330	1.900	0.154	1.950

## STANDARD RATINGS FOR TYPE 630D

Rated Capacitance (μF)	Catalog Number	Nominal Case Size D x L (mm)	Max. ESR	Max. ESR	Max. Ripple Current	Max. Z
			+25°C 120Hz (Ω)	+25°C 20kHz (Ω)	+85°C 120Hz (A <sub>rms</sub> )	+25°C 100kHz (Ω)
<b>25 VOLTS DC WORKING; 30 VOLTS DC SURGE (CONTINUED)</b>						
47	630D476M025CC3A	8.0 x 20.5	5.800	1.250	0.198	1.310
82	630D826M025DC3A	9.5 x 20.5	3.310	0.750	0.292	0.760
220	630D227M025DD3A	9.5 x 24.0	1.250	0.570	0.504	0.580
330	630D337M025DF3A	9.5 x 32.0	0.830	0.380	0.698	0.390
390	630D397M025DH3A	9.5 x 38.0	0.680	0.290	0.837	0.290
560	630D567M025EF3A	11.0 x 32.0	0.470	0.210	1.010	0.210
680	630D687M025EH3A	11.0 x 38.0	0.410	0.160	1.190	0.160
820	630D827M025FH3A	12.5 x 38.0	0.330	0.100	1.410	0.110
1,000	630D108M025FK3A	12.5 x 44.5	0.270	0.080	1.660	0.081
1,200	630D128M025GH3A	16.0 x 38.0	0.220	0.060	1.910	0.061
1,500	630D158M025GK3A	16.0 x 44.5	0.175	0.058	2.040	0.058
<b>30 VOLTS DC WORKING; 35 VOLTS DC SURGE</b>						
22	630D226M030BB3A	6.3 x 17.5	14.13	2.900	0.104	2.910
33	630D336M030CB3A	8.0 x 17.5	9.636	1.950	0.143	1.980
47	630D476M030CC3A	8.0 x 20.5	6.424	1.300	0.187	1.320
82	630D826M030DC3A	9.5 x 20.5	3.785	0.760	0.269	0.770
220	630D227M030DD3A	9.5 x 24.0	1.413	0.570	0.474	0.580
330	630D337M030DF3A	9.5 x 32.0	0.963	0.370	0.649	0.380
390	630D397M030DH3A	9.5 x 38.0	0.785	0.280	0.780	0.285
560	630D567M030EF3A	11.0 x 32.0	0.543	0.205	0.943	0.210
680	630D687M030EH3A	11.0 x 38.0	0.451	0.156	1.120	0.170
820	630D827M030FH3A	12.5 x 38.0	0.378	0.105	1.320	0.108
1,000	630D108M030FK3A	12.5 x 44.5	0.311	0.080	1.560	0.081
1,200	630D128M030GH3A	16.0 x 38.0	0.257	0.065	1.600	0.066
1,500	630D158M030GK3A	16.0 x 44.5	0.200	0.062	1.910	0.063
<b>35 VOLTS DC WORKING; 40 VOLTS DC SURGE</b>						
18	630D186M035BB3A	6.3 x 17.5	14.15	2.850	0.104	2.880
22	630D226M035CB3A	8.0 x 17.5	11.78	1.900	0.129	1.920
27	630D276M035CC3A	8.0 x 20.5	9.640	1.300	0.153	1.320
56	630D566M035DC3A	9.5 x 20.5	4.510	0.760	0.250	0.760
150	630D157M035DD3A	9.5 x 24.0	1.770	0.570	0.424	0.570
220	630D227M035DF3A	9.5 x 32.0	1.170	0.370	0.587	0.370
270	630D277M035DH3A	9.5 x 38.0	0.970	0.280	0.702	0.280
390	630D397M035EF3A	11.0 x 32.0	0.640	0.204	0.867	0.205
470	630D477M035EH3A	11.0 x 38.0	0.540	0.153	1.020	0.155
560	630D567M035FH3A	12.5 x 38.0	0.450	0.105	1.210	0.105
680	630D687M035FK3A	12.5 x 44.5	0.380	0.080	1.410	0.080
820	630D827M035GH3A	16.0 x 38.0	0.290	0.065	1.500	0.065
1,000	630D108M035GK3A	16.0 x 44.5	0.230	0.055	1.800	0.055
<b>40 VOLTS DC WORKING; 45 VOLTS DC SURGE</b>						
12	630D126M040BB3A	6.3 x 17.5	21.20	2.810	0.085	2.850
18	630D186M040CB3A	8.0 x 17.5	14.13	1.910	0.118	1.910
27	630D276M040CC3A	8.0 x 20.5	9.630	1.285	0.153	1.300
47	630D476M040DC3A	9.5 x 20.5	5.430	0.750	0.228	0.755
120	630D127M040DD3A	9.5 x 24.0	2.120	0.560	0.387	0.565
180	630D187M040DF3A	9.5 x 32.0	1.410	0.360	0.536	0.365
270	630D277M040DH3A	9.5 x 38.0	0.963	0.270	0.703	0.265
330	630D337M040EF3A	11.0 x 32.0	0.785	0.200	0.776	0.205
390	630D397M040EH3A	11.0 x 38.0	0.642	0.153	0.939	0.155
470	630D477M040FH3A	12.5 x 38.0	0.543	0.103	1.100	0.105

## STANDARD RATINGS FOR TYPE 630D

Rated Capacitance (μF)	Catalog Number	Nominal Case Size D x L (mm)	Max. ESR	Max. ESR	Max. Ripple	Max. Z
			+25°C 120Hz (Ω)	+25°C 20kHz (Ω)	Current +85°C 120Hz (A <sub>rms</sub> )	+25°C 100kHz (Ω)
<b>40 VOLTS DC WORKING; 45 VOLTS DC SURGE (CONTINUED)</b>						
560	630D567M040FK3A	12.5 x 44.5	0.451	0.083	1.290	0.085
680	630D687M040GH3A	16.0 x 38.0	0.351	0.063	1.350	0.065
820	630D827M040GK3A	16.0 x 44.5	0.261	0.054	1.670	0.055
<b>50 VOLTS DC WORKING; 60 VOLTS DC SURGE</b>						
10	630D106M050BB3A	6.3 x 17.5	24.26	2.780	0.079	2.810
12	630D126M050CB3A	8.0 x 17.5	19.16	1.890	0.095	1.900
22	630D226M050CC3A	8.0 x 20.5	11.05	1.250	0.143	1.310
33	630D336M050DC3A	9.5 x 20.5	7.370	0.760	0.196	0.760
82	630D826M050DD3A	9.5 x 24.0	2.930	0.570	0.329	0.570
120	630D127M050DF3A	9.5 x 32.0	1.990	0.360	0.451	0.370
180	630D187M050DH3A	9.5 x 38.0	1.330	0.280	0.601	0.280
220	630D227M050EF3A	11.0 x 32.0	1.110	0.205	0.661	0.205
270	630D277M050EH3A	11.0 x 38.0	0.905	0.156	0.791	0.158
330	630D337M050FH3A	12.5 x 38.0	0.737	0.104	0.946	0.105
390	630D397M050FK3A	12.5 x 44.5	0.603	0.077	1.120	0.077
560	630D567M050GH3A	16.0 x 38.0	0.421	0.066	1.240	0.064
680	630D687M050GK3A	16.0 x 44.5	0.341	0.061	1.460	0.061
<b>63 VOLTS DC WORKING; 70 VOLTS DC SURGE</b>						
6.8	630D685M063BB3A	6.3 x 17.5	35.53	2.750	0.066	2.780
8.2	630D825M063CB3A	8.0 x 17.5	29.26	1.800	0.082	1.850
12	630D126M063CC3A	8.0 x 20.5	19.91	1.200	0.107	1.250
22	630D226M063DC3A	9.5 x 20.5	11.05	0.750	0.161	0.760
56	630D566M063DD3A	9.5 x 24.0	4.230	0.560	0.273	0.570
82	630D826M063DF3A	9.5 x 32.0	2.930	0.355	0.372	0.362
120	630D127M063DH3A	9.5 x 38.0	2.010	0.270	0.491	0.271
150	630D157M063EF3A	11.0 x 32.0	1.660	0.195	0.541	0.201
180	630D187M063EH3A	11.0 x 38.0	1.330	0.150	0.653	0.155
180	630D187M063FH3A	12.5 x 38.0	1.330	0.100	0.704	0.105
220	630D227M063FK3A	12.5 x 44.5	1.110	0.076	0.825	0.078
330	630D337M063GH3A	16.0 x 38.0	0.710	0.062	0.950	0.063
470	630D477M063GK3A	16.0 x 44.5	0.560	0.060	1.150	0.062
<b>75 VOLTS DC WORKING; 85 VOLTS DC SURGE</b>						
5.6	630D565M075BB3A	6.3 x 17.5	34.00	2.619	0.063	2.650
6.8	630D685M075CB3A	8.0 x 17.5	29.00	2.234	0.072	2.250
10	630D106M075CC3A	8.0 x 20.5	20.00	1.541	0.093	1.610
18	630D186M075DC3A	9.5 x 20.5	11.10	0.855	0.138	0.880
27	630D276M075DD3A	9.5 x 24.0	7.400	0.570	0.180	0.580
47	630D476M075DF3A	9.5 x 32.0	4.300	0.331	0.265	0.340
56	630D566M075DH3A	9.5 x 38.0	3.600	0.277	0.315	0.282
82	630D826M075EF3A	11.0 x 32.0	2.400	0.185	0.390	0.191
100	630D107M075EH3A	11.0 x 38.0	2.000	0.154	0.460	0.161
120	630D127M075FH3A	12.5 x 38.0	1.660	0.128	0.546	0.134
150	630D157M075FK3A	12.5 x 44.5	1.330	0.102	0.656	0.109
220	630D227M075GH3A	16.0 x 38.0	0.900	0.069	0.843	0.071
270	630D277M075GK3A	16.0 x 44.5	0.740	0.057	0.993	0.060
<b>100 VOLTS DC WORKING; 125 VOLTS DC SURGE</b>						
4.7	630D475M100BB3A	6.3 x 17.5	42.50	4.630	0.052	4.652
5.6	630D565M100CB3A	8.0 x 17.5	35.70	3.889	0.065	3.934
8.2	630D825M100CC3A	8.0 x 20.5	24.40	2.658	0.084	2.690
15	630D156M100DC3A	9.5 x 20.5	13.30	1.449	0.126	1.475

## STANDARD RATINGS FOR TYPE 630D

Rated Capacitance (μF)	Catalog Number	Nominal Case Size D x L (mm)	Max. ESR	Max. ESR	Max. Ripple	Max. Z
			+25°C 120Hz (Ω)	+25°C 20kHz (Ω)	Current +85°C 120Hz (A <sub>rms</sub> )	+25°C 100kHz (Ω)
<b>100 VOLTS DC WORKING; 125 VOLTS DC SURGE (CONTINUED)</b>						
22	630D226M100DD3A	9.5 x 24.0	9.100	0.991	0.134	1.001
33	630D336M100DF3A	9.5 x 32.0	6.100	0.765	0.224	0.698
47	630D476M100DH3A	9.5 x 38.0	4.250	0.463	0.290	0.478
68	630D686M100EF3A	11.0 x 32.0	2.940	0.320	0.349	0.345
82	630D826M100FH3A	12.5 x 38.0	2.440	0.266	0.497	0.281
120	630D127M100FK3A	12.5 x 44.5	2.000	0.218	0.584	0.228
150	630D157M100GH3A	16.0 x 38.0	1.660	0.181	0.694	0.196
220	630D227M100GK3A	16.0 x 44.5	1.340	0.146	0.895	0.154
<b>150 VOLTS DC WORKING; 175 VOLTS DC SURGE</b>						
3.9	630D395M150BB3A	6.3 x 17.5	42.40	5.930	0.051	5.946
4.7	630D475M150CB3A	8.0 x 17.5	35.10	4.909	0.064	4.928
6.8	630D685M150CC3A	8.0 x 20.5	24.20	3.385	0.082	3.399
8.2	630D825M150DC3A	9.5 x 20.5	20.10	2.811	0.103	2.841
10	630D106M150DD3A	9.5 x 24.0	16.50	2.308	0.120	2.329
18	630D186M150DF3A	9.5 x 32.0	9.200	1.287	0.182	1.299
22	630D226M150DH3A	9.5 x 38.0	7.500	1.049	0.218	1.060
33	630D336M150EF3A	11.0 x 32.0	5.000	0.699	0.268	0.701
47	630D476M150EH3A	11.0 x 38.0	3.500	0.490	0.348	0.500
47	630D476M150FH3A	12.5 x 38.0	3.300	0.462	0.410	0.478
56	630D566M150FK3A	12.5 x 44.5	2.940	0.411	0.455	0.430
100	630D107M150GH3A	16.0 x 38.0	1.650	0.231	0.622	0.240
120	630D127M150GK3A	16.0 x 44.5	1.380	0.193	0.727	0.205
<b>180 VOLTS DC WORKING; 225 VOLTS DC SURGE</b>						
2.7	630D275M180BB3A	6.3 x 17.5	50.00	7.278	0.048	7.290
3.3	630D335M180CB3A	8.0 x 17.5	44.00	6.405	0.060	6.470
5.6	630D565M180CC3A	8.0 x 20.5	26.00	3.785	0.082	3.800
6.8	630D685M180DC3A	9.5 x 20.5	22.00	3.202	0.098	3.215
10	630D106M180DD3A	9.5 x 24.0	16.00	2.329	0.119	2.346
15	630D156M180DF3A	9.5 x 32.0	10.00	1.456	0.180	1.471
18	630D186M180DH3A	9.5 x 38.0	8.000	1.164	0.215	1.180
27	630D276M180EF3A	11.0 x 32.0	5.100	0.742	0.265	0.762
33	630D336M180EH3A	11.0 x 38.0	4.200	0.611	0.338	0.625
37	630D376M180FH3A	12.5 x 38.0	3.700	0.539	0.406	0.543
47	630D476M180FK3A	12.5 x 44.5	3.200	0.466	0.434	0.475
68	630D686M180GH3A	16.0 x 38.0	2.000	0.291	0.565	0.299
100	630D107M180GK3A	16.0 x 44.5	1.500	0.218	0.700	0.224
<b>200 VOLTS DC WORKING; 250 VOLTS DC SURGE</b>						
2.2	630D225M200BB3A	6.3 x 17.5	50.00	8.052	0.047	8.060
2.7	630D275M200CB3A	8.0 x 17.5	44.40	7.150	0.059	7.241
4.7	630D475M200CC3A	8.0 x 20.5	28.50	4.589	0.078	4.600
5.6	630D565M200DC3A	9.5 x 20.5	21.50	3.462	0.094	3.496
8.2	630D825M200DD3A	9.5 x 24.0	17.40	2.802	0.120	2.824
12	630D126M200DF3A	9.5 x 32.0	11.28	1.816	0.164	1.834
17	630D176M200DH3A	9.5 x 38.0	8.340	1.343	0.208	1.362
22	630D226M200EF3A	11.0 x 32.0	6.200	0.998	0.246	1.008
33	630D336M200EH3A	11.0 x 38.0	4.330	0.697	0.330	0.709
47	630D476M200FH3A	12.5 x 38.0	3.330	0.536	0.360	0.549
68	630D686M200GH3A	16.0 x 38.0	2.150	0.346	0.545	0.362
82	630D826M200GK3A	16.0 x 44.5	1.520	0.245	0.690	0.258

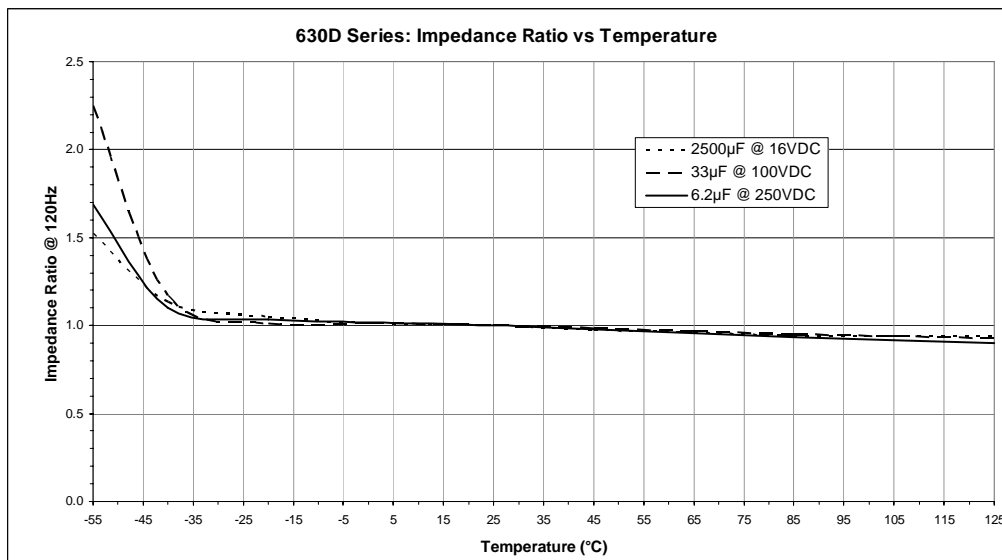
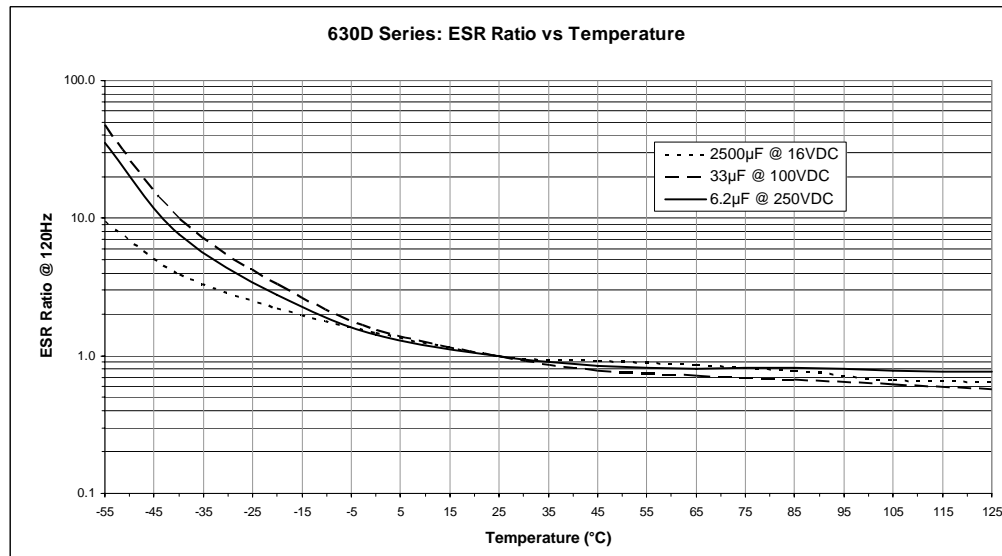
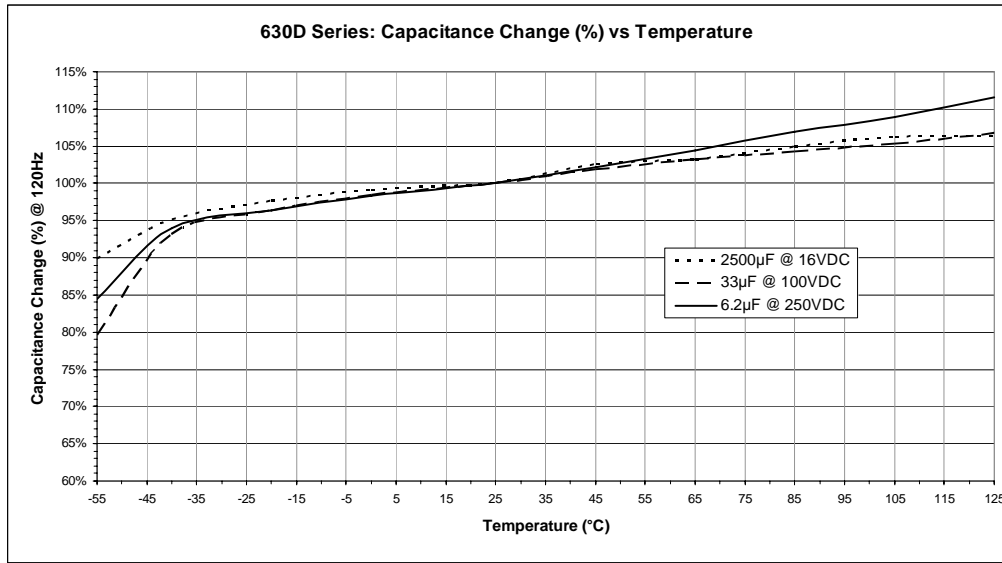
**STANDARD RATINGS FOR TYPE 630D**

Rated Capacitance ( $\mu$ F)	Catalog Number	Nominal Case	Max. ESR	Max. ESR	Max. Ripple	Max. Z
		Size D x L (mm)	+25°C 120Hz ( $\Omega$ )	+25°C 20kHz ( $\Omega$ )	Current +85°C 120Hz (A <sub>rms</sub> )	+25°C 100kHz ( $\Omega$ )
<b>250 VOLTS DC WORKING; 300 VOLTS DC SURGE</b>						
1.8	630D185M250BB3A	6.3 x 17.5	66.80	11.42	0.042	11.52
2.2	630D225M250CB3A	8.0 x 17.5	54.10	9.248	0.053	9.348
3.3	630D335M250CC3A	8.0 x 20.5	36.10	6.171	0.069	6.205
6.2	630D625M250DC3A	9.5 x 20.5	23.40	4.000	0.095	4.034
8.2	630D825M250DD3A	9.5 x 24.0	17.20	2.940	0.128	2.978
12	630D126M250DF3A	9.5 x 32.0	11.20	1.915	0.158	1.927
22	630D226M250EF3A	11.0 x 32.0	7.100	1.214	0.242	1.227
27	630D276M250EH3A	11.0 x 38.0	5.650	0.966	0.298	0.999
33	630D336M250FK3A	12.5 x 44.5	4.650	0.795	0.398	0.812
47	630D476M250GH3A	16.0 x 38.0	3.000	0.513	0.498	0.536
68	630D686M250GK3A	16.0 x 44.5	2.500	0.427	0.598	0.444



# 630D TYPICAL PERFORMANCE PROFILES

## TEMPERATURE CHARACTERISTICS



# 630D TYPICAL PERFORMANCE PROFILES

## FREQUENCY CHARACTERISTICS

