

Series 1306 Polyester and Foil

Features: Flame retardant to UL94, cost effective, moderate temperature choice, small size, dv/dt ratings in excess of 1000 V/us.

Applications: Recommended for DC applications where blocking capacitance stability is not a critical factor, medical electronics, telecommunications.

Packaging: Axial wrap and fill (TF,TC), radial lead box (EFR, DFR), axial lead epoxy tube (EC).

Specifications

1) Temperature Range

-55°C to 85°C at rated voltage to 125°C with 50% voltage derating.

2) Capacitance

0.001µf to 10µF

3) Dielectric Strength

At 25°C, 200% of rated voltage when applied terminal to terminal for one minute through a current limiting resistance.

4) Insulation Resistance

At 25°C after 2 minutes charge time at rated voltage or 500 VDC, whichever is less, the minimum IR shall be 50,000 Megohm-Microfarads, but need not exceed 100,000 Megohms.

5) Humidity Resistance

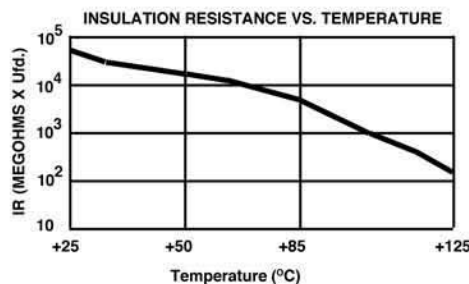
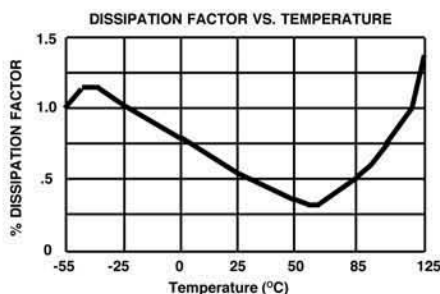
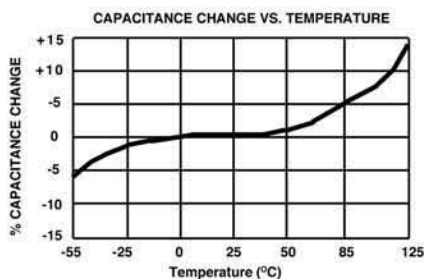
Series 1306 shall meet the requirements of MIL-STD. 202, Method 103B.

6) Dissipation Factor

Shall be 0.6% max. when measured at 1 KHz and 25°C.

7) Life Test

Will withstand the application of 140% rated voltage at + 85°C for 250 hours with not more than one failure in 12 permitted.



Typical Temperature Curves Polyester and Foil

Catalog Nomenclature

*** 1 3 0 6 E F R - 3 - . 0 0 1 - 1 - 5**

Case Code:

TC - Wrap & Fill - Round - Axial
 TF - Wrap & Fill - Flat - Axial
 EC - Epoxy Case - Round - Axial
 EFR - Epoxy Case - Flat - Radial
 DFR - Dipped Construction - Flat - Radial
 HS - Hermetically Sealed

Dielectric Code:

1206 - Polypropylene/Foil
 1213 - Metallized Polypropylene
 1306 - Polyester/Foil
 1313 - Metallized Polyester
 1613 - Metallized Polycarbonate
 1906 - Polystyrene/Foil
 2113 - Metallized Polyphenylene Sulfide

Size Code:

3 - Standard
 2 - Miniature (1313DFR Series Only)
 X - Non-standard
 Or one letter case code

Capacitance:

In microfarads (μ F)

Voltage:

.35 - 35 VDC
 0 - 50 VDC
 1 - 100 VDC
 2 - 200 VDC
 3 - 300 VDC
 4 - 400 VDC
 10 - 1000 VDC
 1.6K - 1600VDC
 Etc.

Tolerance:

1 - 1%
 2 - 2%
 5 - 5%
 Etc.

*** Options**

The following options are available from EFC by specifying the appropriate prefix.

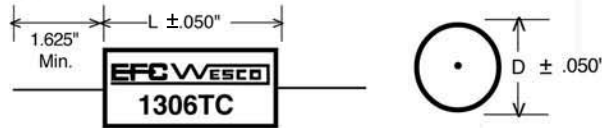
- A - Aluminum foil electrodes
- T - Tin foil electrodes
- HV - High voltage DC applications
- AC - AC voltage rated applications
- MF - Metallized and foil hybrid for maximum pulse current applications
- M - Dual metallized design for pulse current applications
- SP - Low ESR, high RMS current applications
- PC - Direct mount terminals for high current filter applications
- FT - Feed thru filter applications
- RC - Resistor capacitor suppressors



1306TC Tubular Wrap & Fill

Polyester and Foil Capacitors

Lead Spec.
Tinned Copperweld
Under .250D = 24 AWG
.250 - .440D = 22AWG
Above .440D = 20 AWG



Dimensions and Ratings

Cap.		50 VDC	
µF	Part #	D	L
.001	1306TC-3-.001-0-*	.180	.406
.0012	1306TC-3-.0012-0-*	.180	.406
.0015	1306TC-3-.0015-0-*	.180	.406
.0022	1306TC-3-.0022-0-*	.180	.406
.0027	1306TC-3-.0027-0-*	.180	.406
.0039	1306TC-3-.0039-0-*	.180	.406
.0047	1306TC-3-.0047-0-*	.180	.406
.0056	1306TC-3-.0056-0-*	.180	.406
.0068	1306TC-3-.0068-0-*	.180	.406
.0082	1306TC-3-.0082-0-*	.180	.406
.01	1306TC-3-.01-0-*	.180	.406
.012	1306TC-3-.012-0-*	.180	.406
.015	1306TC-3-.015-0-*	.180	.406
.018	1306TC-3-.018-0-*	.200	.406
.022	1306TC-3-.022-0-*	.210	.406
.027	1306TC-3-.027-0-*	.230	.406
.033	1306TC-3-.033-0-*	.180	.531
.039	1306TC-3-.039-0-*	.190	.531
.047	1306TC-3-.047-0-*	.200	.531
.056	1306TC-3-.056-0-*	.220	.531
.068	1306TC-3-.068-0-*	.200	.656
.082	1306TC-3-.082-0-*	.210	.656
.1	1306TC-3-.1-0-*	.230	.656
.12	1306TC-3-.12-0-*	.250	.656
.15	1306TC-3-.15-0-*	.280	.656
.18	1306TC-3-.18-0-*	.270	.781
.22	1306TC-3-.22-0-*	.300	.781
.27	1306TC-3-.27-0-*	.330	.781
.33	1306TC-3-.33-0-*	.320	.906
.39	1306TC-3-.39-0-*	.350	.906
.47	1306TC-3-.47-0-*	.380	.906
.56	1306TC-3-.56-0-*	.360	1.190
.68	1306TC-3-.68-0-*	.390	1.190
.82	1306TC-3-.82-0-*	.420	1.190
1.0	1306TC-3-1.0-0-*	.460	1.190
1.25	1306TC-3-1.25-0-*	.520	1.190

Cap.		100 VDC	
µF	Part #	D	L
.001	1306TC-3-.001-1-*	.180	.406
.0012	1306TC-3-.0012-1-*	.180	.406
.0015	1306TC-3-.0015-1-*	.180	.406
.0022	1306TC-3-.0022-1-*	.180	.406
.0027	1306TC-3-.0027-1-*	.180	.406
.0039	1306TC-3-.0039-1-*	.180	.406
.0047	1306TC-3-.0047-1-*	.180	.406
.0056	1306TC-3-.0056-1-*	.180	.406
.0068	1306TC-3-.0068-1-*	.180	.406
.0082	1306TC-3-.0082-1-*	.180	.406
.01	1306TC-3-.01-1-*	.180	.406
.012	1306TC-3-.012-1-*	.200	.406
.015	1306TC-3-.015-1-*	.220	.406
.018	1306TC-3-.018-1-*	.240	.406
.022	1306TC-3-.022-1-*	.180	.531
.027	1306TC-3-.027-1-*	.200	.531
.033	1306TC-3-.033-1-*	.210	.531
.039	1306TC-3-.039-1-*	.230	.531
.047	1306TC-3-.047-1-*	.250	.531
.056	1306TC-3-.056-1-*	.270	.531
.068	1306TC-3-.068-1-*	.240	.656
.082	1306TC-3-.082-1-*	.270	.656
.1	1306TC-3-.1-1-*	.290	.656
.12	1306TC-3-.12-1-*	.320	.656
.15	1306TC-3-.15-1-*	.350	.656
.18	1306TC-3-.18-1-*	.390	.656
.22	1306TC-3-.22-1-*	.330	.906
.27	1306TC-3-.27-1-*	.370	.906
.33	1306TC-3-.33-1-*	.400	.906
.39	1306TC-3-.39-1-*	.440	.906
.47	1306TC-3-.47-1-*	.480	.906
.56	1306TC-3-.56-1-*	.440	1.190
.68	1306TC-3-.68-1-*	.490	1.190
.82	1306TC-3-.82-1-*	.530	1.190
1.0	1306TC-3-1.0-1-*	.580	1.190
1.25	1306TC-3-1.25-1-*	.650	1.190
1.5	1306TC-3-1.5-1-*	.630	1.440
2.0	1306TC-3-2.0-1-*	.720	1.440
3.0	1306TC-3-3.0-1-*	.800	1.690
4.0	1306TC-3-4.0-1-*	.920	1.690
5.0	1306TC-3-5.0-1-*	1.020	1.940

Cap.		160 VDC	
µF	Part #	D	L
.001	1306TC-3-.001-1.6-*	.180	.406
.0012	1306TC-3-.0012-1.6-*	.180	.406
.0015	1306TC-3-.0015-1.6-*	.180	.406
.0022	1306TC-3-.0022-1.6-*	.180	.406
.0027	1306TC-3-.0027-1.6-*	.180	.406
.0039	1306TC-3-.0039-1.6-*	.180	.406
.0047	1306TC-3-.0047-1.6-*	.180	.406
.0056	1306TC-3-.0056-1.6-*	.180	.406
.0068	1306TC-3-.0068-1.6-*	.180	.406
.0082	1306TC-3-.0082-1.6-*	.190	.406
.01	1306TC-3-.01-1.6-*	.210	.406
.012	1306TC-3-.012-1.6-*	.220	.406
.015	1306TC-3-.015-1.6-*	.170	.531
.018	1306TC-3-.018-1.6-*	.180	.531
.022	1306TC-3-.022-1.6-*	.200	.531
.027	1306TC-3-.027-1.6-*	.220	.531
.033	1306TC-3-.033-1.6-*	.240	.531
.039	1306TC-3-.039-1.6-*	.260	.531
.047	1306TC-3-.047-1.6-*	.290	.531
.056	1306TC-3-.056-1.6-*	.250	.656
.068	1306TC-3-.068-1.6-*	.280	.656
.082	1306TC-3-.082-1.6-*	.300	.656
.1	1306TC-3-.1-1.6-*	.330	.656
.12	1306TC-3-.12-1.6-*	.360	.656
.15	1306TC-3-.15-1.6-*	.350	.781
.18	1306TC-3-.18-1.6-*	.380	.781
.22	1306TC-3-.22-1.6-*	.420	.781
.27	1306TC-3-.27-1.6-*	.410	.906
.33	1306TC-3-.33-1.6-*	.460	.906
.39	1306TC-3-.39-1.6-*	.500	.906
.47	1306TC-3-.47-1.6-*	.460	1.190
.56	1306TC-3-.56-1.6-*	.500	1.190
.68	1306TC-3-.68-1.6-*	.550	1.190
.82	1306TC-3-.82-1.6-*	.600	1.190
1.0	1306TC-3-1.0-1.6-*	.660	1.190
1.25	1306TC-3-1.25-1.6-*	.650	1.440
1.5	1306TC-3-1.5-1.6-*	.710	1.440
2.0	1306TC-3-2.0-1.6-*	.750	1.690
3.0	1306TC-3-3.0-1.6-*	.910	1.690
4.0	1306TC-3-4.0-1.6-*	1.050	1.690
5.0	1306TC-3-5.0-1.6-*	1.070	1.940
6.0	1306TC-3-6.0-1.6-*	1.170	1.940
8.0	1306TC-3-8.0-1.6-*	1.260	2.250

* - Please insert appropriate tolerance code

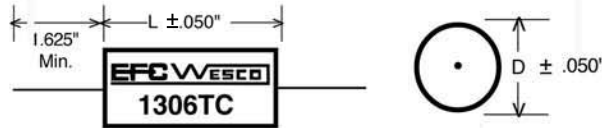


Please consult factory for special requirements, including non-standard values and sizes

1306TC Tubular Wrap & Fill

Polyester and Foil Capacitors

Lead Spec.
Tinned Copperweld
Under .250D = 24 AWG
.250 - .440D = 22AWG
Above .440D = 20 AWG



Dimensions and Ratings

Cap.	200 VDC		
µF	Part #	D	L
.001	1306TC-3-.001-2-*	.180	.406
.0012	1306TC-3-.0012-2-*	.180	.406
.0015	1306TC-3-.0015-2-*	.180	.406
.0022	1306TC-3-.0022-2-*	.180	.406
.0027	1306TC-3-.0027-2-*	.180	.406
.0039	1306TC-3-.0039-2-*	.180	.406
.0047	1306TC-3-.0047-2-*	.180	.406
.0056	1306TC-3-.0056-2-*	.190	.406
.0068	1306TC-3-.0068-2-*	.210	.406
.0082	1306TC-3-.0082-2-*	.230	.406
.01	1306TC-3-.01-2-*	.250	.406
.012	1306TC-3-.012-2-*	.180	.531
.015	1306TC-3-.015-2-*	.200	.531
.018	1306TC-3-.018-2-*	.220	.531
.022	1306TC-3-.022-2-*	.240	.531
.027	1306TC-3-.027-2-*	.260	.531
.033	1306TC-3-.033-2-*	.290	.531
.039	1306TC-3-.039-2-*	.250	.656
.047	1306TC-3-.047-2-*	.280	.656
.056	1306TC-3-.056-2-*	.300	.656
.068	1306TC-3-.068-2-*	.330	.656
.082	1306TC-3-.082-2-*	.360	.656
.1	1306TC-3-.1-2-*	.350	.781
.12	1306TC-3-.12-2-*	.380	.781
.15	1306TC-3-.15-2-*	.420	.781
.18	1306TC-3-.18-2-*	.410	.906
.22	1306TC-3-.22-2-*	.450	.906
.27	1306TC-3-.27-2-*	.500	.906
.33	1306TC-3-.33-2-*	.470	1.190
.39	1306TC-3-.39-2-*	.510	1.190
.47	1306TC-3-.47-2-*	.560	1.190
.56	1306TC-3-.56-2-*	.600	1.190
.68	1306TC-3-.68-2-*	.660	1.190
.82	1306TC-3-.82-2-*	.640	1.440
1.0	1306TC-3-1.0-2-*	.710	1.690
1.25	1306TC-3-1.25-2-*	.780	1.690
1.5	1306TC-3-1.5-2-*	.830	1.940
2.0	1306TC-3-2.0-2-*	1.010	1.940

Cap.	400 VDC		
µF	Part #	D	L
.001	1306TC-3-.001-4-*	.180	.406
.0012	1306TC-3-.0012-4-*	.180	.406
.0015	1306TC-3-.0015-4-*	.180	.406
.0022	1306TC-3-.0022-4-*	.200	.406
.0027	1306TC-3-.0027-4-*	.220	.406
.0039	1306TC-3-.0039-4-*	.260	.406
.0047	1306TC-3-.0047-4-*	.180	.531
.0056	1306TC-3-.0056-4-*	.190	.531
.0068	1306TC-3-.0068-4-*	.200	.531
.0082	1306TC-3-.0082-4-*	.220	.531
.01	1306TC-3-.01-4-*	.240	.531
.012	1306TC-3-.012-4-*	.270	.531
.015	1306TC-3-.015-4-*	.290	.531
.018	1306TC-3-.018-4-*	.250	.656
.022	1306TC-3-.022-4-*	.280	.656
.027	1306TC-3-.027-4-*	.310	.656
.033	1306TC-3-.033-4-*	.340	.656
.039	1306TC-3-.039-4-*	.360	.656
.047	1306TC-3-.047-4-*	.340	.781
.056	1306TC-3-.056-4-*	.370	.781
.068	1306TC-3-.068-4-*	.410	.781
.082	1306TC-3-.082-4-*	.400	.906
.1	1306TC-3-.1-4-*	.440	.906
.12	1306TC-3-.12-4-*	.480	.906
.15	1306TC-3-.15-4-*	.450	1.190
.18	1306TC-3-.18-4-*	.490	1.190
.22	1306TC-3-.22-4-*	.540	1.190
.27	1306TC-3-.27-4-*	.600	1.190
.33	1306TC-3-.33-4-*	.580	1.440
.39	1306TC-3-.39-4-*	.630	1.440
.47	1306TC-3-.47-4-*	.690	1.440
.56	1306TC-3-.56-4-*	.680	1.690
.68	1306TC-3-.68-4-*	.740	1.690
.82	1306TC-3-.82-4-*	.810	1.690
1.0	1306TC-3-1.0-4-*	.820	1.940
1.25	1306TC-3-1.25-4-*	.920	1.940
1.5	1306TC-3-1.5-4-*	1.000	1.940
2.0	1306TC-3-2.0-4-*	1.080	2.250
3.0	1306TC-3-3.0-4-*	1.310	2.250

Cap.	600 VDC		
µF	Part #	D	L
.001	1306TC-3-.001-6-*	.180	.531
.0012	1306TC-3-.0012-6-*	.180	.531
.0015	1306TC-3-.0015-6-*	.180	.531
.0022	1306TC-3-.0022-6-*	.190	.531
.0027	1306TC-3-.0027-6-*	.200	.531
.0039	1306TC-3-.0039-6-*	.240	.531
.0047	1306TC-3-.0047-6-*	.260	.531
.0056	1306TC-3-.0056-6-*	.280	.531
.0068	1306TC-3-.0068-6-*	.230	.656
.0082	1306TC-3-.0082-6-*	.250	.656
.01	1306TC-3-.01-6-*	.270	.656
.012	1306TC-3-.012-6-*	.290	.656
.015	1306TC-3-.015-6-*	.330	.656
.018	1306TC-3-.018-6-*	.360	.656
.022	1306TC-3-.022-6-*	.330	.781
.027	1306TC-3-.027-6-*	.360	.781
.033	1306TC-3-.033-6-*	.400	.781
.039	1306TC-3-.039-6-*	.370	.906
.047	1306TC-3-.047-6-*	.410	.906
.056	1306TC-3-.056-6-*	.450	.906
.068	1306TC-3-.068-6-*	.490	.906
.082	1306TC-3-.082-6-*	.450	1.190
.1	1306TC-3-.1-6-*	.490	1.190
.12	1306TC-3-.12-6-*	.530	1.190
.15	1306TC-3-.15-6-*	.590	1.190
.18	1306TC-3-.18-6-*	.650	1.190
.22	1306TC-3-.22-6-*	.620	1.440
.27	1306TC-3-.27-6-*	.690	1.440
.33	1306TC-3-.33-6-*	.680	1.690
.39	1306TC-3-.39-6-*	.740	1.690
.47	1306TC-3-.47-6-*	.810	1.690
.56	1306TC-3-.56-6-*	.810	1.940
.68	1306TC-3-.68-6-*	.890	1.940
.82	1306TC-3-.82-6-*	.970	1.940
1.0	1306TC-3-1.0-6-*	1.070	1.940
1.25	1306TC-3-1.25-6-*	1.110	2.250
1.5	1306TC-3-1.5-6-*	1.220	2.250

* - Please insert appropriate tolerance code