

Series 1206

Polypropylene and Foil

Features: Flame retardant to UL94, excellent long term stability, high insulation resistance, low dissipation factor, negative temperature coefficient, high frequency operation, high dv/dt ratings.

Applications: Timing circuits, switch mode power supplies (SMPS), snubber circuits.

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

Specifications

1) Temperature Range

-55°C to 105°C with 50% voltage derating above 85°C.

2) Capacitance

0.001µF to 5µF

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 200,000 Megohm-Microfarads, but need not exceed 250,000 Megohms.

5) Humidity Resistance

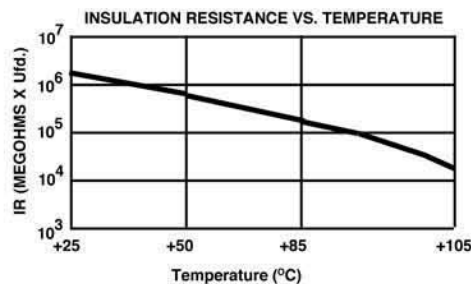
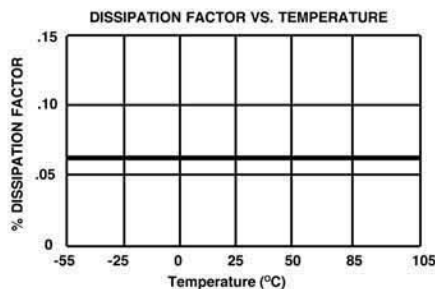
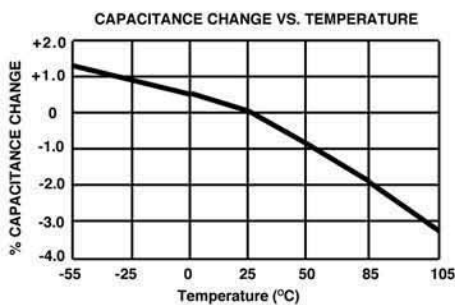
Series 1206 shall meet the requirements of MIL-STD. 202, Method 103B.

6) Dissipation Factor

Shall be 0.07% max. when measured at 1KHz 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
Polypropylene 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 (μF)

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.

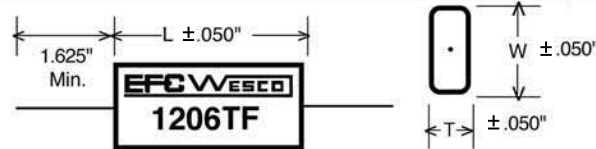
- A - Aluminum foil electrodes
- T - Tin foil electrodes
- HV - High voltage DC applications
- AC - AC voltage rated applications
- MF - Metallized and foil hybrid for maximum pulse current applications
- M - Dual metallized design for pulse current applications
- SP - Low ESR, high RMS current applications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



1206TF Oval Wrap & Fill

Polypropylene and Foil Capacitors

Lead Spec.
Tinned Copperweld
Under .190T = 24 AWG
.190 - .380T = 22AWG
Above .380T = 20 AWG



Dimensions and Ratings

50 VDC					100 VDC					160 VDC				
Cap. μ F	Part #	T	W	L	Cap. μ F	Part #	T	W	L	Cap. μ F	Part #	T	W	L
.001	1206TF-3-.001-0-*	.120	.210	.406	.001	1206TF-3-.001-1-*	.120	.210	.406	.001	1206TF-3-.001-1.6-*	.120	.210	.406
.0012	1206TF-3-.0012-0-*	.120	.210	.406	.0012	1206TF-3-.0012-1-*	.120	.210	.406	.0012	1206TF-3-.0012-1.6-*	.120	.210	.406
.0015	1206TF-3-.0015-0-*	.120	.210	.406	.0015	1206TF-3-.0015-1-*	.120	.210	.406	.0015	1206TF-3-.0015-1.6-*	.120	.210	.406
.0022	1206TF-3-.0022-0-*	.120	.210	.406	.0022	1206TF-3-.0022-1-*	.120	.210	.406	.0022	1206TF-3-.0022-1.6-*	.120	.210	.406
.0027	1206TF-3-.0027-0-*	.120	.210	.406	.0027	1206TF-3-.0027-1-*	.120	.210	.406	.0027	1206TF-3-.0027-1.6-*	.120	.210	.406
.0039	1206TF-3-.0039-0-*	.120	.210	.406	.0039	1206TF-3-.0039-1-*	.120	.210	.406	.0039	1206TF-3-.0039-1.6-*	.120	.210	.406
.0047	1206TF-3-.0047-0-*	.120	.210	.406	.0047	1206TF-3-.0047-1-*	.120	.210	.406	.0047	1206TF-3-.0047-1.6-*	.120	.210	.406
.0056	1206TF-3-.0056-0-*	.120	.210	.406	.0056	1206TF-3-.0056-1-*	.120	.210	.406	.0056	1206TF-3-.0056-1.6-*	.120	.210	.406
.0068	1206TF-3-.0068-0-*	.120	.210	.406	.0068	1206TF-3-.0068-1-*	.130	.230	.406	.0068	1206TF-3-.0068-1.6-*	.130	.230	.406
.0082	1206TF-3-.0082-0-*	.130	.220	.406	.0082	1206TF-3-.0082-1-*	.150	.240	.406	.0082	1206TF-3-.0082-1.6-*	.150	.240	.406
.01	1206TF-3-.01-0-*	.140	.240	.406	.01	1206TF-3-.01-1-*	.170	.260	.406	.01	1206TF-3-.01-1.6-*	.170	.260	.406
.012	1206TF-3-.012-0-*	.160	.250	.406	.012	1206TF-3-.012-1-*	.190	.280	.406	.012	1206TF-3-.012-1.6-*	.190	.280	.406
.015	1206TF-3-.015-0-*	.180	.280	.406	.015	1206TF-3-.015-1-*	.120	.210	.531	.015	1206TF-3-.015-1.6-*	.120	.210	.531
.018	1206TF-3-.018-0-*	.120	.210	.531	.018	1206TF-3-.018-1-*	.140	.220	.531	.018	1206TF-3-.018-1.6-*	.140	.220	.531
.022	1206TF-3-.022-0-*	.130	.230	.531	.022	1206TF-3-.022-1-*	.150	.230	.531	.022	1206TF-3-.022-1.6-*	.150	.230	.531
.027	1206TF-3-.027-0-*	.150	.240	.531	.027	1206TF-3-.027-1-*	.180	.250	.531	.027	1206TF-3-.027-1.6-*	.180	.250	.531
.033	1206TF-3-.033-0-*	.170	.260	.531	.033	1206TF-3-.033-1-*	.200	.270	.531	.033	1206TF-3-.033-1.6-*	.200	.270	.531
.039	1206TF-3-.039-0-*	.190	.280	.531	.039	1206TF-3-.039-1-*	.220	.290	.531	.039	1206TF-3-.039-1.6-*	.220	.290	.531
.047	1206TF-3-.047-0-*	.210	.310	.531	.047	1206TF-3-.047-1-*	.190	.310	.656	.047	1206TF-3-.047-1.6-*	.190	.310	.656
.056	1206TF-3-.056-0-*	.230	.330	.531	.056	1206TF-3-.056-1-*	.210	.280	.656	.056	1206TF-3-.056-1.6-*	.210	.280	.656
.068	1206TF-3-.068-0-*	.200	.300	.656	.068	1206TF-3-.068-1-*	.230	.300	.656	.068	1206TF-3-.068-1.6-*	.230	.300	.656
.082	1206TF-3-.082-0-*	.230	.320	.656	.082	1206TF-3-.082-1-*	.260	.330	.656	.082	1206TF-3-.082-1.6-*	.260	.330	.656
.1	1206TF-3-.1-0-*	.250	.350	.656	.1	1206TF-3-.1-1-*	.290	.360	.656	.1	1206TF-3-.1-1.6-*	.290	.360	.656
.12	1206TF-3-.12-0-*	.280	.380	.656	.12	1206TF-3-.12-1-*	.260	.390	.781	.12	1206TF-3-.12-1.6-*	.260	.390	.781
.15	1206TF-3-.15-0-*	.320	.420	.656	.15	1206TF-3-.15-1-*	.290	.380	.781	.15	1206TF-3-.15-1.6-*	.290	.380	.781
.18	1206TF-3-.18-0-*	.300	.390	.781	.18	1206TF-3-.18-1-*	.330	.420	.781	.18	1206TF-3-.18-1.6-*	.330	.420	.781
.22	1206TF-3-.22-0-*	.330	.430	.781	.22	1206TF-3-.22-1-*	.320	.450	.906	.22	1206TF-3-.22-1.6-*	.320	.450	.906
.27	1206TF-3-.27-0-*	.330	.420	.906	.27	1206TF-3-.27-1-*	.360	.490	.906	.27	1206TF-3-.27-1.6-*	.360	.490	.906
.33	1206TF-3-.33-0-*	.370	.460	.906	.33	1206TF-3-.33-1-*	.410	.530	.906	.33	1206TF-3-.33-1.6-*	.410	.530	.906
.39	1206TF-3-.39-0-*	.410	.500	.906	.39	1206TF-3-.39-1-*	.350	.510	1.190	.39	1206TF-3-.39-1.6-*	.350	.510	1.190
.47	1206TF-3-.47-0-*	.370	.460	1.190	.47	1206TF-3-.47-1-*	.390	.560	1.190	.47	1206TF-3-.47-1.6-*	.390	.560	1.190
.56	1206TF-3-.56-0-*	.410	.500	1.190	.56	1206TF-3-.56-1-*	.430	.600	1.190	.56	1206TF-3-.56-1.6-*	.430	.600	1.190
.68	1206TF-3-.68-0-*	.450	.550	1.190	.68	1206TF-3-.68-1-*	.480	.650	1.190	.68	1206TF-3-.68-1.6-*	.480	.650	1.190
.82	1206TF-3-.82-0-*	.500	.600	1.190	.82	1206TF-3-.82-1-*	.540	.710	1.190	.82	1206TF-3-.82-1.6-*	.540	.710	1.190
1.0	1206TF-3-1.0-0-*	.560	.660	1.190	1.0	1206TF-3-1.0-1-*	.520	.690	1.440	1.0	1206TF-3-1.0-1.6-*	.520	.690	1.440
1.25	1206TF-3-1.25-0-*	.550	.650	1.440	1.25	1206TF-3-1.25-1-*	.590	.760	1.440	1.25	1206TF-3-1.25-1.6-*	.590	.760	1.440
1.5	1206TF-3-1.5-0-*	.610	.700	1.440	1.5	1206TF-3-1.5-1-*	.570	.770	1.690	1.5	1206TF-3-1.5-1.6-*	.570	.770	1.690
2.0	1206TF-3-2.0-0-*	.570	.670	1.440	2.0	1206TF-3-2.0-1-*	.670	.870	1.690	2.0	1206TF-3-2.0-1.6-*	.670	.870	1.690
3.0	1206TF-3-3.0-0-*	.620	.750	1.690	3.0	1206TF-3-3.0-1-*	.770	.970	1.940	3.0	1206TF-3-3.0-1.6-*	.770	.970	1.940
4.0	1206TF-3-4.0-0-*	.730	.850	1.690	4.0	1206TF-3-4.0-1-*	.900	1.100	1.940	4.0	1206TF-3-4.0-1.6-*	.900	1.100	1.940
5.0	1206TF-3-5.0-0-*				5.0	1206TF-3-5.0-1-*	1.020	1.220	1.940	5.0	1206TF-3-5.0-1.6-*	1.020	1.220	1.940

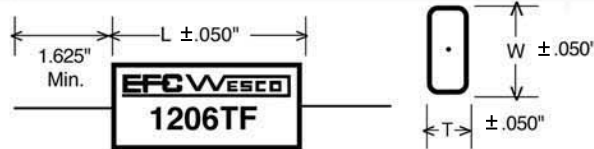
* - Please insert appropriate tolerance code



1206TF Oval Wrap & Fill

Polypropylene and Foil Capacitors

Lead Spec.
Tinned Copperweld
Under .190T = 24 AWG
.190 - .380T = 22AWG
Above .380T = 20 AWG



Dimensions and Ratings

200 VDC					400 VDC					600 VDC				
Cap. μ F	Part #	T	W	L	Cap. μ F	Part #	T	W	L	Cap. μ F	Part #	T	W	L
.001	1206TF-3-.001-2-*	.120	.210	.406	.001	1206TF-3-.001-4-*	.120	.210	.406	.001	1206TF-3-.001-6-*	.120	.210	.531
.0012	1206TF-3-.0012-2-*	.120	.210	.406	.0012	1206TF-3-.0012-4-*	.120	.210	.406	.0012	1206TF-3-.0012-6-*	.120	.210	.531
.0015	1206TF-3-.0015-2-*	.120	.210	.406	.0015	1206TF-3-.0015-4-*	.130	.230	.406	.0015	1206TF-3-.0015-6-*	.120	.210	.531
.0022	1206TF-3-.0022-2-*	.120	.210	.406	.0022	1206TF-3-.0022-4-*	.170	.260	.406	.0022	1206TF-3-.0022-6-*	.140	.240	.531
.0027	1206TF-3-.0027-2-*	.120	.210	.406	.0027	1206TF-3-.0027-4-*	.190	.280	.406	.0027	1206TF-3-.0027-6-*	.160	.260	.531
.0039	1206TF-3-.0039-2-*	.120	.220	.406	.0039	1206TF-3-.0039-4-*	.120	.210	.531	.0039	1206TF-3-.0039-6-*	.210	.300	.531
.0047	1206TF-3-.0047-2-*	.140	.230	.406	.0047	1206TF-3-.0047-4-*	.130	.230	.531	.0047	1206TF-3-.0047-6-*	.230	.320	.531
.0056	1206TF-3-.0056-2-*	.150	.250	.406	.0056	1206TF-3-.0056-4-*	.150	.240	.531	.0056	1206TF-3-.0056-6-*	.170	.260	.656
.0068	1206TF-3-.0068-2-*	.170	.270	.406	.0068	1206TF-3-.0068-4-*	.170	.260	.531	.0068	1206TF-3-.0068-6-*	.190	.280	.656
.0082	1206TF-3-.0082-2-*	.110	.210	.531	.0082	1206TF-3-.0082-4-*	.190	.280	.531	.0082	1206TF-3-.0082-6-*	.210	.310	.656
.01	1206TF-3-.01-2-*	.130	.220	.531	.01	1206TF-3-.01-4-*	.210	.300	.531	.01	1206TF-3-.01-6-*	.240	.330	.656
.012	1206TF-3-.012-2-*	.140	.240	.531	.012	1206TF-3-.012-4-*	.230	.330	.531	.012	1206TF-3-.012-6-*	.270	.360	.656
.015	1206TF-3-.015-2-*	.160	.260	.531	.015	1206TF-3-.015-4-*	.200	.290	.656	.015	1206TF-3-.015-6-*	.300	.400	.656
.018	1206TF-3-.018-2-*	.180	.280	.531	.018	1206TF-3-.018-4-*	.220	.310	.656	.018	1206TF-3-.018-6-*	.350	.380	.781
.022	1206TF-3-.022-2-*	.210	.300	.531	.022	1206TF-3-.022-4-*	.250	.340	.656	.022	1206TF-3-.022-6-*	.280	.410	.781
.027	1206TF-3-.027-2-*	.180	.270	.656	.027	1206TF-3-.027-4-*	.280	.370	.656	.027	1206TF-3-.027-6-*	.320	.450	.781
.033	1206TF-3-.033-2-*	.200	.300	.656	.033	1206TF-3-.033-4-*	.310	.410	.656	.033	1206TF-3-.033-6-*	.300	.430	.906
.039	1206TF-3-.039-2-*	.220	.320	.656	.039	1206TF-3-.039-4-*	.270	.400	.781	.039	1206TF-3-.039-6-*	.340	.460	.906
.047	1206TF-3-.047-2-*	.250	.340	.656	.047	1206TF-3-.047-4-*	.300	.430	.781	.047	1206TF-3-.047-6-*	.380	.500	.906
.056	1206TF-3-.056-2-*	.280	.370	.656	.056	1206TF-3-.056-4-*	.340	.460	.781	.056	1206TF-3-.056-6-*	.420	.540	.906
.068	1206TF-3-.068-2-*	.310	.400	.656	.068	1206TF-3-.068-4-*	.320	.450	.906	.068	1206TF-3-.068-6-*	.350	.510	1.190
.082	1206TF-3-.082-2-*	.270	.400	.781	.082	1206TF-3-.082-4-*	.360	.490	.906	.082	1206TF-3-.082-6-*	.390	.560	1.190
.1	1206TF-3-.1-2-*	.310	.430	.781	.1	1206TF-3-.1-4-*	.410	.530	.906	.1	1206TF-3-.1-6-*	.440	.610	1.190
.12	1206TF-3-.12-2-*	.340	.470	.781	.12	1206TF-3-.12-4-*	.350	.510	1.190	.12	1206TF-3-.12-6-*	.490	.660	1.190
.15	1206TF-3-.15-2-*	.340	.460	.906	.15	1206TF-3-.15-4-*	.400	.560	1.190	.15	1206TF-3-.15-6-*	.560	.720	1.190
.18	1206TF-3-.18-2-*	.380	.500	.906	.18	1206TF-3-.18-4-*	.440	.610	1.190	.18	1206TF-3-.18-6-*	.520	.690	1.440
.22	1206TF-3-.22-2-*	.420	.550	.906	.22	1206TF-3-.22-4-*	.500	.660	1.190	.22	1206TF-3-.22-6-*	.590	.750	1.440
.27	1206TF-3-.27-2-*	.370	.540	1.190	.27	1206TF-3-.27-4-*	.560	.730	1.190	.27	1206TF-3-.27-6-*	.570	.760	1.690
.33	1206TF-3-.33.5-*	.420	.580	1.190	.33	1206TF-3-.33.5-*	.540	.700	1.440	.33	1206TF-3-.33.5-*	.640	.830	1.690
.39	1206TF-3-.39-2-*	.460	.630	1.190	.39	1206TF-3-.39-4-*	.590	.760	1.440	.39	1206TF-3-.39-6-*	.700	.900	1.690
.47	1206TF-3-.47-2-*	.510	.680	1.190	.47	1206TF-3-.47-4-*	.570	.760	1.690	.47	1206TF-3-.47-6-*	.700	.900	1.940
.56	1206TF-3-.56-2-*	.490	.650	1.440	.56	1206TF-3-.56-4-*	.630	.830	1.690	.56	1206TF-3-.56-6-*	.780	.970	1.940
.68	1206TF-3-.68-2-*	.550	.710	1.440	.68	1206TF-3-.68-4-*	.700	.900	1.690	.68	1206TF-3-.68-6-*	.870	1.080	1.940
.82	1206TF-3-.82-2-*	.610	.780	1.440	.82	1206TF-3-.82-4-*	.710	.910	1.940	.82	1206TF-3-.82-6-*	.960	1.180	1.940
1.0	1206TF-3-1.0-2-*	.590	.790	1.690	1.0	1206TF-3-1.0-4-*	.790	.990	1.940	1.0	1206TF-3-1.0-6-*	.990	1.180	2.250
1.25	1206TF-3-1.25-2-*	.670	.870	1.690	1.25	1206TF-3-1.25-4-*	.900	1.100	1.440	1.25	1206TF-3-1.25-6-*	1.120	1.310	2.250
1.5	1206TF-3-1.5-2-*	.680	.870	1.690	1.5	1206TF-3-1.5-4-*	.920	1.100	2.250	1.5	1206TF-3-1.5-6-*	1.230	1.430	2.250
2.0	1206TF-3-2.0-2-*	.800	.990	1.940	2.0	1206TF-3-2.0-4-*	1.080	1.270	2.250					
3.0	1206TF-3-3.0-2-*	1.000	1.200	1.940										

* - Please insert appropriate tolerance code