

# 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

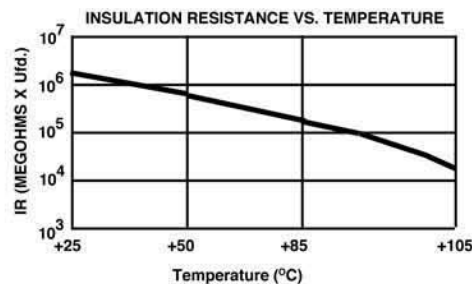
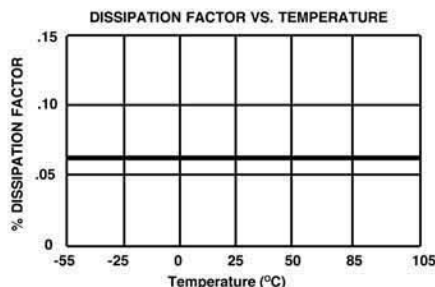
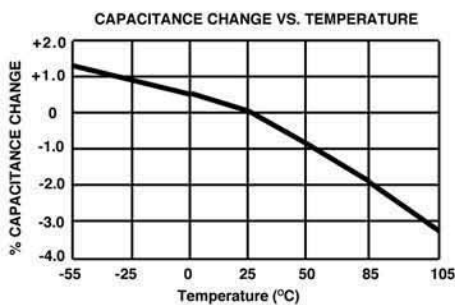
Series 1206 shall meet the requirements of MIL-STD. 202, Method 103B.

#### 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 ( $\mu$ 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



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

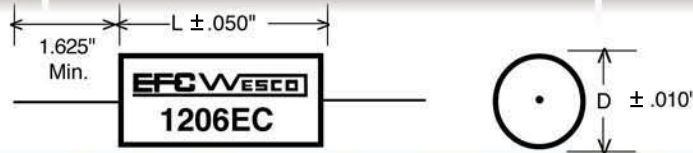
# 1206EC

Tubular Plastic Case  
(Axial Leads)

# Polypropylene and Foil Capacitors

### Lead Spec.

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



## Dimensions and Ratings

50 VDC				
Cap.	Part #	D	L	
μF				
.001	1206EC-3-.001-0-*	.187	.375	
.0012	1206EC-3-.0012-0-*	.187	.375	
.0015	1206EC-3-.0015-0-*	.187	.375	
.0022	1206EC-3-.0022-0-*	.187	.375	
.0027	1206EC-3-.0027-0-*	.187	.375	
.0039	1206EC-3-.0039-0-*	.187	.375	
.0047	1206EC-3-.0047-0-*	.187	.375	
.0056	1206EC-3-.0056-0-*	.225	.375	
.0068	1206EC-3-.0068-0-*	.225	.375	
.0082	1206EC-3-.0082-0-*	.225	.375	
.01	1206EC-3-.01-0-*	.225	.500	
.012	1206EC-3-.012-0-*	.225	.500	
.015	1206EC-3-.015-0-*	.225	.500	
.018	1206EC-3-.018-0-*	.225	.500	
.022	1206EC-3-.022-0-*	.260	.550	
.027	1206EC-3-.027-0-*	.260	.550	
.033	1206EC-3-.033-0-*	.250	.625	
.039	1206EC-3-.039-0-*	.250	.625	
.047	1206EC-3-.047-0-*	.312	.625	
.056	1206EC-3-.056-0-*	.312	.625	
.068	1206EC-3-.068-0-*	.312	.625	
.082	1206EC-3-.082-0-*	.312	.750	
.1	1206EC-3-.1-0-*	.312	.750	
.12	1206EC-3-.12-0-*	.375	.750	
.15	1206EC-3-.15-0-*	.375	.750	
.18	1206EC-3-.18-0-*	.375	.875	
.22	1206EC-3-.22-0-*	.437	.875	
.27	1206EC-3-.27-0-*	.437	.875	
.33	1206EC-3-.33-0-*	.500	.875	
.39	1206EC-3-.39-0-*	.500	1.190	
.47	1206EC-3-.47-0-*	.500	1.190	

100 VDC				
Cap.	Part #	D	L	
μF				
.001	1206EC-3-.001-1-*	.187	.375	
.0012	1206EC-3-.0012-1-*	.187	.375	
.0015	1206EC-3-.0015-1-*	.187	.375	
.0022	1206EC-3-.0022-1-*	.187	.375	
.0027	1206EC-3-.0027-1-*	.187	.375	
.0039	1206EC-3-.0039-1-*	.187	.375	
.0047	1206EC-3-.0047-1-*	.225	.375	
.0056	1206EC-3-.0056-1-*	.225	.375	
.0068	1206EC-3-.0068-1-*	.187	.500	
.0082	1206EC-3-.0082-1-*	.187	.500	
.01	1206EC-3-.01-1-*	.225	.500	
.012	1206EC-3-.012-1-*	.225	.500	
.015	1206EC-3-.015-1-*	.225	.500	
.018	1206EC-3-.018-1-*	.260	.550	
.022	1206EC-3-.022-1-*	.260	.550	
.027	1206EC-3-.027-1-*	.250	.625	
.033	1206EC-3-.033-1-*	.250	.625	
.039	1206EC-3-.039-1-*	.312	.625	
.047	1206EC-3-.047-1-*	.312	.625	
.056	1206EC-3-.056-1-*	.312	.625	
.068	1206EC-3-.068-1-*	.312	.750	
.082	1206EC-3-.082-1-*	.375	.750	
.1	1206EC-3-.1-1-*	.375	.750	
.12	1206EC-3-.12-1-*	.375	.750	
.15	1206EC-3-.15-1-*	.375	.875	
.18	1206EC-3-.18-1-*	.437	.875	
.22	1206EC-3-.22-1-*	.437	.875	
.27	1206EC-3-.27-1-*	.500	.875	
.33	1206EC-3-.33-1-*	.500	1.190	
.39	1206EC-3-.39-1-*	.500	1.190	

160 VDC				
Cap.	Part #	D	L	
μF				
.001	1206EC-3-.001-1.6-*	.187	.375	
.0012	1206EC-3-.0012-1.6-*	.187	.375	
.0015	1206EC-3-.0015-1.6-*	.187	.375	
.0022	1206EC-3-.0022-1.6-*	.187	.375	
.0027	1206EC-3-.0027-1.6-*	.187	.375	
.0039	1206EC-3-.0039-1.6-*	.187	.375	
.0047	1206EC-3-.0047-1.6-*	.225	.375	
.0056	1206EC-3-.0056-1.6-*	.225	.375	
.0068	1206EC-3-.0068-1.6-*	.187	.500	
.0082	1206EC-3-.0082-1.6-*	.187	.500	
.01	1206EC-3-.01-1.6-*	.225	.500	
.012	1206EC-3-.012-1.6-*	.225	.500	
.015	1206EC-3-.015-1.6-*	.225	.500	
.018	1206EC-3-.018-1.6-*	.260	.550	
.022	1206EC-3-.022-1.6-*	.260	.550	
.027	1206EC-3-.027-1.6-*	.250	.625	
.033	1206EC-3-.033-1.6-*	.250	.625	
.039	1206EC-3-.039-1.6-*	.312	.625	
.047	1206EC-3-.047-1.6-*	.312	.625	
.056	1206EC-3-.056-1.6-*	.312	.625	
.068	1206EC-3-.068-1.6-*	.312	.750	
.082	1206EC-3-.082-1.6-*	.375	.750	
.1	1206EC-3-.1-1.6-*	.375	.750	
.12	1206EC-3-.12-1.6-*	.375	.750	
.15	1206EC-3-.15-1.6-*	.375	.875	
.18	1206EC-3-.18-1.6-*	.437	.875	
.22	1206EC-3-.22-1.6-*	.437	.875	
.27	1206EC-3-.27-1.6-*	.500	.875	
.33	1206EC-3-.33-1.6-*	.500	1.190	
.39	1206EC-3-.39-1.6-*	.500	1.190	

\* - Please insert appropriate tolerance code

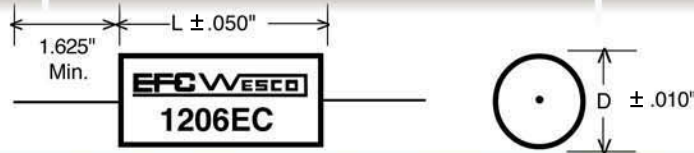


Please consult factory for special requirements, including non-standard values and sizes

**1206EC**  
Tubular Plastic Case  
(Axial Leads)

**Polypropylene and  
Foil Capacitors**

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



## Dimensions and Ratings

200 VDC				
Cap. $\mu$ F	Part #	D	L	
.001	1206EC-3-.001-2-*	.187	.375	
.0012	1206EC-3-.0012-2-*	.187	.375	
.0015	1206EC-3-.0015-2-*	.187	.375	
.0022	1206EC-3-.0022-2-*	.187	.375	
.0027	1206EC-3-.0027-2-*	.225	.375	
.0039	1206EC-3-.0039-2-*	.225	.375	
.0047	1206EC-3-.0047-2-*	.225	.500	
.0056	1206EC-3-.0056-2-*	.225	.500	
.0068	1206EC-3-.0068-2-*	.225	.500	
.0082	1206EC-3-.0082-2-*	.225	.500	
.01	1206EC-3-.01-2-*	.260	.550	
.012	1206EC-3-.012-2-*	.260	.550	
.015	1206EC-3-.015-2-*	.250	.625	
.018	1206EC-3-.018-2-*	.250	.625	
.022	1206EC-3-.022-2-*	.312	.625	
.027	1206EC-3-.027-2-*	.312	.625	
.033	1206EC-3-.033-2-*	.312	.625	
.039	1206EC-3-.039-2-*	.312	.625	
.047	1206EC-3-.047-2-*	.312	.750	
.056	1206EC-3-.056-2-*	.375	.750	
.068	1206EC-3-.068-2-*	.375	.750	
.082	1206EC-3-.082-2-*	.375	.875	
.1	1206EC-3-.1-2-*	.437	.875	
.12	1206EC-3-.12-2-*	.437	.875	
.15	1206EC-3-.15-2-*	.500	.875	
.18	1206EC-3-.18-2-*	.500	.875	
.22	1206EC-3-.22-2-*	.500	1.190	

400 VDC				
Cap. $\mu$ F	Part #	D	L	
.001	1206EC-3-.001-4-*	.225	.375	
.0012	1206EC-3-.0012-4-*	.225	.375	
.0015	1206EC-3-.0015-4-*	.225	.375	
.0022	1206EC-3-.0022-4-*	.187	.500	
.0027	1206EC-3-.0027-4-*	.225	.500	
.0039	1206EC-3-.0039-4-*	.225	.500	
.0047	1206EC-3-.0047-4-*	.260	.550	
.0056	1206EC-3-.0056-4-*	.260	.550	
.0068	1206EC-3-.0068-4-*	.225	.625	
.0082	1206EC-3-.0082-4-*	.250	.625	
.01	1206EC-3-.01-4-*	.250	.625	
.012	1206EC-3-.012-4-*	.312	.625	
.015	1206EC-3-.015-4-*	.312	.625	
.018	1206EC-3-.018-4-*	.312	.625	
.022	1206EC-3-.022-4-*	.312	.750	
.027	1206EC-3-.027-4-*	.375	.750	
.033	1206EC-3-.033-4-*	.375	.750	
.039	1206EC-3-.039-4-*	.375	.875	
.047	1206EC-3-.047-4-*	.437	.875	
.056	1206EC-3-.056-4-*	.437	.875	
.068	1206EC-3-.068-4-*	.500	.875	
.082	1206EC-3-.082-4-*	.500	.875	
.1	1206EC-3-.1-4-*	.500	1.190	
.12	1206EC-3-.12-4-*	.500	1.190	

600 VDC				
Cap. $\mu$ F	Part #	D	L	
.001	1206EC-3-.001-6-*	.225	.500	
.0012	1206EC-3-.0012-6-*	.225	.500	
.0015	1206EC-3-.0015-6-*	.225	.500	
.0022	1206EC-3-.0022-6-*	.260	.550	
.0027	1206EC-3-.0027-6-*	.260	.550	
.0039	1206EC-3-.0039-6-*	.250	.625	
.0047	1206EC-3-.0047-6-*	.250	.625	
.0056	1206EC-3-.0056-6-*	.312	.625	
.0068	1206EC-3-.0068-6-*	.312	.625	
.0082	1206EC-3-.0082-6-*	.312	.625	
.01	1206EC-3-.01-6-*	.312	.750	
.012	1206EC-3-.012-6-*	.312	.750	
.015	1206EC-3-.015-6-*	.375	.750	
.018	1206EC-3-.018-6-*	.375	.750	
.022	1206EC-3-.022-6-*	.375	.875	
.027	1206EC-3-.027-6-*	.437	.875	
.033	1206EC-3-.033-6-*	.437	.870	
.039	1206EC-3-.039-6-*	.500	.875	
.047	1206EC-3-.047-6-*	.500	.875	
.056	1206EC-3-.056-6-*	.500	1.190	
.068	1206EC-3-.068-6-*	.500	1.190	

\* - Please insert appropriate tolerance code