

# Series 1313 Metallized Polyester

**Features:** Flame retardant to UL94, small size, self healing, low costs.

**Applications:** Medical electronics, telecommunications, high voltage power supplies.

**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 20μF

### 3) Dielectric Strength

At 25°C, 150% 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 30,000 Megohm-Microfarads, but need not exceed 50,000 Megohms for voltages greater than 50 VDC, and 15,000 Megohm-Microfarads, but need not exceed 30,000 Megohms for 50 VDC or less.

### 5) Humidity Resistance

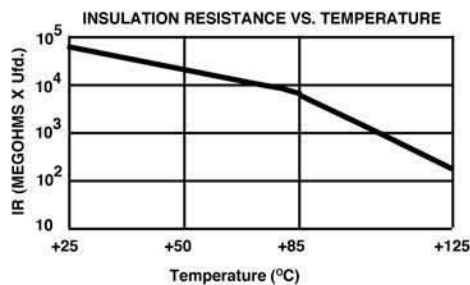
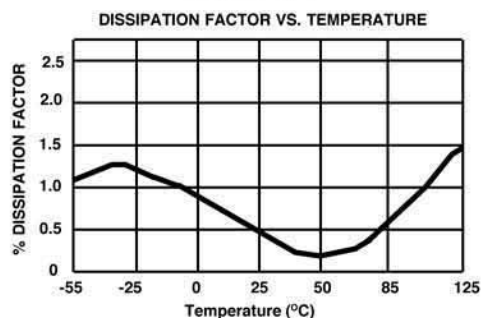
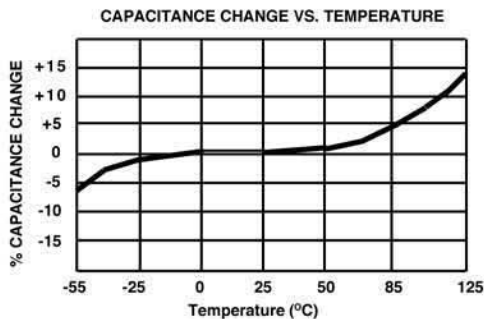
Series 1313 shall meet the requirements of MIL-STD. 202, Method 103B.

### 6) Dissipation Factor

Shall be 1.0% max. when measured at 1KHz.

### 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  
Metallized Polyester**

# 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



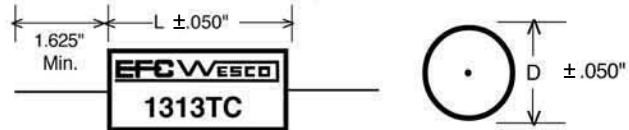
Please consult factory for special requirements, including non-standard values and sizes

## 1313TC Tubular Wrap & Fill

## Metallized Polyester Capacitors

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

### Dimensions and Ratings



50 VDC		D	L
Cap. $\mu$ F	Part #		
.001	1313TC-3-.001-0-*	.180	.406
.0012	1313TC-3-.0012-0-*	.180	.406
.0015	1313TC-3-.0015-0-*	.180	.406
.0018	1313TC-3-.0018-0-*	.180	.406
.0022	1313TC-3-.0022-0-*	.180	.406
.0027	1313TC-3-.0027-0-*	.180	.406
.0033	1313TC-3-.0033-0-*	.180	.406
.0039	1313TC-3-.0039-0-*	.180	.406
.0047	1313TC-3-.0047-0-*	.180	.406
.0056	1313TC-3-.0056-0-*	.180	.406
.0068	1313TC-3-.0068-0-*	.180	.406
.0082	1313TC-3-.0082-0-*	.180	.406
.01	1313TC-3-.01-0-*	.180	.406
.012	1313TC-3-.012-0-*	.180	.406
.015	1313TC-3-.015-0-*	.180	.406
.018	1313TC-3-.018-0-*	.180	.406
.022	1313TC-3-.022-0-*	.180	.406
.027	1313TC-3-.027-0-*	.180	.406
.033	1313TC-3-.033-0-*	.180	.406
.039	1313TC-3-.039-0-*	.180	.406
.047	1313TC-3-.047-0-*	.180	.406
.056	1313TC-3-.056-0-*	.180	.406
.068	1313TC-3-.068-0-*	.180	.406
.082	1313TC-3-.082-0-*	.180	.406
.1	1313TC-3-.1-0-*	.180	.406
.12	1313TC-3-.12-0-*	.190	.406
.15	1313TC-3-.15-0-*	.200	.406
.18	1313TC-3-.18-0-*	.220	.406
.22	1313TC-3-.22-0-*	.190	.468
.27	1313TC-3-.27-0-*	.210	.468
.33	1313TC-3-.33-0-*	.230	.468
.39	1313TC-3-.39-0-*	.250	.468
.47	1313TC-3-.47-0-*	.230	.531
.56	1313TC-3-.56-0-*	.250	.531
.68	1313TC-3-.68-0-*	.270	.531
.82	1313TC-3-.82-0-*	.240	.656
1.0	1313TC-3-1.0-0-*	.270	.656
1.25	1313TC-3-1.25-0-*	.300	.656
1.5	1313TC-3-1.5-0-*	.300	.781
2.0	1313TC-3-2.0-0-*	.350	.781
3.0	1313TC-3-3.0-0-*	.400	.781
4.0	1313TC-3-4.0-0-*	.420	.906
5.0	1313TC-3-5.0-0-*	.470	.906
6.0	1313TC-3-6.0-0-*	.440	1.190
10.0	1313TC-3-10.0-0-*	.500	1.190
20.0	1313TC-3-20.0-0-*	.700	1.440

100 VDC		D	L
Cap. $\mu$ F	Part #		
.001	1313TC-3-.001-1-*	.180	.406
.0012	1313TC-3-.0012-1-*	.180	.406
.0015	1313TC-3-.0015-1-*	.180	.406
.0018	1313TC-3-.0018-1-*	.180	.406
.0022	1313TC-3-.0022-1-*	.180	.406
.0027	1313TC-3-.0027-1-*	.180	.406
.0033	1313TC-3-.0033-1-*	.180	.406
.0039	1313TC-3-.0039-1-*	.180	.406
.0047	1313TC-3-.0047-1-*	.180	.406
.0056	1313TC-3-.0056-1-*	.180	.406
.0068	1313TC-3-.0068-1-*	.180	.406
.0082	1313TC-3-.0082-1-*	.180	.406
.01	1313TC-3-.01-1-*	.180	.406
.012	1313TC-3-.012-1-*	.180	.406
.015	1313TC-3-.015-1-*	.180	.406
.018	1313TC-3-.018-1-*	.180	.406
.022	1313TC-3-.022-1-*	.180	.406
.027	1313TC-3-.027-1-*	.180	.406
.033	1313TC-3-.033-1-*	.180	.406
.039	1313TC-3-.039-1-*	.180	.406
.047	1313TC-3-.047-1-*	.180	.406
.056	1313TC-3-.056-1-*	.200	.406
.068	1313TC-3-.068-1-*	.220	.406
.082	1313TC-3-.082-1-*	.190	.468
.1	1313TC-3-.1-1-*	.210	.468
.12	1313TC-3-.12-1-*	.220	.468
.15	1313TC-3-.15-1-*	.210	.531
.18	1313TC-3-.18-1-*	.230	.531
.22	1313TC-3-.22-1-*	.250	.531
.27	1313TC-3-.27-1-*	.280	.531
.33	1313TC-3-.33-1-*	.250	.656
.39	1313TC-3-.39-1-*	.270	.656
.47	1313TC-3-.47-1-*	.290	.656
.56	1313TC-3-.56-1-*	.310	.656
.68	1313TC-3-.68-1-*	.300	.781
.82	1313TC-3-.82-1-*	.330	.781
1.0	1313TC-3-1.0-1-*	.360	.781
1.25	1313TC-3-1.25-1-*	.400	.781
1.5	1313TC-3-1.5-1-*	.390	.906
2.0	1313TC-3-2.0-1-*	.440	.906
3.0	1313TC-3-3.0-1-*	.460	1.190
4.0	1313TC-3-4.0-1-*	.530	1.190
5.0	1313TC-3-5.0-1-*	.520	1.440
6.0	1313TC-3-6.0-1-*	.560	1.440
10.0	1313TC-3-10.0-1-*	.690	1.570
20.0	1313TC-3-20.0-1-*	.920	1.690

160 VDC		D	L
Cap. $\mu$ F	Part #		
.001	1313TC-3-.001-1.6-*	.180	.406
.0012	1313TC-3-.0012-1.6-*	.180	.406
.0015	1313TC-3-.0015-1.6-*	.180	.406
.0018	1313TC-3-.0018-1.6-*	.180	.406
.0022	1313TC-3-.0022-1.6-*	.180	.406
.0027	1313TC-3-.0027-1.6-*	.180	.406
.0033	1313TC-3-.0033-1.6-*	.180	.406
.0039	1313TC-3-.0039-1.6-*	.180	.406
.0047	1313TC-3-.0047-1.6-*	.180	.406
.0056	1313TC-3-.0056-1.6-*	.180	.406
.0068	1313TC-3-.0068-1.6-*	.180	.406
.0082	1313TC-3-.0082-1.6-*	.180	.406
.01	1313TC-3-.01-1.6-*	.180	.406
.012	1313TC-3-.012-1.6-*	.180	.406
.015	1313TC-3-.015-1.6-*	.180	.406
.018	1313TC-3-.018-1.6-*	.180	.406
.022	1313TC-3-.022-1.6-*	.180	.406
.027	1313TC-3-.027-1.6-*	.200	.406
.033	1313TC-3-.033-1.6-*	.220	.406
.039	1313TC-3-.039-1.6-*	.230	.406
.047	1313TC-3-.047-1.6-*	.240	.406
.056	1313TC-3-.056-1.6-*	.250	.406
.068	1313TC-3-.068-1.6-*	.200	.531
.082	1313TC-3-.082-1.6-*	.220	.531
.1	1313TC-3-.1-1.6-*	.240	.531
.12	1313TC-3-.12-1.6-*	.260	.531
.15	1313TC-3-.15-1.6-*	.240	.656
.18	1313TC-3-.18-1.6-*	.260	.656
.22	1313TC-3-.22-1.6-*	.280	.656
.27	1313TC-3-.27-1.6-*	.310	.656
.33	1313TC-3-.33-1.6-*	.350	.656
.39	1313TC-3-.39-1.6-*	.320	.781
.47	1313TC-3-.47-1.6-*	.350	.781
.56	1313TC-3-.56-1.6-*	.380	.781
.68	1313TC-3-.68-1.6-*	.380	.906
.82	1313TC-3-.82-1.6-*	.410	.906
1.0	1313TC-3-1.0-1.6-*	.450	.906
1.25	1313TC-3-1.25-1.6-*	.430	1.190
1.5	1313TC-3-1.5-1.6-*	.470	1.190
2.0	1313TC-3-2.0-1.6-*	.540	1.190
3.0	1313TC-3-3.0-1.6-*	.580	1.440
4.0	1313TC-3-4.0-1.6-*	.660	1.440
5.0	1313TC-3-5.0-1.6-*	.700	1.570
6.0	1313TC-3-6.0-1.6-*	.770	1.570
10.0	1313TC-3-10.0-1.6-*	.940	1.690
20.0	1313TC-3-20.0-1.6-*	1.200	1.940

\* - Please insert appropriate tolerance code



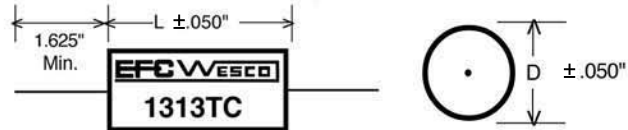
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## Metallized Polyester Capacitors

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	1313TC-3-.001-2-*	.180	.406
.0012	1313TC-3-.0012-2-*	.180	.406
.0015	1313TC-3-.0015-2-*	.180	.406
.0018	1313TC-3-.0018-2-*	.180	.406
.0022	1313TC-3-.0022-2-*	.180	.406
.0027	1313TC-3-.0027-2-*	.180	.406
.0033	1313TC-3-.0033-2-*	.180	.406
.0039	1313TC-3-.0039-2-*	.180	.406
.0047	1313TC-3-.0047-2-*	.180	.406
.0056	1313TC-3-.0056-2-*	.180	.406
.0068	1313TC-3-.0068-2-*	.180	.406
.0082	1313TC-3-.0082-2-*	.180	.406
.01	1313TC-3-.01-2-*	.180	.406
.012	1313TC-3-.012-2-*	.180	.406
.015	1313TC-3-.015-2-*	.180	.406
.018	1313TC-3-.018-2-*	.180	.406
.022	1313TC-3-.022-2-*	.200	.406
.027	1313TC-3-.027-2-*	.220	.406
.033	1313TC-3-.033-2-*	.240	.406
.039	1313TC-3-.039-2-*	.190	.531
.047	1313TC-3-.047-2-*	.200	.531
.056	1313TC-3-.056-2-*	.210	.531
.068	1313TC-3-.068-2-*	.220	.531
.082	1313TC-3-.082-2-*	.250	.531
.1	1313TC-3-.1-2-*	.270	.531
.12	1313TC-3-.12-2-*	.290	.531
.15	1313TC-3-.15-2-*	.250	.656
.18	1313TC-3-.18-2-*	.290	.656
.22	1313TC-3-.22-2-*	.320	.656
.27	1313TC-3-.27-2-*	.300	.781
.33	1313TC-3-.33-2-*	.330	.781
.39	1313TC-3-.39-2-*	.360	.781
.47	1313TC-3-.47-2-*	.400	.781
.56	1313TC-3-.56-2-*	.380	.906
.68	1313TC-3-.68-2-*	.420	.906
.82	1313TC-3-.82-2-*	.450	.906
1.0	1313TC-3-1.0-2-*	.430	1.190
1.25	1313TC-3-1.25-2-*	.480	1.190
1.5	1313TC-3-1.5-2-*	.530	1.190
2.0	1313TC-3-2.0-2-*	.600	1.190
3.0	1313TC-3-3.0-2-*	.650	1.440
4.0	1313TC-3-4.0-2-*	.740	1.440
5.0	1313TC-3-5.0-2-*	.790	1.570
6.0	1313TC-3-6.0-2-*	.820	1.690
10.0	1313TC-3-10.0-2-*	.970	1.940

400 VDC			
Cap. $\mu$ F	Part #	D	L
.001	1313TC-3-.001-4-*	.180	.406
.0012	1313TC-3-.0012-4-*	.180	.406
.0015	1313TC-3-.0015-4-*	.180	.406
.0018	1313TC-3-.0018-4-*	.180	.406
.0022	1313TC-3-.0022-4-*	.180	.406
.0027	1313TC-3-.0027-4-*	.180	.406
.0033	1313TC-3-.0033-4-*	.180	.406
.0039	1313TC-3-.0039-4-*	.180	.406
.0047	1313TC-3-.0047-4-*	.180	.406
.0056	1313TC-3-.0056-4-*	.180	.406
.0068	1313TC-3-.0068-4-*	.180	.406
.0082	1313TC-3-.0082-4-*	.180	.406
.01	1313TC-3-.01-4-*	.180	.406
.012	1313TC-3-.012-4-*	.180	.406
.015	1313TC-3-.015-4-*	.180	.406
.018	1313TC-3-.018-4-*	.200	.531
.022	1313TC-3-.022-4-*	.220	.531
.027	1313TC-3-.027-4-*	.240	.531
.033	1313TC-3-.033-4-*	.260	.531
.039	1313TC-3-.039-4-*	.280	.531
.047	1313TC-3-.047-4-*	.250	.656
.056	1313TC-3-.056-4-*	.270	.656
.068	1313TC-3-.068-4-*	.290	.656
.082	1313TC-3-.082-4-*	.320	.656
.1	1313TC-3-.1-4-*	.310	.781
.12	1313TC-3-.12-4-*	.340	.781
.15	1313TC-3-.15-4-*	.370	.781
.18	1313TC-3-.18-4-*	.410	.781
.22	1313TC-3-.22-4-*	.400	.906
.27	1313TC-3-.27-4-*	.440	.906
.33	1313TC-3-.33-4-*	.490	.906
.39	1313TC-3-.39-4-*	.450	1.190
.47	1313TC-3-.47-4-*	.490	1.190
.56	1313TC-3-.56-4-*	.530	1.190
.68	1313TC-3-.68-4-*	.580	1.190
.82	1313TC-3-.82-4-*	.640	1.190
1.0	1313TC-3-1.0-4-*	.620	1.440
1.25	1313TC-3-1.25-4-*	.690	1.440
1.5	1313TC-3-1.5-4-*	.760	1.440
2.0	1313TC-3-2.0-4-*	.790	1.690
3.0	1313TC-3-3.0-4-*	.960	1.690

600 VDC			
Cap. $\mu$ F	Part #	D	L
.001	1313TC-3-.001-6-*	.180	.406
.0012	1313TC-3-.0012-6-*	.180	.406
.0015	1313TC-3-.0015-6-*	.180	.406
.0018	1313TC-3-.0018-6-*	.180	.406
.0022	1313TC-3-.0022-6-*	.180	.406
.0027	1313TC-3-.0027-6-*	.200	.406
.0033	1313TC-3-.0033-6-*	.220	.406
.0039	1313TC-3-.0039-6-*	.240	.406
.0047	1313TC-3-.0047-6-*	.190	.531
.0056	1313TC-3-.0056-6-*	.200	.531
.0068	1313TC-3-.0068-6-*	.210	.531
.0082	1313TC-3-.0082-6-*	.220	.531
.01	1313TC-3-.01-6-*	.240	.531
.012	1313TC-3-.012-6-*	.260	.531
.015	1313TC-3-.015-6-*	.290	.531
.018	1313TC-3-.018-6-*	.250	.656
.022	1313TC-3-.022-6-*	.280	.656
.027	1313TC-3-.027-6-*	.310	.656
.033	1313TC-3-.033-6-*	.340	.656
.039	1313TC-3-.039-6-*	.320	.781
.047	1313TC-3-.047-6-*	.350	.781
.056	1313TC-3-.056-6-*	.380	.781
.068	1313TC-3-.068-6-*	.410	.781
.082	1313TC-3-.082-6-*	.400	.906
.1	1313TC-3-.1-6-*	.440	.906
.12	1313TC-3-.12-6-*	.480	.906
.15	1313TC-3-.15-6-*	.460	1.190
.18	1313TC-3-.18-6-*	.500	1.190
.22	1313TC-3-.22-6-*	.550	1.190
.27	1313TC-3-.27-6-*	.600	1.190
.33	1313TC-3-.33-6-*	.580	1.440
.39	1313TC-3-.39-6-*	.640	1.440
.47	1313TC-3-.47-6-*	.700	1.440
.56	1313TC-3-.56-6-*	.720	1.570
.68	1313TC-3-.68-6-*	.800	1.570
.82	1313TC-3-.82-6-*	.800	1.820
1.0	1313TC-3-1.0-6-*	.880	1.820
1.25	1313TC-3-1.25-6-*	.970	1.820
1.5	1313TC-3-1.5-6-*	.960	2.250
2.0	1313TC-3-2.0-6-*	1.100	2.250

\* - Please insert appropriate tolerance code



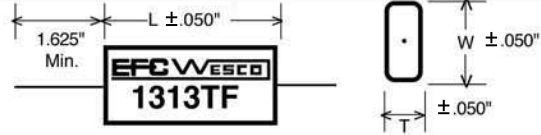
Please consult factory for special requirements, including non-standard values and sizes

## 1313TF Oval Wrap & Fill

## Metallized Polyester 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. $\mu$ F	Part #	T	W	L	Cap. $\mu$ F	Part #	T	W	L	Cap. $\mu$ F	Part #	T	W	L
.001	1313TF-3-.001-0-*	.125	.225	.406	.001	1313TF-3-.001-1-*	.125	.225	.406	.001	1313TF-3-.001-1.6-*	.125	.225	.406
.0012	1313TF-3-.0012-0-*	.125	.225	.406	.0012	1313TF-3-.0012-1-*	.125	.225	.406	.0012	1313TF-3-.0012-1.6-*	.125	.225	.406
.0015	1313TF-3-.0015-0-*	.125	.225	.406	.0015	1313TF-3-.0015-1-*	.125	.225	.406	.0015	1313TF-3-.0015-1.6-*	.125	.225	.406
.0018	1313TF-3-.0018-0-*	.125	.225	.406	.0018	1313TF-3-.0018-1-*	.125	.225	.406	.0018	1313TF-3-.0018-1.6-*	.125	.225	.406
.0022	1313TF-3-.0022-0-*	.125	.225	.406	.0022	1313TF-3-.0022-1-*	.125	.225	.406	.0022	1313TF-3-.0022-1.6-*	.125	.225	.406
.0027	1313TF-3-.0027-0-*	.125	.225	.406	.0027	1313TF-3-.0027-1-*	.125	.225	.406	.0027	1313TF-3-.0027-1.6-*	.125	.225	.406
.0033	1313TF-3-.0033-0-*	.125	.225	.406	.0033	1313TF-3-.0033-1-*	.125	.225	.406	.0033	1313TF-3-.0033-1.6-*	.125	.225	.406
.0039	1313TF-3-.0039-0-*	.125	.225	.406	.0039	1313TF-3-.0039-1-*	.125	.225	.406	.0039	1313TF-3-.0039-1.6-*	.125	.225	.406
.0047	1313TF-3-.0047-0-*	.125	.225	.406	.0047	1313TF-3-.0047-1-*	.125	.225	.406	.0047	1313TF-3-.0047-1.6-*	.125	.225	.406
.0056	1313TF-3-.0056-0-*	.125	.225	.406	.0056	1313TF-3-.0056-1-*	.125	.225	.406	.0056	1313TF-3-.0056-1.6-*	.125	.225	.406
.0068	1313TF-3-.0068-0-*	.125	.225	.406	.0068	1313TF-3-.0068-1-*	.125	.225	.406	.0068	1313TF-3-.0068-1.6-*	.125	.225	.406
.0082	1313TF-3-.0082-0-*	.125	.225	.406	.0082	1313TF-3-.0082-1-*	.125	.225	.406	.0082	1313TF-3-.0082-1.6-*	.125	.225	.406
.01	1313TF-3-.01-0-*	.125	.225	.406	.01	1313TF-3-.01-1-*	.125	.225	.406	.01	1313TF-3-.01-1.6-*	.125	.225	.406
.012	1313TF-3-.012-0-*	.125	.225	.406	.012	1313TF-3-.012-1-*	.125	.225	.406	.012	1313TF-3-.012-1.6-*	.125	.225	.406
.015	1313TF-3-.015-0-*	.125	.225	.406	.015	1313TF-3-.015-1-*	.125	.225	.406	.015	1313TF-3-.015-1.6-*	.125	.225	.406
.018	1313TF-3-.018-0-*	.125	.225	.406	.018	1313TF-3-.018-1-*	.125	.225	.406	.018	1313TF-3-.018-1.6-*	.125	.225	.406
.022	1313TF-3-.022-0-*	.125	.225	.406	.022	1313TF-3-.022-1-*	.125	.225	.406	.022	1313TF-3-.022-1.6-*	.126	.225	.406
.027	1313TF-3-.027-0-*	.125	.225	.406	.027	1313TF-3-.027-1-*	.125	.225	.406	.027	1313TF-3-.027-1.6-*	.140	.240	.406
.033	1313TF-3-.033-0-*	.125	.225	.406	.033	1313TF-3-.033-1-*	.125	.225	.406	.033	1313TF-3-.033-1.6-*	.160	.260	.406
.039	1313TF-3-.039-0-*	.125	.225	.406	.039	1313TF-3-.039-1-*	.125	.225	.406	.039	1313TF-3-.039-1.6-*	.170	.270	.406
.047	1313TF-3-.047-0-*	.125	.225	.406	.047	1313TF-3-.047-1-*	.125	.225	.406	.047	1313TF-3-.047-1.6-*	.180	.280	.406
.056	1313TF-3-.056-0-*	.125	.225	.406	.056	1313TF-3-.056-1-*	.140	.240	.406	.056	1313TF-3-.056-1.6-*	.190	.290	.406
.068	1313TF-3-.068-0-*	.125	.225	.406	.068	1313TF-3-.068-1-*	.160	.260	.406	.068	1313TF-3-.068-1.6-*	.140	.240	.531
.082	1313TF-3-.082-0-*	.125	.225	.406	.082	1313TF-3-.082-1-*	.130	.230	.468	.082	1313TF-3-.082-1.6-*	.160	.260	.531
.1	1313TF-3-.1-0-*	.125	.225	.406	.1	1313TF-3-.1-1-*	.150	.250	.468	.1	1313TF-3-.1-1.6-*	.180	.280	.531
.12	1313TF-3-.12-0-*	.130	.230	.406	.12	1313TF-3-.12-1-*	.160	.260	.468	.12	1313TF-3-.12-1.6-*	.200	.300	.531
.15	1313TF-3-.15-0-*	.140	.240	.406	.15	1313TF-3-.15-1-*	.150	.250	.531	.15	1313TF-3-.15-1.6-*	.180	.280	.656
.18	1313TF-3-.18-0-*	.160	.260	.406	.18	1313TF-3-.18-1-*	.170	.270	.531	.18	1313TF-3-.18-1.6-*	.200	.300	.656
.22	1313TF-3-.22-0-*	.130	.230	.468	.22	1313TF-3-.22-1-*	.190	.290	.531	.22	1313TF-3-.22-1.6-*	.220	.320	.656
.27	1313TF-3-.27-0-*	.150	.250	.468	.27	1313TF-3-.27-1-*	.220	.320	.531	.27	1313TF-3-.27-1.6-*	.250	.350	.656
.33	1313TF-3-.33-0-*	.170	.270	.468	.33	1313TF-3-.33-1-*	.190	.290	.656	.33	1313TF-3-.33-1.6-*	.290	.390	.656
.39	1313TF-3-.39-0-*	.190	.290	.468	.39	1313TF-3-.39-1-*	.210	.310	.656	.39	1313TF-3-.39-1.6-*	.240	.370	.781
.47	1313TF-3-.47-0-*	.170	.270	.531	.47	1313TF-3-.47-1-*	.230	.330	.656	.47	1313TF-3-.47-1.6-*	.270	.400	.781
.56	1313TF-3-.56-0-*	.190	.290	.531	.56	1313TF-3-.56-1-*	.250	.350	.656	.56	1313TF-3-.56-1.6-*	.300	.430	.781
.68	1313TF-3-.68-0-*	.210	.310	.531	.68	1313TF-3-.68-1-*	.220	.350	.781	.68	1313TF-3-.68-1.6-*	.300	.430	.906
.82	1313TF-3-.82-0-*	.180	.280	.656	.82	1313TF-3-.82-1-*	.250	.380	.781	.82	1313TF-3-.82-1.6-*	.330	.460	.906
1.0	1313TF-3-1.0-0-*	.210	.310	.656	1.0	1313TF-3-1.0-1-*	.280	.410	.781	1.0	1313TF-3-1.0-1.6-*	.370	.500	.906
1.25	1313TF-3-1.25-0-*	.240	.340	.656	1.25	1313TF-3-1.25-1-*	.320	.450	.781	1.25	1313TF-3-1.25-1.6-*	.320	.490	1.190
1.5	1313TF-3-1.5-0-*	.220	.350	.781	1.5	1313TF-3-1.5-1-*	.310	.440	.906	1.5	1313TF-3-1.5-1.6-*	.360	.530	1.190
2.0	1313TF-3-2.0-0-*	.270	.400	.781	2.0	1313TF-3-2.0-1-*	.360	.490	.906	2.0	1313TF-3-2.0-1.6-*	.430	.600	1.190
3.0	1313TF-3-3.0-0-*	.320	.450	.781	3.0	1313TF-3-3.0-1-*	.350	.520	1.190	3.0	1313TF-3-3.0-1.6-*	.470	.640	1.440
4.0	1313TF-3-4.0-0-*	.340	.470	.906	4.0	1313TF-3-4.0-1-*	.420	.590	1.190	4.0	1313TF-3-4.0-1.6-*	.550	.720	1.440
5.0	1313TF-3-5.0-0-*	.390	.520	.906	5.0	1313TF-3-5.0-1-*	.410	.580	1.440	5.0	1313TF-3-5.0-1.6-*	.590	.760	1.570
6.0	1313TF-3-6.0-0-*	.330	.500	1.190	6.0	1313TF-3-6.0-1-*	.450	.620	1.440	6.0	1313TF-3-6.0-1.6-*	.660	.830	1.570
10.0	1313TF-3-10.0-0-*	.450	.620	1.190	10.0	1313TF-3-10.0-1-*	.580	.750	1.570	10.0	1313TF-3-10.0-1.6-*	.810	1.010	1.690
20.0	1313TF-3-20.0-0-*	.590	.760	1.440	20.0	1313TF-3-20.0-1-*	.790	.990	1.690	20.0	1313TF-3-20.0-1.6-*	1.070	1.270	1.940

\* - Please insert appropriate tolerance code



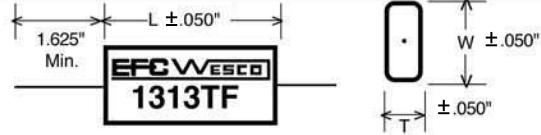
Please consult factory for special requirements, including non-standard values and sizes

## 1313TF Oval Wrap & Fill

## Metallized Polyester Capacitors

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

### Dimensions and Ratings



Cap.		200 VDC			
μF	Part #	T	W	L	
.001	1313TF-3-.001-2*	.125	.225	.406	
.0012	1313TF-3-.0012-2*	.125	.225	.406	
.0015	1313TF-3-.0015-2*	.125	.225	.406	
.0018	1313TF-3-.0018-2*	.125	.225	.406	
.0022	1313TF-3-.0022-2*	.125	.225	.406	
.0027	1313TF-3-.0027-2*	.125	.225	.406	
.0033	1313TF-3-.0033-2*	.125	.225	.406	
.0039	1313TF-3-.0039-2*	.125	.225	.406	
.0047	1313TF-3-.0047-2*	.125	.225	.406	
.0056	1313TF-3-.0056-2*	.125	.225	.406	
.0068	1313TF-3-.0068-2*	.125	.225	.406	
.0082	1313TF-3-.0082-2*	.125	.225	.406	
.01	1313TF-3-.01-2*	.125	.225	.406	
.012	1313TF-3-.012-2*	.125	.225	.406	
.015	1313TF-3-.015-2*	.125	.225	.406	
.018	1313TF-3-.018-2*	.125	.225	.406	
.022	1313TF-3-.022-2*	.140	.240	.406	
.027	1313TF-3-.027-2*	.160	.260	.406	
.033	1313TF-3-.033-2*	.180	.280	.406	
.039	1313TF-3-.039-2*	.130	.230	.531	
.047	1313TF-3-.047-2*	.140	.240	.531	
.056	1313TF-3-.056-2*	.150	.250	.531	
.068	1313TF-3-.068-2*	.160	.260	.531	
.082	1313TF-3-.082-2*	.190	.290	.531	
.1	1313TF-3-.1-2*	.210	.310	.531	
.12	1313TF-3-.12-2*	.230	.330	.531	
.15	1313TF-3-.15-2*	.190	.290	.656	
.18	1313TF-3-.18-2*	.230	.330	.656	
.22	1313TF-3-.22-2*	.260	.360	.656	
.27	1313TF-3-.27-2*	.220	.350	.781	
.33	1313TF-3-.33-2*	.250	.380	.781	
.39	1313TF-3-.39-2*	.280	.410	.781	
.47	1313TF-3-.47-2*	.320	.450	.781	
.56	1313TF-3-.56-2*	.320	.450	.906	
.68	1313TF-3-.68-2*	.340	.470	.906	
.82	1313TF-3-.82-2*	.370	.500	.906	
1.0	1313TF-3-1.0-2*	.320	.490	1.190	
1.25	1313TF-3-1.25-2*	.370	.540	1.190	
1.5	1313TF-3-1.5-2*	.420	.590	1.190	
2.0	1313TF-3-2.0-2*	.490	.660	1.190	
3.0	1313TF-3-3.0-2*	.540	.710	1.440	
4.0	1313TF-3-4.0-2*	.630	.800	1.440	
5.0	1313TF-3-5.0-2*	.680	.850	1.570	
6.0	1313TF-3-6.0-2*	.690	.890	1.690	
10.0	1313TF-3-10.0-2*	.840	1.040	1.940	

Cap.		400 VDC			
μF	Part #	T	W	L	
.001	1313TF-3-.001-4*	.125	.225	.406	
.0012	1313TF-3-.0012-4*	.125	.225	.406	
.0015	1313TF-3-.0015-4*	.125	.225	.406	
.0018	1313TF-3-.0018-4*	.125	.225	.406	
.0022	1313TF-3-.0022-4*	.125	.225	.406	
.0027	1313TF-3-.0027-4*	.125	.225	.406	
.0033	1313TF-3-.0033-4*	.125	.225	.406	
.0039	1313TF-3-.0039-4*	.125	.225	.406	
.0047	1313TF-3-.0047-4*	.125	.225	.406	
.0056	1313TF-3-.0056-4*	.125	.225	.406	
.0068	1313TF-3-.0068-4*	.125	.225	.406	
.0082	1313TF-3-.0082-4*	.140	.240	.406	
.01	1313TF-3-.01-4*	.160	.260	.406	
.012	1313TF-3-.012-4*	.180	.280	.406	
.015	1313TF-3-.015-4*	.130	.230	.531	
.018	1313TF-3-.018-4*	.140	.240	.531	
.022	1313TF-3-.022-4*	.160	.260	.531	
.027	1313TF-3-.027-4*	.180	.280	.531	
.033	1313TF-3-.033-4*	.200	.300	.531	
.039	1313TF-3-.039-4*	.220	.320	.531	
.047	1313TF-3-.047-4*	.190	.290	.656	
.056	1313TF-3-.056-4*	.210	.310	.656	
.068	1313TF-3-.068-4*	.230	.330	.656	
.082	1313TF-3-.082-4*	.260	.360	.656	
.1	1313TF-3-.1-4*	.230	.380	.781	
.12	1313TF-3-.12-4*	.260	.390	.781	
.15	1313TF-3-.15-4*	.290	.420	.781	
.18	1313TF-3-.18-4*	.330	.460	.781	
.22	1313TF-3-.22-4*	.320	.450	.906	
.27	1313TF-3-.27-4*	.360	.490	.906	
.33	1313TF-3-.33-4*	.410	.540	.906	
.39	1313TF-3-.39-4*	.340	.510	1.190	
.47	1313TF-3-.47-4*	.380	.550	1.190	
.56	1313TF-3-.56-4*	.420	.590	1.190	
.68	1313TF-3-.68-4*	.470	.640	1.190	
.82	1313TF-3-.82-4*	.530	.700	1.190	
1.0	1313TF-3-1.0-4*	.510	.680	1.440	
1.25	1313TF-3-1.25-4*	.580	.750	1.440	
1.5	1313TF-3-1.5-4*	.650	.820	1.440	
2.0	1313TF-3-2.0-4*	.660	.860	1.690	
3.0	1313TF-3-3.0-4*	.830	1.030	1.690	

Cap.		600 VDC			
μF	Part #	T	W	L	
.001	1313TF-3-.001-6*	.125	.225	.406	
.0012	1313TF-3-.0012-6*	.125	.225	.406	
.0015	1313TF-3-.0015-6*	.125	.225	.406	
.0018	1313TF-3-.0018-6*	.125	.225	.406	
.0022	1313TF-3-.0022-6*	.125	.225	.406	
.0027	1313TF-3-.0027-6*	.140	.240	.406	
.0033	1313TF-3-.0033-6*	.160	.260	.406	
.0039	1313TF-3-.0039-6*	.180	.280	.406	
.0047	1313TF-3-.0047-6*	.130	.230	.531	
.0056	1313TF-3-.0056-6*	.140	.240	.531	
.0068	1313TF-3-.0068-6*	.150	.250	.531	
.0082	1313TF-3-.0082-6*	.160	.260	.531	
.01	1313TF-3-.01-6*	.180	.280	.531	
.012	1313TF-3-.012-6*	.200	.300	.531	
.015	1313TF-3-.015-6*	.230	.330	.531	
.018	1313TF-3-.018-6*	.190	.290	.656	
.022	1313TF-3-.022-6*	.220	.320	.656	
.027	1313TF-3-.027-6*	.250	.350	.656	
.033	1313TF-3-.033-6*	.280	.380	.656	
.039	1313TF-3-.039-6*	.240	.370	.781	
.047	1313TF-3-.047-6*	.270	.400	.781	
.056	1313TF-3-.056-6*	.300	.430	.781	
.068	1313TF-3-.068-6*	.330	.460	.781	
.082	1313TF-3-.082-6*	.320	.450	.906	
.1	1313TF-3-.1-6*	.360	.490	.906	
.12	1313TF-3-.12-6*	.400	.530	.906	
.15	1313TF-3-.15-6*	.350	.520	1.190	
.18	1313TF-3-.18-6*	.390	.560	1.190	
.22	1313TF-3-.22-6*	.440	.610	1.190	
.27	1313TF-3-.27-6*	.490	.660	1.190	
.33	1313TF-3-.33-6*	.470	.640	1.440	
.39	1313TF-3-.39-6*	.530	.700	1.440	
.47	1313TF-3-.47-6*	.590	.760	1.440	
.56	1313TF-3-.56-6*	.610	.780	1.570	
.68	1313TF-3-.68-6*	.690	.860	1.570	
.82	1313TF-3-.82-6*	.670	.870	1.820	
1.0	1313TF-3-1.0-6*	.750	.950	1.820	
1.25	1313TF-3-1.25-6*	.840	1.040	1.820	
1.5	1313TF-3-1.5-6*	.830	1.030	2.250	
2.0	1313TF-3-2.0-6*	.990	1.190	2.250	

For 1000 VDC rated parts,  
please consult factory.

\* - Please insert appropriate tolerance code

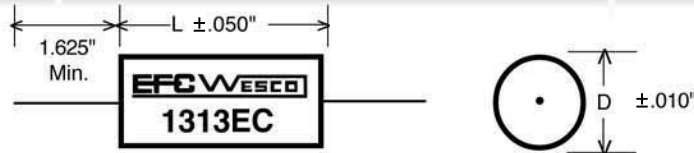


Please consult factory for special requirements, including non-standard values and sizes

**1313EC**  
Tubular Plastic Case  
(Axial Leads)

**Metallized  
Polyester Capacitors**

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



## Dimensions and Ratings

50 VDC				100 VDC				160 VDC			
Cap.	Part #	D	L	Cap.	Part #	D	L	Cap.	Part #	D	L
.001	1313EC-3-.001-0-*	.187	.375	.001	1313EC-3-.001-1-*	.187	.375	.001	1313EC-3-.001-1.6*	.187	.375
.0012	1313EC-3-.0012-0-*	.187	.375	.0012	1313EC-3-.0012-1-*	.187	.375	.0012	1313EC-3-.0012-1.6*	.187	.375
.0015	1313EC-3-.0015-0-*	.187	.375	.0015	1313EC-3-.0015-1-*	.187	.375	.0015	1313EC-3-.0015-1.6*	.187	.375
.0018	1313EC-3-.0018-0-*	.187	.375	.0018	1313EC-3-.0018-1-*	.187	.375	.0018	1313EC-3-.0018-1.6*	.187	.375
.0022	1313EC-3-.0022-0-*	.187	.375	.0022	1313EC-3-.0022-1-*	.187	.375	.0022	1313EC-3-.0022-1.6*	.187	.375
.0027	1313EC-3-.0027-0-*	.187	.375	.0027	1313EC-3-.0027-1-*	.187	.375	.0027	1313EC-3-.0027-1.6*	.187	.375
.0033	1313EC-3-.0033-0-*	.187	.375	.0033	1313EC-3-.0033-1-*	.187	.375	.0033	1313EC-3-.0033-1.6*	.187	.375
.0039	1313EC-3-.0039-0-*	.187	.375	.0039	1313EC-3-.0039-1-*	.187	.375	.0039	1313EC-3-.0039-1.6*	.187	.375
.0047	1313EC-3-.0047-0-*	.187	.375	.0047	1313EC-3-.0047-1-*	.187	.375	.0047	1313EC-3-.0047-1.6*	.187	.375
.0056	1313EC-3-.0056-0-*	.187	.375	.0056	1313EC-3-.0056-1-*	.187	.375	.0056	1313EC-3-.0056-1.6*	.187	.375
.0068	1313EC-3-.0068-0-*	.187	.375	.0068	1313EC-3-.0068-1-*	.187	.375	.0068	1313EC-3-.0068-1.6*	.187	.375
.0082	1313EC-3-.0082-0-*	.187	.375	.0082	1313EC-3-.0082-1-*	.187	.375	.0082	1313EC-3-.0082-1.6*	.187	.375
.01	1313EC-3-.01-0-*	.187	.375	.01	1313EC-3-.01-1-*	.187	.375	.01	1313EC-3-.01-1.6*	.187	.375
.012	1313EC-3-.012-0-*	.187	.375	.012	1313EC-3-.012-1-*	.187	.375	.012	1313EC-3-.012-1.6*	.187	.375
.015	1313EC-3-.015-0-*	.187	.375	.015	1313EC-3-.015-1-*	.187	.375	.015	1313EC-3-.015-1.6*	.187	.375
.018	1313EC-3-.018-0-*	.187	.375	.018	1313EC-3-.018-1-*	.187	.375	.018	1313EC-3-.018-1.6*	.187	.375
.022	1313EC-3-.022-0-*	.187	.375	.022	1313EC-3-.022-1-*	.187	.375	.022	1313EC-3-.022-1.6*	.187	.375
.027	1313EC-3-.027-0-*	.187	.375	.027	1313EC-3-.027-1-*	.187	.375	.027	1313EC-3-.027-1.6*	.225	.375
.033	1313EC-3-.033-0-*	.187	.375	.033	1313EC-3-.033-1-*	.187	.375	.033	1313EC-3-.033-1.6*	.225	.375
.039	1313EC-3-.039-0-*	.187	.375	.039	1313EC-3-.039-1-*	.187	.375	.039	1313EC-3-.039-1.6*	.250	.375
.047	1313EC-3-.047-0-*	.187	.375	.047	1313EC-3-.047-1-*	.225	.375	.047	1313EC-3-.047-1.6*	.250	.375
.056	1313EC-3-.056-0-*	.187	.375	.056	1313EC-3-.056-1-*	.225	.375	.056	1313EC-3-.056-1.6*	.225	.500
.068	1313EC-3-.068-0-*	.187	.375	.068	1313EC-3-.068-1-*	.225	.375	.068	1313EC-3-.068-1.6*	.225	.500
.082	1313EC-3-.082-0-*	.187	.375	.082	1313EC-3-.082-1-*	.250	.375	.082	1313EC-3-.082-1.6*	.225	.500
.1	1313EC-3-.1-0-*	.187	.375	.1	1313EC-3-.1-1-*	.187	.500	.1	1313EC-3-.1-1.6*	.250	.500
.12	1313EC-3-.12-0-*	.187	.375	.12	1313EC-3-.12-1-*	.225	.500	.12	1313EC-3-.12-1.6*	.225	.625
.15	1313EC-3-.15-0-*	.225	.375	.15	1313EC-3-.15-1-*	.225	.500	.15	1313EC-3-.15-1.6*	.250	.625
.18	1313EC-3-.18-0-*	.250	.375	.18	1313EC-3-.18-1-*	.250	.500	.18	1313EC-3-.18-1.6*	.250	.625
.22	1313EC-3-.22-0-*	.187	.500	.22	1313EC-3-.22-1-*	.250	.500	.22	1313EC-3-.22-1.6*	.312	.625
.27	1313EC-3-.27-0-*	.225	.500	.27	1313EC-3-.27-1-*	.225	.625	.27	1313EC-3-.27-1.6*	.312	.625
.33	1313EC-3-.33-0-*	.225	.500	.33	1313EC-3-.33-1-*	.250	.625	.33	1313EC-3-.33-1.6*	.312	.750
.39	1313EC-3-.39-0-*	.250	.500	.39	1313EC-3-.39-1-*	.312	.625	.39	1313EC-3-.39-1.6*	.375	.750
.47	1313EC-3-.47-0-*	.225	.625	.47	1313EC-3-.47-1-*	.312	.625	.47	1313EC-3-.47-1.6*	.375	.750
.56	1313EC-3-.56-0-*	.250	.625	.56	1313EC-3-.56-1-*	.312	.750	.56	1313EC-3-.56-1.6*	.375	.750
.68	1313EC-3-.68-0-*	.250	.625	.68	1313EC-3-.68-1-*	.312	.750	.68	1313EC-3-.68-1.6*	.375	.875
.82	1313EC-3-.82-0-*	.312	.625	.82	1313EC-3-.82-1-*	.375	.750	.82	1313EC-3-.82-1.6*	.437	.875
1.0	1313EC-3-1.0-0-*	.312	.625	1.0	1313EC-3-1.0-1-*	.375	.750	1.0	1313EC-3-1.0-1.6*	.500	.875
1.25	1313EC-3-1.25-0-*	.312	.750	1.25	1313EC-3-1.25-1-*	.375	.875	1.25	1313EC-3-1.25-1.6*	.500	.875
1.5	1313EC-3-1.5-0-*	.312	.750	1.5	1313EC-3-1.5-1-*	.437	.875	1.5	1313EC-3-1.5-1.6*	.500	1.190

\* - Please insert appropriate tolerance code

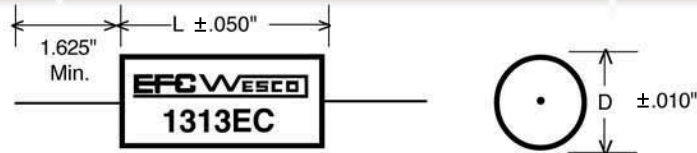


Please consult factory for special requirements, including non-standard values and sizes

**1313EC**  
Tubular Plastic Case  
(Axial Leads)

## Metallized Polyester Capacitors

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



# Dimensions and Ratings

200 VDC				400 VDC			
Cap.	Part #	D	L	Cap.	Part #	D	L
.001	1313EC-3-.001-2-*	.187	.375	.001	1313EC-3-.001-4-*	.187	.375
.0012	1313EC-3-.0012-2-*	.187	.375	.0012	1313EC-3-.0012-4-*	.187	.375
.0015	1313EC-3-.0015-2-*	.187	.375	.0015	1313EC-3-.0015-4-*	.187	.375
.0018	1313EC-3-.0018-2-*	.187	.375	.0018	1313EC-3-.0018-4-*	.187	.375
.0022	1313EC-3-.0022-2-*	.187	.375	.0022	1313EC-3-.0022-4-*	.187	.375
.0027	1313EC-3-.0027-2-*	.187	.375	.0027	1313EC-3-.0027-4-*	.187	.375
.0033	1313EC-3-.0033-2-*	.187	.375	.0033	1313EC-3-.0033-4-*	.187	.375
.0039	1313EC-3-.0039-2-*	.187	.375	.0039	1313EC-3-.0039-4-*	.187	.375
.0047	1313EC-3-.0047-2-*	.187	.375	.0047	1313EC-3-.0047-4-*	.187	.375
.0056	1313EC-3-.0056-2-*	.187	.375	.0056	1313EC-3-.0056-4-*	.187	.375
.0068	1313EC-3-.0068-2-*	.187	.375	.0068	1313EC-3-.0068-4-*	.225	.375
.0082	1313EC-3-.0082-2-*	.187	.375	.0082	1313EC-3-.0082-4-*	.225	.375
.01	1313EC-3-.01-2-*	.187	.375	.01	1313EC-3-.01-4-*	.225	.375
.012	1313EC-3-.012-2-*	.187	.375	.012	1313EC-3-.012-4-*	.250	.375
.015	1313EC-3-.015-2-*	.187	.375	.015	1313EC-3-.015-4-*	.225	.500
.018	1313EC-3-.018-2-*	.225	.375	.018	1313EC-3-.018-4-*	.225	.500
.022	1313EC-3-.022-2-*	.225	.375	.022	1313EC-3-.022-4-*	.225	.500
.027	1313EC-3-.027-2-*	.225	.375	.027	1313EC-3-.027-4-*	.250	.500
.033	1313EC-3-.033-2-*	.250	.375	.033	1313EC-3-.033-4-*	.225	.625
.039	1313EC-3-.039-2-*	.187	.500	.039	1313EC-3-.039-4-*	.250	.625
.047	1313EC-3-.047-2-*	.225	.500	.047	1313EC-3-.047-4-*	.250	.625
.056	1313EC-3-.056-2-*	.225	.500	.056	1313EC-3-.056-4-*	.312	.625
.068	1313EC-3-.068-2-*	.250	.500	.068	1313EC-3-.068-4-*	.312	.625
.082	1313EC-3-.082-2-*	.250	.500	.082	1313EC-3-.082-4-*	.312	.750
.1	1313EC-3-.1-2-*	.225	.625	.1	1313EC-3-.1-4-*	.312	.750
.12	1313EC-3-.12-2-*	.250	.625	.12	1313EC-3-.12-4-*	.375	.750
.15	1313EC-3-.15-2-*	.312	.625	.15	1313EC-3-.15-4-*	.375	.750
.18	1313EC-3-.18-2-*	.312	.625	.18	1313EC-3-.18-4-*	.375	.875
.22	1313EC-3-.22-2-*	.312	.750	.22	1313EC-3-.22-4-*	.437	.875
.27	1313EC-3-.27-2-*	.312	.750	.27	1313EC-3-.27-4-*	.500	.875
.33	1313EC-3-.33-2-*	.375	.750	.33	1313EC-3-.33-4-*	.500	.875
.39	1313EC-3-.39-2-*	.375	.750	.39	1313EC-3-.39-4-*	.500	1.190
.47	1313EC-3-.47-2-*	.375	.875	.47	1313EC-3-.47-4-*	.500	1.190
.56	1313EC-3-.56-2-*	.437	.875				
.68	1313EC-3-.68-2-*	.437	.875				
.82	1313EC-3-.82-2-*	.500	.875				
1.0	1313EC-3-1.0-2-*	.437	1.190				
1.25	1313EC-3-1.25-2-*	.500	1.190				

\* - Please insert appropriate tolerance code



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

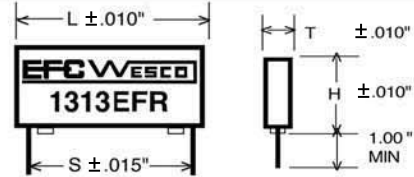
**1313EFR**  
Rectangular Plastic Case  
(Radial Leads)

**Metallized  
Polyester Capacitors**

Lead Specs -  
Tinned Copperweld

L	S	AWG
.420	.30	22
.550	.40	22
.670	.50	22
.820	.60	22
1.04	.80	22
1.24	1.10	20
1.75	1.60	20

## Dimensions and Ratings



50 VDC					100 VDC					200 VDC				
Cap. $\mu$ F	Part #	T	L	H	Cap. $\mu$ F	Part #	T	L	H	Cap. $\mu$ F	Part #	T	L	H
.001	1313EFR-3-.001-0-*	.160	.420	.330	.001	1313EFR-3-.001-1-*	.160	.420	.330	.001	1313EFR-3-.001-2-*	.160	.420	.330
.0012	1313EFR-3-.0012-0-*	.160	.420	.330	.0012	1313EFR-3-.0012-1-*	.160	.420	.330	.0012	1313EFR-3-.0012-2-*	.160	.420	.330
.0015	1313EFR-3-.0015-0-*	.160	.420	.330	.0015	1313EFR-3-.0015-1-*	.160	.420	.330	.0015	1313EFR-3-.0015-2-*	.160	.420	.330
.0018	1313EFR-3-.0018-0-*	.160	.420	.330	.0018	1313EFR-3-.0018-1-*	.160	.420	.330	.0018	1313EFR-3-.0018-2-*	.160	.420	.330
.0022	1313EFR-3-.0022-0-*	.160	.420	.330	.0022	1313EFR-3-.0022-1-*	.160	.420	.330	.0022	1313EFR-3-.0022-2-*	.160	.420	.330
.0027	1313EFR-3-.0027-0-*	.160	.420	.330	.0027	1313EFR-3-.0027-1-*	.160	.420	.330	.0027	1313EFR-3-.0027-2-*	.160	.420	.330
.0033	1313EFR-3-.0033-0-*	.160	.420	.330	.0033	1313EFR-3-.0033-1-*	.160	.420	.330	.0033	1313EFR-3-.0033-2-*	.160	.420	.330
.0039	1313EFR-3-.0039-0-*	.160	.420	.330	.0039	1313EFR-3-.0039-1-*	.160	.420	.330	.0039	1313EFR-3-.0039-2-*	.160	.420	.330
.0047	1313EFR-3-.0047-0-*	.160	.420	.330	.0047	1313EFR-3-.0047-1-*	.160	.420	.330	.0047	1313EFR-3-.0047-2-*	.160	.420	.330
.0056	1313EFR-3-.0056-0-*	.160	.420	.330	.0056	1313EFR-3-.0056-1-*	.160	.420	.330	.0056	1313EFR-3-.0056-2-*	.160	.420	.330
.0068	1313EFR-3-.0068-0-*	.160	.420	.330	.0068	1313EFR-3-.0068-1-*	.160	.420	.330	.0068	1313EFR-3-.0068-2-*	.160	.420	.330
.0082	1313EFR-3-.0082-0-*	.160	.420	.330	.0082	1313EFR-3-.0082-1-*	.160	.420	.330	.0082	1313EFR-3-.0082-2-*	.160	.420	.330
.01	1313EFR-3-.01-0-*	.160	.420	.330	.01	1313EFR-3-.01-1-*	.160	.420	.330	.01	1313EFR-3-.01-2-*	.160	.420	.330
.012	1313EFR-3-.012-0-*	.160	.420	.330	.012	1313EFR-3-.012-1-*	.160	.420	.330	.012	1313EFR-3-.012-2-*	.160	.420	.330
.015	1313EFR-3-.015-0-*	.160	.420	.330	.015	1313EFR-3-.015-1-*	.160	.420	.330	.015	1313EFR-3-.015-2-*	.160	.420	.330
.018	1313EFR-3-.018-0-*	.160	.420	.330	.018	1313EFR-3-.018-1-*	.160	.420	.330	.018	1313EFR-3-.018-2-*	.160	.420	.330
.022	1313EFR-3-.022-0-*	.160	.420	.330	.022	1313EFR-3-.022-1-*	.160	.420	.330	.022	1313EFR-3-.022-2-*	.180	.420	.330
.027	1313EFR-3-.027-0-*	.160	.420	.330	.027	1313EFR-3-.027-1-*	.160	.420	.330	.027	1313EFR-3-.027-2-*	.180	.420	.330
.033	1313EFR-3-.033-0-*	.160	.420	.330	.033	1313EFR-3-.033-1-*	.160	.420	.330	.033	1313EFR-3-.033-2-*	.180	.420	.330
.039	1313EFR-3-.039-0-*	.160	.420	.330	.039	1313EFR-3-.039-1-*	.180	.420	.330	.039	1313EFR-3-.039-2-*	.180	.550	.330
.047	1313EFR-3-.047-0-*	.160	.420	.330	.047	1313EFR-3-.047-1-*	.180	.420	.330	.047	1313EFR-3-.047-2-*	.180	.550	.330
.056	1313EFR-3-.056-0-*	.160	.420	.330	.056	1313EFR-3-.056-1-*	.180	.420	.330	.056	1313EFR-3-.056-2-*	.180	.550	.330
.068	1313EFR-3-.068-0-*	.180	.420	.330	.068	1313EFR-3-.068-1-*	.180	.420	.330	.068	1313EFR-3-.068-2-*	.180	.550	.330
.082	1313EFR-3-.082-0-*	.180	.420	.330	.082	1313EFR-3-.082-1-*	.180	.420	.330	.082	1313EFR-3-.082-2-*	.240	.550	.380
.1	1313EFR-3-.1-0-*	.180	.420	.330	.1	1313EFR-3-.1-1-*	.180	.420	.330	.1	1313EFR-3-.1-2-*	.240	.550	.380
.12	1313EFR-3-.12-0-*	.180	.420	.330	.12	1313EFR-3-.12-1-*	.180	.550	.330	.12	1313EFR-3-.12-2-*	.300	.550	.430
.15	1313EFR-3-.15-0-*	.180	.420	.330	.15	1313EFR-3-.15-1-*	.180	.550	.330	.15	1313EFR-3-.15-2-*	.300	.550	.430
.18	1313EFR-3-.18-0-*	.180	.550	.330	.18	1313EFR-3-.18-1-*	.180	.550	.330	.18	1313EFR-3-.18-2-*	.300	.550	.430
.22	1313EFR-3-.22-0-*	.180	.550	.330	.22	1313EFR-3-.22-1-*	.180	.550	.330	.22	1313EFR-3-.22-2-*	.300	.670	.430
.27	1313EFR-3-.27-0-*	.180	.550	.330	.27	1313EFR-3-.27-1-*	.240	.550	.380	.27	1313EFR-3-.27-2-*	.300	.820	.430
.33	1313EFR-3-.33-0-*	.180	.550	.330	.33	1313EFR-3-.33-1-*	.240	.550	.380	.33	1313EFR-3-.33-2-*	.300	.820	.430
.39	1313EFR-3-.39-0-*	.240	.550	.380	.39	1313EFR-3-.39-1-*	.300	.550	.430	.39	1313EFR-3-.39-2-*	.300	.820	.430
.47	1313EFR-3-.47-0-*	.240	.550	.380	.47	1313EFR-3-.47-1-*	.300	.550	.430	.47	1313EFR-3-.47-2-*	.400	.820	.550
.56	1313EFR-3-.56-0-*	.300	.550	.430	.56	1313EFR-3-.56-1-*	.300	.550	.430	.56	1313EFR-3-.56-2-*	.400	.820	.550
.68	1313EFR-3-.68-0-*	.300	.550	.430	.68	1313EFR-3-.68-1-*	.300	.670	.430	.68	1313EFR-3-.68-2-*	.400	1.040	.550
.82	1313EFR-3-.82-0-*	.300	.550	.430	.82	1313EFR-3-.82-1-*	.300	.820	.430	.82	1313EFR-3-.82-2-*	.400	1.040	.550
1.0	1313EFR-3-1.0-0-*	.300	.670	.430	1.0	1313EFR-3-1.0-1-*	.300	.820	.430	1.0	1313EFR-3-1.0-2-*	.400	1.240	.550
1.25	1313EFR-3-1.25-0-*	.300	.820	.430	1.25	1313EFR-3-1.25-1-*	.400	.820	.550	1.25	1313EFR-3-1.25-2-*	.400	1.240	.550
1.5	1313EFR-3-1.5-0-*	.300	.820	.430	1.5	1313EFR-3-1.5-1-*	.400	.820	.550	1.5	1313EFR-3-1.5-2-*	.400	1.240	.550
2.0	1313EFR-3-2.0-0-*	.400	1.040	.550	2.0	1313EFR-3-2.0-1-*	.400	1.240	.550	2.0	1313EFR-3-2.0-2-*	.570	1.500	.730
3.0	1313EFR-3-3.0-0-*	.400	1.240	.550	3.0	1313EFR-3-3.0-1-*	.400	1.240	.550	3.0	1313EFR-3-3.0-2-*	.570	1.750	.730
4.0	1313EFR-3-4.0-0-*	.400	1.240	.550	4.0	1313EFR-3-4.0-1-*	.570	1.240	.730					
5.0	1313EFR-3-5.0-0-*	.400	1.240	.550	5.0	1313EFR-3-5.0-1-*	.570	1.240	.730					
6.0	1313EFR-3-6.0-0-*	.570	1.240	.730	6.0	1313EFR-3-6.0-1-*	.570	1.240	.730					
10.0	1313EFR-3-10.0-0-*	.570	1.750	.730	10.0	1313EFR-3-10.0-1-*	.570	1.750	.730					

\* - Please insert appropriate tolerance code



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

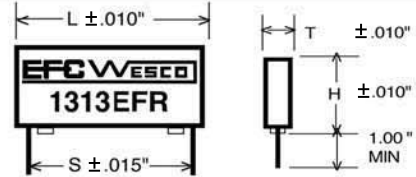
**1313EFR**  
Rectangular Plastic Case  
(Radial Leads)

**Metallized  
Polyester Capacitors**

Lead Specs -  
Tinned Copperweld

L	S	AWG
.420	.30	22
.550	.40	22
.670	.50	22
.820	.60	22
1.04	.80	22
1.24	1.10	20
1.75	1.60	20

## Dimensions and Ratings



Cap.	400 VDC			
μF	Part #	T	L	H
.001	1313EFR-3-.001-4-*	.180	.420	.330
.0012	1313EFR-3-.0012-4-*	.180	.420	.330
.0015	1313EFR-3-.0015-4-*	.180	.420	.330
.0018	1313EFR-3-.0018-4-*	.180	.420	.330
.0022	1313EFR-3-.0022-4-*	.180	.420	.330
.0027	1313EFR-3-.0027-4-*	.180	.420	.330
.0033	1313EFR-3-.0033-4-*	.180	.420	.330
.0039	1313EFR-3-.0039-4-*	.180	.420	.330
.0047	1313EFR-3-.0047-4-*	.180	.420	.330
.0056	1313EFR-3-.0056-4-*	.180	.420	.330
.0068	1313EFR-3-.0068-4-*	.180	.420	.330
.0082	1313EFR-3-.0082-4-*	.180	.420	.330
.01	1313EFR-3-.01-4-*	.180	.420	.330
.012	1313EFR-3-.012-4-*	.180	.420	.330
.015	1313EFR-3-.015-4-*	.180	.420	.330
.018	1313EFR-3-.018-4-*	.180	.420	.330
.022	1313EFR-3-.022-4-*	.180	.550	.330
.027	1313EFR-3-.027-4-*	.180	.550	.330
.033	1313EFR-3-.033-4-*	.180	.550	.330
.039	1313EFR-3-.039-4-*	.240	.550	.380
.047	1313EFR-3-.047-4-*	.240	.550	.380
.056	1313EFR-3-.056-4-*	.240	.550	.380
.068	1313EFR-3-.068-4-*	.240	.550	.380
.082	1313EFR-3-.082-4-*	.300	.550	.430
.1	1313EFR-3-.1-4-*	.300	.670	.430
.12	1313EFR-3-.12-4-*	.300	.670	.430
.15	1313EFR-3-.15-4-*	.300	.670	.430
.18	1313EFR-3-.18-4-*	.300	.820	.430
.22	1313EFR-3-.22-4-*	.300	.820	.430
.27	1313EFR-3-.27-4-*	.300	.820	.430
.33	1313EFR-3-.33-4-*	.400	.820	.550
.39	1313EFR-3-.39-4-*	.400	1.040	.550
.47	1313EFR-3-.47-4-*	.400	1.040	.550
.56	1313EFR-3-.56-4-*	.570	1.240	.730
.68	1313EFR-3-.68-4-*	.570	1.240	.730
.82	1313EFR-3-.82-4-*	.570	1.240	.730
1.0	1313EFR-3-1.0-4-*	.570	1.240	.730
1.25	1313EFR-3-1.25-4-*	.570	1.240	.730
1.5	1313EFR-3-1.5-4-*	.570	1.240	.730
2.0	1313EFR-3-2.0-4-*	.570	1.750	.730

Cap.	600 VDC			
μF	Part #	T	L	H
.001	1313EFR-3-.001-6-*	.180	.550	.330
.0012	1313EFR-3-.0012-6-*	.180	.550	.330
.0015	1313EFR-3-.0015-6-*	.180	.550	.330
.0018	1313EFR-3-.0018-6-*	.180	.550	.330
.0022	1313EFR-3-.0022-6-*	.180	.550	.330
.0027	1313EFR-3-.0027-6-*	.180	.550	.330
.0033	1313EFR-3-.0033-6-*	.180	.550	.330
.0039	1313EFR-3-.0039-6-*	.180	.550	.330
.0047	1313EFR-3-.0047-6-*	.180	.550	.330
.0056	1313EFR-3-.0056-6-*	.180	.550	.330
.0068	1313EFR-3-.0068-6-*	.180	.550	.330
.0082	1313EFR-3-.0082-6-*	.180	.550	.330
.01	1313EFR-3-.01-6-*	.180	.550	.330
.012	1313EFR-3-.012-6-*	.180	.550	.330
.015	1313EFR-3-.015-6-*	.180	.550	.330
.018	1313EFR-3-.018-6-*	.180	.550	.330
.022	1313EFR-3-.022-6-*	.240	.550	.380
.027	1313EFR-3-.027-6-*	.240	.550	.380
.033	1313EFR-3-.033-6-*	.300	.550	.430
.039	1313EFR-3-.039-6-*	.300	.670	.430
.047	1313EFR-3-.047-6-*	.300	.670	.430
.056	1313EFR-3-.056-6-*	.300	.670	.430
.068	1313EFR-3-.068-6-*	.300	.820	.430
.082	1313EFR-3-.082-6-*	.300	.820	.430
.1	1313EFR-3-.1-6-*	.300	.820	.430
.12	1313EFR-3-.12-6-*	.400	.820	.550
.15	1313EFR-3-.15-6-*	.400	.820	.550
.18	1313EFR-3-.18-6-*	.400	1.040	.550
.22	1313EFR-3-.22-6-*	.440	1.240	.550
.27	1313EFR-3-.27-6-*	.400	1.240	.550
.33	1313EFR-3-.33-6-*	.400	1.240	.550
.39	1313EFR-3-.39-6-*	.400	1.240	.550
.47	1313EFR-3-.47-6-*	.400	1.240	.550
.56	1313EFR-3-.56-6-*	.570	1.240	.730
.68	1313EFR-3-.68-6-*	.570	1.240	.730
.82	1313EFR-3-.82-6-*	.570	1.750	.730

\* - Please insert appropriate tolerance code



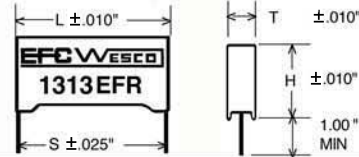
Please consult factory for special requirements, including non-standard values and sizes

**1313EFR**  
Rectangular Plastic Case  
(Radial Leads)

**Metallized  
Polyester Capacitors**

**Lead Specs -  
Tinned Copperweld**  
B through E cases: 22 AWG  
F through Q cases: 20 AWG

## Dimensions and Ratings



63 VDC / 40 VAC						160 VDC / 100 VAC					
Cap.	Part #	T	L	H	S	Cap.	Part #	T	L	H	S
µF		in. (mm)	in. (mm)	in. (mm)	in. (mm)	µF		in. (mm)	in. (mm)	in. (mm)	in. (mm)
.001	1313EFR-B-.001-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.001	1313EFR-B-.001-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0012	1313EFR-B-.0012-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0012	1313EFR-B-.0012-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0015	1313EFR-B-.0015-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0015	1313EFR-B-.0015-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0018	1313EFR-B-.0018-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0018	1313EFR-B-.0018-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0022	1313EFR-B-.0022-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0022	1313EFR-B-.0022-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0027	1313EFR-B-.0027-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0027	1313EFR-B-.0027-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0033	1313EFR-B-.0033-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0033	1313EFR-B-.0033-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0039	1313EFR-B-.0039-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0039	1313EFR-B-.0039-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0047	1313EFR-B-.0047-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0047	1313EFR-B-.0047-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0056	1313EFR-B-.0056-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0056	1313EFR-B-.0056-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0068	1313EFR-B-.0068-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0068	1313EFR-B-.0068-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0082	1313EFR-B-.0082-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.0082	1313EFR-B-.0082-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.01	1313EFR-B-.01-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.01	1313EFR-B-.01-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.012	1313EFR-B-.012-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.012	1313EFR-B-.012-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.015	1313EFR-B-.015-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.015	1313EFR-B-.015-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.018	1313EFR-B-.018-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.018	1313EFR-B-.018-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.022	1313EFR-B-.022-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.022	1313EFR-B-.022-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.027	1313EFR-B-.027-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.027	1313EFR-B-.027-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.033	1313EFR-B-.033-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.033	1313EFR-B-.033-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.039	1313EFR-B-.039-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.039	1313EFR-B-.039-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.047	1313EFR-B-.047-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.047	1313EFR-B-.047-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.056	1313EFR-B-.056-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.056	1313EFR-B-.056-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.068	1313EFR-B-.068-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.068	1313EFR-B-.068-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.082	1313EFR-B-.082-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.082	1313EFR-B-.082-1.6*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.1	1313EFR-B-.1-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.1	1313EFR-C-.1-1.6*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.12	1313EFR-B-.12-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.12	1313EFR-C-.12-1.6*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.15	1313EFR-B-.15-63*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)	.15	1313EFR-C-.15-1.6*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.18	1313EFR-C-.18-63*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)	.18	1313EFR-D-.18-1.6*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.22	1313EFR-C-.22-63*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)	.22	1313EFR-D-.22-1.6*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.27	1313EFR-C-.27-63*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)	.27	1313EFR-D-.27-1.6*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.33	1313EFR-C-.33-63*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)	.33	1313EFR-E-.33-1.6*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.39	1313EFR-D-.39-63*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)	.39	1313EFR-E-.39-1.6*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.47	1313EFR-D-.47-63*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)	.47	1313EFR-F-.47-1.6*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.56	1313EFR-E-.56-63*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)	.56	1313EFR-G-.56-1.6*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.68	1313EFR-E-.68-63*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)	.68	1313EFR-G-.68-1.6*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.82	1313EFR-F-.82-63*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)	.82	1313EFR-H-.82-1.6*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
1.0	1313EFR-F-1.0-63*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)	1.0	1313EFR-H-1.0-1.6*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
1.2	1313EFR-G-1.2-63*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)	1.2	1313EFR-H-1.2-1.6*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
1.5	1313EFR-G-1.5-63*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)	1.5	1313EFR-K-1.5-1.6*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
2.2	1313EFR-H-2.2-63*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)	1.5	1313EFR-M-1.5-1.6*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
3.3	1313EFR-K-3.3-63*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)	2.2	1313EFR-N-2.2-1.6*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
3.3	1313EFR-M-3.3-63*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)	3.3	1313EFR-O-3.3-1.6*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
4.7	1313EFR-N-4.7-63*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)	4.7	1313EFR-P-4.7-1.6*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
5.6	1313EFR-O-5.6-63*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)						

\* - Please insert appropriate tolerance code



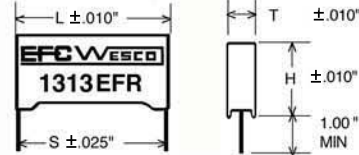
Please consult factory for special requirements, including non-standard values and sizes

**1313EFR**  
Rectangular Plastic Case  
(Radial Leads)

**Metallized  
Polyester Capacitors**

**Lead Specs -  
Tinned Copperweld**  
B through E cases: 22 AWG  
F through Q cases: 20 AWG

## Dimensions and Ratings



250 VDC / 160 VAC					
Cap.	Part #	T	L	H	S
μF		in. (mm)	in. (mm)	in. (mm)	in. (mm)
.001	1313EFR-B-.001-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0012	1313EFR-B-.0012-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0015	1313EFR-B-.0015-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0018	1313EFR-B-.0018-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0022	1313EFR-B-.0022-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0027	1313EFR-B-.0027-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0033	1313EFR-B-.0033-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0039	1313EFR-B-.0039-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0047	1313EFR-B-.0047-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0056	1313EFR-B-.0056-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0068	1313EFR-B-.0068-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0082	1313EFR-B-.0082-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.01	1313EFR-B-.01-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.012	1313EFR-B-.012-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.015	1313EFR-B-.015-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.018	1313EFR-B-.018-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.022	1313EFR-B-.022-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.027	1313EFR-B-.027-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.033	1313EFR-B-.033-2.5-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.039	1313EFR-C-.039-2.5-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.047	1313EFR-C-.047-2.5-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.056	1313EFR-C-.056-2.5-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.068	1313EFR-C-.068-2.5-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.082	1313EFR-D-.082-2.5-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.1	1313EFR-D-.1-2.5-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.12	1313EFR-D-.12-2.5-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.15	1313EFR-E-.15-2.5-*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.18	1313EFR-E-.18-2.5-*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.22	1313EFR-F-.22-2.5-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.27	1313EFR-F-.27-2.5-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.33	1313EFR-G-.33-2.5-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.39	1313EFR-G-.39-2.5-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.47	1313EFR-H-.47-2.5-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.56	1313EFR-H-.56-2.5-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.68	1313EFR-J-.68-2.5-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.68	1313EFR-L-.68-2.5-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.82	1313EFR-K-.82-2.5-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.82	1313EFR-M-.82-2.5-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
1.0	1313EFR-N-1.0-2.5-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
1.2	1313EFR-N-1.2-2.5-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
1.5	1313EFR-P-1.5-2.5-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
2.2	1313EFR-P-2.2-2.5-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
3.3	1313EFR-Q-3.3-2.5-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)

400 VDC / 220 VAC					
Cap.	Part #	T	L	H	S
μF		in. (mm)	in. (mm)	in. (mm)	in. (mm)
.001	1313EFR-B-.001-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0012	1313EFR-B-.0012-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0015	1313EFR-B-.0015-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0018	1313EFR-B-.0018-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0022	1313EFR-B-.0022-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0027	1313EFR-B-.0027-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0033	1313EFR-B-.0033-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0039	1313EFR-B-.0039-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0047	1313EFR-B-.0047-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0056	1313EFR-B-.0056-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0068	1313EFR-B-.0068-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.0082	1313EFR-B-.0082-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.01	1313EFR-B-.01-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.012	1313EFR-B-.012-4-*	.157 (4.0)	.413 (10.5)	.354 (9.0)	.295 (7.5)
.015	1313EFR-C-.015-4-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.018	1313EFR-C-.018-4-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.022	1313EFR-C-.022-4-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.027	1313EFR-C-.027-4-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.033	1313EFR-D-.033-4-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.039	1313EFR-D-.039-4-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.047	1313EFR-D-.047-4-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.056	1313EFR-E-.056-4-*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.068	1313EFR-E-.068-4-*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.082	1313EFR-F-.082-4-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.1	1313EFR-F-.1-4-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.12	1313EFR-G-.12-4-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.15	1313EFR-H-.15-4-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.18	1313EFR-H-.18-4-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.22	1313EFR-J-.22-4-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.22	1313EFR-L-.22-4-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.27	1313EFR-K-.27-4-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.27	1313EFR-M-.27-4-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.33	1313EFR-K-.33-4-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.33	1313EFR-M-.33-4-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.39	1313EFR-K-.39-4-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.39	1313EFR-M-.39-4-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.47	1313EFR-N-.47-4-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.56	1313EFR-O-.56-4-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.68	1313EFR-O-.68-4-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.82	1313EFR-P-.82-4-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
1.0	1313EFR-P-1.0-4-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
1.2	1313EFR-Q-1.2-4-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)

\* - Please insert appropriate tolerance code



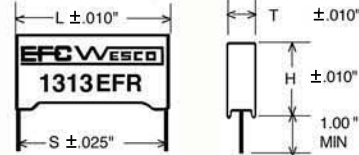
Please consult factory for special requirements, including non-standard values and sizes

**1313EFR**  
Rectangular Plastic Case  
(Radial Leads)

**Metallized  
Polyester Capacitors**

**Lead Specs -  
Tinned Copperweld**  
B through E cases: 22 AWG  
F through Q cases: 20 AWG

## Dimensions and Ratings



Cap.	630 VDC / 250 VAC				
μF	Part #	T in. (mm)	L in. (mm)	H in. (mm)	S in. (mm)
.001	1313EFR-C-.001-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0012	1313EFR-C-.0012-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0015	1313EFR-C-.0015-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0018	1313EFR-C-.0018-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0022	1313EFR-C-.0022-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0027	1313EFR-C-.0027-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0033	1313EFR-C-.0033-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0039	1313EFR-C-.0039-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0047	1313EFR-C-.0047-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0056	1313EFR-C-.0056-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0068	1313EFR-C-.0068-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.0082	1313EFR-C-.0082-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.01	1313EFR-C-.01-6.3-*	.157 (4.0)	.512 (13.0)	.354 (9.0)	.394 (10.0)
.012	1313EFR-D-.012-6.3-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.015	1313EFR-D-.015-6.3-*	.197 (5.0)	.512 (13.0)	.433 (11.0)	.394 (10.0)
.018	1313EFR-E-.018-6.3-*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.022	1313EFR-E-.022-6.3-*	.236 (6.0)	.512 (13.0)	.472 (12.0)	.394 (10.0)
.027	1313EFR-F-.027-6.3-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.033	1313EFR-F-.033-6.3-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.039	1313EFR-G-.039-6.3-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.047	1313EFR-G-.047-6.3-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.056	1313EFR-H-.056-6.3-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.068	1313EFR-H-.068-6.3-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.082	1313EFR-H-.082-6.3-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.1	1313EFR-J-.1-6.3-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.1	1313EFR-L-.1-6.3-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.12	1313EFR-J-.12-6.3-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.12	1313EFR-L-.12-6.3-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.15	1313EFR-J-.15-6.3-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.15	1313EFR-L-.15-6.3-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.18	1313EFR-K-.18-6.3-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.18	1313EFR-M-.18-6.3-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.22	1313EFR-N-.22-6.3-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.27	1313EFR-O-.27-6.3-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.33	1313EFR-P-.33-6.3-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.39	1313EFR-P-.39-6.3-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.47	1313EFR-Q-.47-6.3-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)
.56	1313EFR-Q-.56-6.3-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)

\* - Please insert appropriate tolerance code



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

## 1313DFR

Epoxy Dipped (Radial Leads)

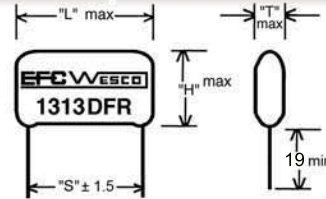
## Standard Metallized Polyester Capacitors

Lead Specs - Tinned Copperweld

L	S	LEAD DIA
10.5	7.5	0.6
12.5	10.0	0.6
18.0	15.0	0.8
26.0	22.5	0.8
31.0	27.5	0.8
44.0	38.0	1.0

## Dimensions and Ratings

All dimensions in mm



100 VDC					160 VDC				
Cap. $\mu$ F	Part #	T	H	L	Cap. $\mu$ F	Part #	T	H	L
.001	1313DFR-3-.001-1-*	4.0	8.0	10.0	.001	1313DFR-3-.001-1.6-*	4.0	8.0	10.0
.0012	1313DFR-3-.0012-1-*	4.0	8.0	10.0	.0012	1313DFR-3-.0012-1.6-*	4.0	8.0	10.0
.0015	1313DFR-3-.0015-1-*	4.0	8.0	10.0	.0015	1313DFR-3-.0015-1.6-*	4.0	8.0	10.0
.0022	1313DFR-3-.0022-1-*	4.0	8.0	10.0	.0022	1313DFR-3-.0022-1.6-*	4.0	8.0	10.0
.0027	1313DFR-3-.0027-1-*	4.0	8.0	10.0	.0027	1313DFR-3-.0027-1.6-*	4.0	8.0	10.0
.0039	1313DFR-3-.0039-1-*	4.0	8.0	10.0	.0039	1313DFR-3-.0039-1.6-*	4.0	8.0	10.0
.0047	1313DFR-3-.0047-1-*	4.0	8.0	10.0	.0047	1313DFR-3-.0047-1.6-*	4.0	8.0	10.0
.0056	1313DFR-3-.0056-1-*	4.0	8.0	10.0	.0056	1313DFR-3-.0056-1.6-*	4.0	8.0	10.0
.0068	1313DFR-3-.0068-1-*	4.0	8.0	10.0	.0068	1313DFR-3-.0068-1.6-*	4.0	8.0	10.0
.0082	1313DFR-3-.0082-1-*	4.0	8.0	10.0	.0082	1313DFR-3-.0082-1.6-*	4.0	8.0	10.0
.01	1313DFR-3-.01-1-*	4.0	8.0	10.0	.01	1313DFR-3-.01-1.6-*	4.0	8.0	10.0
.012	1313DFR-3-.012-1-*	4.0	8.0	10.0	.012	1313DFR-3-.012-1.6-*	4.0	8.0	10.0
.015	1313DFR-3-.015-1-*	4.0	8.0	10.0	.015	1313DFR-3-.015-1.6-*	4.0	8.0	10.0
.018	1313DFR-3-.018-1-*	4.0	8.0	10.0	.018	1313DFR-3-.018-1.6-*	4.0	8.0	10.0
.022	1313DFR-3-.022-1-*	4.0	8.0	10.0	.022	1313DFR-3-.022-1.6-*	4.0	8.0	10.0
.027	1313DFR-3-.027-1-*	4.0	8.0	10.0	.027	1313DFR-3-.027-1.6-*	4.0	8.0	10.0
.033	1313DFR-3-.033-1-*	4.0	8.0	10.0	.033	1313DFR-3-.033-1.6-*	4.0	8.0	10.0
.039	1313DFR-3-.039-1-*	4.0	8.0	10.0	.039	1313DFR-3-.039-1.6-*	4.0	8.0	10.0
.047	1313DFR-3-.047-1-*	4.0	8.0	10.0	.047	1313DFR-3-.047-1.6-*	4.0	8.0	10.0
.056	1313DFR-3-.056-1-*	4.0	8.0	10.0	.056	1313DFR-3-.056-1.6-*	4.0	8.0	10.0
.068	1313DFR-3-.068-1-*	4.0	8.0	10.0	.068	1313DFR-3-.068-1.6-*	4.0	8.0	10.0
.082	1313DFR-3-.082-1-*	4.0	8.0	10.0	.082	1313DFR-3-.082-1.6-*	4.0	8.5	10.0
.1	1313DFR-3-.1-1-*	4.0	8.0	10.0	.1	1313DFR-3-.1-1.6-*	4.0	9.0	10.0
.12	1313DFR-3-.12-1-*	4.0	8.0	10.0	.12	1313DFR-3-.12-1.6-*	5.5	11.0	12.5
.15	1313DFR-3-.15-1-*	4.0	8.0	10.0	.15	1313DFR-3-.15-1.6-*	4.5	9.0	12.5
.18	1313DFR-3-.18-1-*	4.0	8.5	10.0	.18	1313DFR-3-.18-1.6-*	4.5	9.5	12.5
.22	1313DFR-3-.22-1-*	4.0	8.5	10.0	.22	1313DFR-3-.22-1.6-*	5.0	10.0	12.5
.27	1313DFR-3-.27-1-*	4.0	8.5	10.0	.27	1313DFR-3-.27-1.6-*	5.5	11.0	12.5
.33	1313DFR-3-.33-1-*	4.0	9.0	10.0	.33	1313DFR-3-.33-1.6-*	6.0	12.0	12.5
.39	1313DFR-3-.39-1-*	4.0	9.0	12.5	.39	1313DFR-3-.39-1.6-*	5.0	10.0	18.0
.47	1313DFR-3-.47-1-*	4.5	9.5	12.5	.47	1313DFR-3-.47-1.6-*	5.5	11.0	0.2
.56	1313DFR-3-.56-1-*	5.0	10.0	12.5	.56	1313DFR-3-.56-1.6-*	6.0	12.0	18.0
.68	1313DFR-3-.68-1-*	5.5	10.5	12.5	.68	1313DFR-3-.68-1.6-*	7.0	13.0	18.0
.82	1313DFR-3-.82-1-*	6.0	11.5	12.5	.82	1313DFR-3-.82-1.6-*	7.5	13.5	18.0
1.0	1313DFR-3-1.0-1-*	6.5	12.0	12.5	1.0	1313DFR-3-1.0-1.6-*	8.0	14.0	18.0
1.2	1313DFR-3-1.2-1-*	6.0	12.0	18.0	1.2	1313DFR-3-1.2-1.6-*	7.5	13.5	26.0
1.5	1313DFR-3-1.5-1-*	6.5	12.5	18.0	1.5	1313DFR-3-1.5-1.6-*	8.0	14.0	26.0
1.8	1313DFR-3-1.8-1-*	7.0	13.0	18.0	1.8	1313DFR-3-1.8-1.6-*	8.5	15.5	26.0
2.2	1313DFR-3-2.2-1-*	7.5	13.5	18.0	2.2	1313DFR-3-2.2-1.6-*	9.0	17.0	26.0
2.7	1313DFR-3-2.7-1-*	7.0	13.0	26.0	2.7	1313DFR-3-2.7-1.6-*	9.5	18.0	26.0
3.3	1313DFR-3-3.3-1-*	7.5	13.5	26.0	3.3	1313DFR-3-3.3-1.6-*	10.5	20.0	26.0
3.9	1313DFR-3-3.9-1-*	8.0	14.5	26.0	3.9	1313DFR-3-3.9-1.6-*	10.0	19.0	31.0
4.7	1313DFR-3-4.7-1-*	8.5	16.0	26.0	4.7	1313DFR-3-4.7-1.6-*	11.0	21.0	31.0
5.6	1313DFR-3-5.6-1-*	9.0	17.0	26.0	5.6	1313DFR-3-5.6-1.6-*	12.0	22.0	31.0
6.8	1313DFR-3-6.8-1-*	9.5	18.0	26.0	6.8	1313DFR-3-6.8-1.6-*	13.0	24.0	31.0

\* - Please insert appropriate tolerance code



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

## 1313DFR

Epoxy Dipped (Radial Leads)

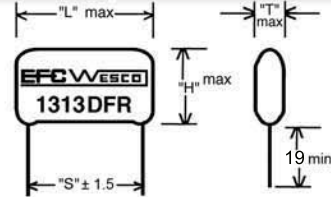
## Standard Metallized Polyester Capacitors

Lead Specs - Tinned Copperweld

L	S	LEAD DIA
10.5	7.5	0.6
12.5	10.0	0.6
18.0	15.0	0.8
26.0	22.5	0.8
31.0	27.5	0.8
44.0	38.0	1.0

## Dimensions and Ratings

All dimensions in mm



Cap. $\mu$ F	250 VDC			
	Part #	T	H	L
.001	1313DFR-3-.001-2.5-*	4.0	8.0	10.0
.0012	1313DFR-3-.0012-2.5-*	4.0	8.0	10.0
.0015	1313DFR-3-.0015-2.5-*	4.0	8.0	10.0
.0022	1313DFR-3-.0022-2.5-*	4.0	8.0	10.0
.0027	1313DFR-3-.0027-2.5-*	4.0	8.0	10.0
.0039	1313DFR-3-.0039-2.5-*	4.0	8.0	10.0
.0047	1313DFR-3-.0047-2.5-*	4.0	8.0	10.0
.0056	1313DFR-3-.0056-2.5-*	4.0	8.0	10.0
.0068	1313DFR-3-.0068-2.5-*	4.0	8.0	10.0
.0082	1313DFR-3-.0082-2.5-*	4.0	8.0	10.0
.01	1313DFR-3-.01-2.5-*	4.0	8.0	10.0
.012	1313DFR-3-.012-2.5-*	4.0	8.0	10.0
.015	1313DFR-3-.015-2.5-*	4.0	8.0	10.0
.018	1313DFR-3-.018-2.5-*	4.0	8.0	10.0
.022	1313DFR-3-.022-2.5-*	4.0	8.0	10.0
.027	1313DFR-3-.027-2.5-*	4.0	8.0	10.0
.033	1313DFR-3-.033-2.5-*	4.0	8.5	10.0
.039	1313DFR-3-.039-2.5-*	4.0	9.0	10.0
.047	1313DFR-3-.047-2.5-*	4.5	9.0	10.0
.056	1313DFR-3-.056-2.5-*	4.0	9.0	12.5
.068	1313DFR-3-.068-2.5-*	4.5	9.0	12.5
.082	1313DFR-3-.082-2.5-*	4.5	9.5	12.5
.1	1313DFR-3-.1-2.5-*	5.0	10.0	12.5
.12	1313DFR-3-.12-2.5-*	5.5	11.0	12.5
.15	1313DFR-3-.15-2.5-*	6.5	12.0	12.5
.18	1313DFR-3-.18-2.5-*	5.0	10.0	18.0
.22	1313DFR-3-.22-2.5-*	5.5	11.0	18.0
.27	1313DFR-3-.27-2.5-*	6.0	12.0	18.0
.33	1313DFR-3-.33-2.5-*	6.5	12.5	18.0
.39	1313DFR-3-.39-2.5-*	7.0	13.0	18.0
.47	1313DFR-3-.47-2.5-*	7.5	13.5	18.0
.56	1313DFR-3-.56-2.5-*	7.0	13.0	26.0
.68	1313DFR-3-.68-2.5-*	8.0	14.0	26.0
.82	1313DFR-3-.82-2.5-*	8.5	15.5	26.0
1.0	1313DFR-3-1.0-2.5-*	9.0	16.5	26.0
1.2	1313DFR-3-1.2-2.5-*	9.5	17.0	26.0
1.5	1313DFR-3-1.5-2.5-*	10.0	19.0	26.0
1.8	1313DFR-3-1.8-2.5-*	9.5	17.0	31.0
2.2	1313DFR-3-2.2-2.5-*	10.0	19.0	31.0
2.7	1313DFR-3-2.7-2.5-*	11.5	21.0	31.0
3.3	1313DFR-3-3.3-2.5-*	15.0	26.0	31.0
3.9	1313DFR-3-3.9-2.5-*	13.5	25.0	31.0
4.7	1313DFR-3-4.7-2.5-*	15.0	26.0	31.0
5.6	1313DFR-3-5.6-2.5-*	14.5	25.0	44.0
6.8	1313DFR-3-6.8-2.5-*	16.0	30.0	44.0

Cap. $\mu$ F	400 VDC			
	Part #	T	H	L
.001	1313DFR-3-.001-4-*	4.0	8.0	10.0
.0012	1313DFR-3-.0012-4-*	4.0	8.0	10.0
.0015	1313DFR-3-.0015-4-*	4.0	8.0	10.0
.0022	1313DFR-3-.0022-4-*	4.0	8.0	10.0
.0027	1313DFR-3-.0027-4-*	4.0	8.0	10.0
.0039	1313DFR-3-.0039-4-*	4.0	8.0	10.0
.0047	1313DFR-3-.0047-4-*	4.0	8.0	10.0
.0056	1313DFR-3-.0056-4-*	4.0	8.0	10.0
.0068	1313DFR-3-.0068-4-*	4.0	8.0	10.0
.0082	1313DFR-3-.0082-4-*	4.0	8.0	10.0
.01	1313DFR-3-.01-4-*	4.0	8.0	10.0
.012	1313DFR-3-.012-4-*	4.0	8.5	10.0
.015	1313DFR-3-.015-4-*	4.5	9.0	10.0
.018	1313DFR-3-.018-4-*	4.0	9.0	12.5
.022	1313DFR-3-.022-4-*	4.5	9.0	12.5
.027	1313DFR-3-.027-4-*	4.5	9.5	12.5
.033	1313DFR-3-.033-4-*	5.0	10.0	12.5
.039	1313DFR-3-.039-4-*	6.0	11.0	12.5
.047	1313DFR-3-.047-4-*	6.5	12.0	12.5
.056	1313DFR-3-.056-4-*	5.0	10.0	18.0
.068	1313DFR-3-.068-4-*	5.5	11.0	18.0
.082	1313DFR-3-.082-4-*	5.5	11.5	18.0
.1	1313DFR-3-.1-4-*	6.5	12.5	18.0
.12	1313DFR-3-.12-4-*	7.0	13.0	18.0
.15	1313DFR-3-.15-4-*	7.5	13.5	18.0
.18	1313DFR-3-.18-4-*	6.5	12.5	26.0
.22	1313DFR-3-.22-4-*	7.0	13.0	26.0
.27	1313DFR-3-.27-4-*	8.0	14.5	26.0
.33	1313DFR-3-.33-4-*	8.5	16.0	26.0
.39	1313DFR-3-.39-4-*	9.0	17.0	26.0
.47	1313DFR-3-.47-4-*	9.5	18.0	26.0
.56	1313DFR-3-.56-4-*	10.0	19.0	31.0
.68	1313DFR-3-.68-4-*	10.5	20.0	31.0
.82	1313DFR-3-.82-4-*	11.5	22.0	31.0
1.0	1313DFR-3-1.0-4-*	13.0	24.0	31.0
1.2	1313DFR-3-1.2-4-*	14.0	25.5	31.0
1.5	1313DFR-3-1.5-4-*	15.5	27.0	31.0
1.8	1313DFR-3-1.8-4-*	16.5	30.3	31.0
2.2	1313DFR-3-2.2-4-*	17.0	32.0	31.0
2.7	1313DFR-3-2.7-4-*	15.5	28.0	44.0
3.3	1313DFR-3-3.3-4-*	17.0	32.0	44.0
3.9	1313DFR-3-3.9-4-*	18.0	33.0	44.0
4.7	1313DFR-3-4.7-4-*	20.0	35.0	44.0

\* - Please insert appropriate tolerance code



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

## 1313DFR

Epoxy Dipped (Radial Leads)

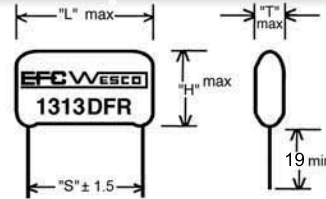
## Standard Metallized Polyester Capacitors

Lead Specs - Tinned Copperweld

L	S	LEAD DIA
10.5	7.5	0.6
12.5	10.0	0.6
18.0	15.0	0.8
26.0	22.5	0.8
31.0	27.5	0.8
44.0	38.0	1.0

## Dimensions and Ratings

All dimensions in mm



Cap.	630 VDC				
µF	Part #	T	H	L	
.001	1313DFR-3-.001-6.3-*	4.0	8.0	10.0	
.0012	1313DFR-3-.0012-6.3-*	4.0	8.0	10.0	
.0015	1313DFR-3-.0015-6.3-*	4.0	8.0	10.0	
.0022	1313DFR-3-.0022-6.3-*	4.0	8.0	10.0	
.0027	1313DFR-3-.0027-6.3-*	4.0	8.0	10.0	
.0039	1313DFR-3-.0039-6.3-*	4.0	8.0	10.0	
.0047	1313DFR-3-.0047-6.3-*	4.0	8.0	10.0	
.0056	1313DFR-3-.0056-6.3-*	4.0	9.0	10.0	
.0068	1313DFR-3-.0068-6.3-*	4.0	9.0	12.5	
.0082	1313DFR-3-.0082-6.3-*	4.5	9.0	12.5	
.01	1313DFR-3-.01-6.3-*	4.5	9.0	12.5	
.012	1313DFR-3-.012-6.3-*	5.0	10.0	12.5	
.015	1313DFR-3-.015-6.3-*	5.5	11.0	12.5	
.018	1313DFR-3-.018-6.3-*	6.0	11.5	12.5	
.022	1313DFR-3-.022-6.3-*	6.0	12.0	12.5	
.027	1313DFR-3-.027-6.3-*	5.0	10.0	18.0	
.033	1313DFR-3-.033-6.3-*	5.5	11.0	18.0	
.039	1313DFR-3-.039-6.3-*	6.0	11.5	18.0	
.047	1313DFR-3-.047-6.3-*	6.0	12.0	18.0	
.056	1313DFR-3-.056-6.3-*	6.5	12.5	18.0	
.068	1313DFR-3-.068-6.3-*	7.0	13.0	18.0	
.082	1313DFR-3-.082-6.3-*	7.5	13.5	18.0	
.1	1313DFR-3-.1-6.3-*	7.0	13.0	26.0	
.12	1313DFR-3-.12-6.3-*	8.0	14.0	26.0	
.15	1313DFR-3-.15-6.3-*	8.5	15.0	26.0	
.18	1313DFR-3-.18-6.3-*	9.0	17.0	26.0	
.22	1313DFR-3-.22-6.3-*	10.0	19.0	26.0	
.27	1313DFR-3-.27-6.3-*	9.5	17.0	31.0	
.33	1313DFR-3-.33-6.3-*	10.0	19.0	31.0	
.39	1313DFR-3-.39-6.3-*	11.0	20.5	31.0	
.47	1313DFR-3-.47-6.3-*	12.0	22.0	31.0	
.56	1313DFR-3-.56-6.3-*	13.0	23.0	31.0	
.68	1313DFR-3-.68-6.3-*	13.5	25.0	31.0	
.82	1313DFR-3-.82-6.3-*	14.5	27.0	31.0	
1.0	1313DFR-3-1.0-6.3-*	16.5	30.0	31.0	
1.2	1313DFR-3-1.2-6.3-*	15.0	27.0	44.0	
1.5	1313DFR-3-1.5-6.3-*	16.5	30.0	44.0	
1.8	1313DFR-3-1.8-6.3-*	18.0	33.0	44.0	
2.2	1313DFR-3-2.2-6.3-*	20.5	36.0	44.0	

Cap.	1000 VDC				
µF	Part #	T	H	L	
.001	1313DFR-3-.001-10-*	4.0	8.0	12.5	
.0012	1313DFR-3-.0012-10-*	4.0	8.5	12.5	
.0015	1313DFR-3-.0015-10-*	4.0	9.0	12.5	
.0022	1313DFR-3-.0022-10-*	4.5	9.0	12.5	
.0027	1313DFR-3-.0027-10-*	4.5	9.0	12.5	
.0039	1313DFR-3-.0039-10-*	4.5	9.0	12.5	
.0047	1313DFR-3-.0047-10-*	4.5	9.5	12.5	
.0056	1313DFR-3-.0056-10-*	4.5	9.5	12.5	
.0068	1313DFR-3-.0068-10-*	5.0	10.0	12.5	
.0082	1313DFR-3-.0082-10-*	5.0	10.0	12.5	
.01	1313DFR-3-.01-10-*	5.5	11.0	12.5	
.012	1313DFR-3-.012-10-*	6.0	12.0	12.5	
.015	1313DFR-3-.015-10-*	5.0	10.0	18.0	
.018	1313DFR-3-.018-10-*	5.5	11.0	18.0	
.022	1313DFR-3-.022-10-*	6.0	12.0	18.0	
.027	1313DFR-3-.027-10-*	6.5	12.5	18.0	
.033	1313DFR-3-.033-10-*	7.0	13.0	18.0	
.039	1313DFR-3-.039-10-*	7.5	13.5	18.0	
.047	1313DFR-3-.047-10-*	7.0	13.0	26.0	
.056	1313DFR-3-.056-10-*	8.0	15.0	26.0	
.068	1313DFR-3-.068-10-*	8.5	16.0	26.0	
.082	1313DFR-3-.082-10-*	9.0	16.5	26.0	
.1	1313DFR-3-.1-10-*	9.5	18.0	26.0	
.12	1313DFR-3-.12-10-*	9.0	16.5	31.0	
.15	1313DFR-3-.15-10-*	10.0	19.0	31.0	
.18	1313DFR-3-.18-10-*	10.5	20.0	31.0	
.22	1313DFR-3-.22-10-*	11.5	21.0	31.0	
.27	1313DFR-3-.27-10-*	12.5	23.0	31.0	
.33	1313DFR-3-.33-10-*	13.5	25.0	31.0	
.39	1313DFR-3-.39-10-*	14.5	27.0	31.0	
.47	1313DFR-3-.47-10-*	16.5	30.0	31.0	
.56	1313DFR-3-.56-10-*	15.0	27.0	44.0	
.68	1313DFR-3-.68-10-*	16.5	30.0	44.0	
.82	1313DFR-3-.82-10-*	17.0	32.0	44.0	
1.0	1313DFR-3-1.0-10-*	20.0	35.0	44.0	

\* - Please insert appropriate tolerance code



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

## 1313DFR Epoxy Dipped (Radial Leads)

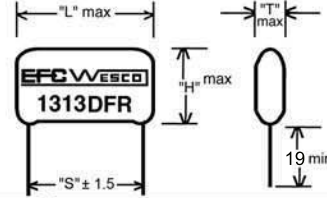
## Miniature Metallized Polyester Capacitors

Lead Specs -  
Tinned Copperweld

L	S	DIA
7.5	5.0	0.5
10.0	7.5	0.6
12.5	10.0	0.6
18.5	15.0	0.8
26.0	22.5	0.8
31.0	27.5	0.8

## Dimensions and Ratings

All dimensions in mm



63 VDC					100 VDC					250 VDC				
Cap.	Part #	T	H	L	Cap.	Part #	T	H	L	Cap.	Part #	T	H	L
.001	1313DFR-2-001-63*	3.5	6.5	7.5	.001	1313DFR-2-001-1*	3.5	6.5	7.5	.001	1313DFR-2-001-2.5*	4.0	7.0	10.0
.0012	1313DFR-2-0012-63*	3.5	6.5	7.5	.0012	1313DFR-2-0012-1*	3.5	6.5	7.5	.0012	1313DFR-2-0012-2.5*	4.0	7.0	10.0
.0015	1313DFR-2-0015-63*	3.5	6.5	7.5	.0015	1313DFR-2-0015-1*	3.5	6.5	7.5	.0015	1313DFR-2-0015-2.5*	4.0	7.0	10.0
.0022	1313DFR-2-0022-63*	3.5	6.5	7.5	.0022	1313DFR-2-0022-1*	3.5	6.5	7.5	.0022	1313DFR-2-0022-2.5*	4.0	7.0	10.0
.0027	1313DFR-2-0027-63*	3.5	6.5	7.5	.0027	1313DFR-2-0027-1*	4.0	7.0	7.5	.0027	1313DFR-2-0027-2.5*	4.0	7.5	10.0
.0039	1313DFR-2-0039-63*	3.5	6.5	7.5	.0039	1313DFR-2-0039-1*	4.0	7.0	7.5	.0039	1313DFR-2-0039-2.5*	4.0	7.5	10.0
.0047	1313DFR-2-0047-63*	3.5	6.5	7.5	.0047	1313DFR-2-0047-1*	4.0	7.0	7.5	.0047	1313DFR-2-0047-2.5*	4.0	7.5	10.0
.0056	1313DFR-2-0056-63*	3.5	6.5	7.5	.0056	1313DFR-2-0056-1*	4.0	7.0	7.5	.0056	1313DFR-2-0056-2.5*	4.0	7.5	10.0
.0068	1313DFR-2-0068-63*	3.5	6.5	7.5	.0068	1313DFR-2-0068-1*	4.0	7.0	7.5	.0068	1313DFR-2-0068-2.5*	4.0	7.5	10.0
.0082	1313DFR-2-0082-63*	3.5	6.5	7.5	.0082	1313DFR-2-0082-1*	4.0	7.0	7.5	.0082	1313DFR-2-0082-2.5*	4.0	7.5	10.0
.01	1313DFR-2-01-63*	3.5	6.5	7.5	.01	1313DFR-2-01-1*	4.0	7.5	7.5	.01	1313DFR-2-01-2.5*	4.0	7.5	10.0
.012	1313DFR-2-012-63*	3.5	6.5	7.5	.012	1313DFR-2-012-1*	4.0	7.5	7.5	.012	1313DFR-2-012-2.5*	4.0	7.5	10.0
.015	1313DFR-2-015-63*	3.5	6.5	7.5	.015	1313DFR-2-015-1*	4.0	7.5	7.5	.015	1313DFR-2-015-2.5*	4.5	7.5	10.0
.018	1313DFR-2-018-63*	3.5	6.5	7.5	.018	1313DFR-2-018-1*	4.0	7.5	7.5	.018	1313DFR-2-018-2.5*	4.5	7.5	10.0
.022	1313DFR-2-022-63*	3.5	6.5	7.5	.022	1313DFR-2-022-1*	4.0	7.5	7.5	.022	1313DFR-2-022-2.5*	4.5	7.5	10.0
.027	1313DFR-2-027-63*	3.5	6.5	7.5	.027	1313DFR-2-027-1*	4.0	7.5	7.5	.027	1313DFR-2-027-2.5*	4.5	7.5	10.0
.033	1313DFR-2-033-63*	3.5	6.5	7.5	.033	1313DFR-2-033-1*	4.0	7.5	7.5	.033	1313DFR-2-033-2.5*	4.5	7.5	10.0
.039	1313DFR-2-039-63*	3.5	6.5	7.5	.039	1313DFR-2-039-1*	4.5	7.5	7.5	.039	1313DFR-2-039-2.5*	4.5	7.5	10.0
.047	1313DFR-2-047-63*	3.5	6.5	7.5	.047	1313DFR-2-047-1*	4.5	7.5	7.5	.047	1313DFR-2-047-2.5*	4.5	7.5	10.0
.056	1313DFR-2-056-63*	3.5	6.5	7.5	.056	1313DFR-2-056-1*	4.5	8.0	7.5	.056	1313DFR-2-056-2.5*	4.5	8.0	10.0
.068	1313DFR-2-068-63*	3.5	6.5	7.5	.068	1313DFR-2-068-1*	5.0	8.5	7.5	.068	1313DFR-2-068-2.5*	4.5	8.0	10.0
.082	1313DFR-2-082-63*	3.5	7.0	7.5	.082	1313DFR-2-082-1*	5.0	9.5	7.5	.082	1313DFR-2-082-2.5*	5.0	8.5	10.0
.1	1313DFR-2-1-63*	4.0	7.0	7.5	.1	1313DFR-2-1-1*	5.0	10.0	7.5	.1	1313DFR-2-1-2.5*	6.0	8.5	10.0
.12	1313DFR-2-12-63*	4.0	7.0	7.5	.12	1313DFR-2-12-1*	4.5	7.5	10.0	.12	1313DFR-2-12-2.5*	6.0	9.0	10.0
.15	1313DFR-2-15-63*	4.0	7.5	7.5	.15	1313DFR-2-15-1*	4.5	7.5	10.0	.15	1313DFR-2-15-2.5*	6.0	11.0	10.0
.18	1313DFR-2-18-63*	4.0	8.0	7.5	.18	1313DFR-2-18-1*	5.0	10.0	12.5	.18	1313DFR-2-18-2.5*	5.0	10.0	12.5
.22	1313DFR-2-22-63*	4.0	8.5	7.5	.22	1313DFR-2-22-1*	5.0	8.5	10.0	.22	1313DFR-2-22-2.5*	5.5	10.5	12.5
.27	1313DFR-2-27-63*	4.5	9.0	7.5	.27	1313DFR-2-27-1*	5.5	10.0	10.0	.27	1313DFR-2-27-2.5*	6.0	11.5	12.5
.33	1313DFR-2-33-63*	4.5	8.5	10.0	.33	1313DFR-2-33-1*	6.0	10.5	10.0	.33	1313DFR-2-33-2.5*	6.5	12.0	12.5
.39	1313DFR-2-39-63*	5.0	8.5	10.0	.39	1313DFR-2-39-1*	6.0	11.0	10.0	.39	1313DFR-2-39-2.5*	5.0	12.0	18.5
.47	1313DFR-2-47-63*	5.0	9.0	10.0	.47	1313DFR-2-47-1*	6.0	12.0	10.0	.47	1313DFR-2-47-2.5*	5.5	12.5	18.5
.56	1313DFR-2-56-63*	5.0	10.0	10.0	.56	1313DFR-2-56-1*	5.5	11.0	12.5	.56	1313DFR-2-56-2.5*	5.5	13.0	18.5
.68	1313DFR-2-68-63*	5.5	11.0	10.0	.68	1313DFR-2-68-1*	6.0	12.0	12.5	.68	1313DFR-2-68-2.5*	6.0	13.5	18.5
.82	1313DFR-2-82-63*	6.0	12.0	10.0	.82	1313DFR-2-82-1*	6.0	13.5	12.5	.82	1313DFR-2-82-2.5*	6.5	14.5	18.5
1.0	1313DFR-2-1.0-63*	6.0	12.5	10.0	1.0	1313DFR-2-1.0-1*	7.0	14.0	12.5	1.0	1313DFR-2-1.0-2.5*	7.5	15.0	18.5
1.2	1313DFR-2-1.2-63*	6.0	12.0	12.5	1.2	1313DFR-2-1.2-1*	5.5	13.0	18.5	1.2	1313DFR-2-1.2-2.5*	8.0	16.0	18.5
1.5	1313DFR-2-1.5-63*	6.5	12.5	12.5	1.5	1313DFR-2-1.5-1*	6.0	13.5	18.5	1.5	1313DFR-2-1.5-2.5*	9.0	17.0	18.5
1.8	1313DFR-2-1.8-63*	6.5	13.5	12.5	1.8	1313DFR-2-1.8-1*	6.5	14.5	18.5	1.8	1313DFR-2-1.8-2.5*	7.5	15.5	26.0
2.2	1313DFR-2-2.2-63*	5.0	10.0	18.5	2.2	1313DFR-2-2.2-1*	7.0	15.0	18.5	2.2	1313DFR-2-2.2-2.5*	8.5	16.5	26.0
2.7	1313DFR-2-2.7-63*	5.5	11.0	18.5	2.7	1313DFR-2-2.7-1*	8.0	16.0	18.5	2.7	1313DFR-2-2.7-2.5*	9.5	17.0	26.0
3.3	1313DFR-2-3.3-63*	6.0	11.5	18.5	3.3	1313DFR-2-3.3-1*	8.5	16.5	18.5	3.3	1313DFR-2-3.3-2.5*	10.5	18.0	26.0
3.9	1313DFR-2-3.9-63*	6.5	12.0	18.5	3.9	1313DFR-2-3.9-1*	7.0	16.5	26.0	3.9	1313DFR-2-3.9-2.5*	11.0	20.5	26.0
4.7	1313DFR-2-4.7-63*	7.0	13.0	18.5	4.7	1313DFR-2-4.7-1*	7.5	17.0	26.0	4.7	1313DFR-2-4.7-2.5*	12.0	21.5	26.0
5.6	1313DFR-2-5.6-63*	8.0	14.0	18.5	5.6	1313DFR-2-5.6-1*	8.5	17.5	26.0	5.6	1313DFR-2-5.6-2.5*	12.0	21.0	31.0
6.8	1313DFR-2-6.8-63*	8.5	15.0	18.5	6.8	1313DFR-2-6.8-1*	9.0	18.5	26.0	6.8	1313DFR-2-6.8-2.5*	13.0	22.5	31.0

\* - Please insert appropriate tolerance code



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

**1313DFR**  
Epoxy Dipped (Radial Leads)

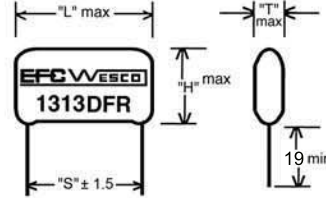
**Miniature Metallized Polyester Capacitors**

Lead Specs -  
Tinned Copperweld

L	S	DIA
7.5	5.0	0.5
10.0	7.5	0.6
12.5	10.0	0.6
18.5	15.0	0.8
26.0	22.5	0.8
31.0	27.5	0.8

## Dimensions and Ratings

All dimensions in mm



Cap.	400 VDC			
μF	Part #	T	H	L
.001	1313DFR-2-.001-4-*	4.5	7.5	10.0
.0012	1313DFR-2-.0012-4-*	4.5	7.5	10.0
.0015	1313DFR-2-.0015-4-*	4.5	7.5	10.0
.0022	1313DFR-2-.0022-4-*	4.5	7.5	10.0
.0027	1313DFR-2-.0027-4-*	4.5	7.5	10.0
.0039	1313DFR-2-.0039-4-*	4.5	7.5	10.0
.0047	1313DFR-2-.0047-4-*	4.5	7.5	10.0
.0056	1313DFR-2-.0056-4-*	4.5	7.5	10.0
.0068	1313DFR-2-.0068-4-*	4.5	7.5	10.0
.0082	1313DFR-2-.0082-4-*	4.5	7.5	10.0
.01	1313DFR-2-.01-4-*	4.5	7.5	10.0
.012	1313DFR-2-.012-4-*	4.5	7.5	10.0
.015	1313DFR-2-.015-4-*	4.5	7.5	10.0
.018	1313DFR-2-.018-4-*	4.5	7.5	10.0
.022	1313DFR-2-.022-4-*	5.0	8.5	10.0
.027	1313DFR-2-.027-4-*	5.5	9.0	10.0
.033	1313DFR-2-.033-4-*	6.0	9.5	10.0
.039	1313DFR-2-.039-4-*	5.0	8.0	12.5
.047	1313DFR-2-.047-4-*	5.0	8.5	12.5
.056	1313DFR-2-.056-4-*	5.0	9.5	12.5
.068	1313DFR-2-.068-4-*	5.5	10.5	12.5
.082	1313DFR-2-.082-4-*	6.0	11.0	12.5
.1	1313DFR-2-.1-4-*	6.5	12.0	12.5
.12	1313DFR-2-.12-4-*	5.0	10.0	18.5
.15	1313DFR-2-.15-4-*	5.0	12.5	18.5
.18	1313DFR-2-.18-4-*	5.5	12.5	18.5
.22	1313DFR-2-.22-4-*	6.0	13.0	18.5
.27	1313DFR-2-.27-4-*	6.5	14.5	18.5
.33	1313DFR-2-.33-4-*	7.0	15.0	18.5
.39	1313DFR-2-.39-4-*	7.5	15.5	18.5
.47	1313DFR-2-.47-4-*	8.0	17.0	18.5
.56	1313DFR-2-.56-4-*	6.5	16.0	26.0
.68	1313DFR-2-.68-4-*	7.0	16.5	26.0
.82	1313DFR-2-.82-4-*	8.0	17.5	26.0
1.0	1313DFR-2-1.0-4-*	8.5	19.0	26.0
1.2	1313DFR-2-1.2-4-*	9.5	19.0	26.0
1.5	1313DFR-2-1.5-4-*	9.5	19.0	31.0
1.8	1313DFR-2-1.8-4-*	11.0	20.5	31.0
2.2	1313DFR-2-2.2-4-*	12.5	22.0	31.0
2.7	1313DFR-2-2.7-4-*	13.5	23.0	31.0
3.3	1313DFR-2-3.3-4-*	15.0	25.0	31.0
3.9	1313DFR-2-3.9-4-*	16.5	27.0	31.0
4.7	1313DFR-2-4.7-4-*	19.5	30.0	31.0

Cap.	630 VDC			
μF	Part #	T	H	L
.001	1313DFR-2-.001-6.3-*	4.5	7.5	12.5
.0012	1313DFR-2-.0012-6.3-*	4.5	7.5	12.5
.0015	1313DFR-2-.0015-6.3-*	4.5	7.5	12.5
.0022	1313DFR-2-.0022-6.3-*	4.5	7.5	12.5
.0027	1313DFR-2-.0027-6.3-*	4.5	7.5	12.5
.0039	1313DFR-2-.0039-6.3-*	4.5	7.5	12.5
.0047	1313DFR-2-.0047-6.3-*	4.5	7.5	12.5
.0056	1313DFR-2-.0056-6.3-*	4.5	7.5	12.5
.0068	1313DFR-2-.0068-6.3-*	4.5	7.5	12.5
.0082	1313DFR-2-.0082-6.3-*	4.5	7.5	12.5
.01	1313DFR-2-.01-6.3-*	4.5	7.5	12.5
.012	1313DFR-2-.012-6.3-*	4.5	8.0	12.5
.015	1313DFR-2-.015-6.3-*	5.0	8.5	12.5
.018	1313DFR-2-.018-6.3-*	5.0	9.5	12.5
.022	1313DFR-2-.022-6.3-*	5.5	10.0	12.5
.027	1313DFR-2-.027-6.3-*	5.5	11.0	12.5
.033	1313DFR-2-.033-6.3-*	6.0	12.0	12.5
.039	1313DFR-2-.039-6.3-*	6.0	12.5	12.5
.047	1313DFR-2-.047-6.3-*	6.5	13.5	12.5
.056	1313DFR-2-.056-6.3-*	5.5	10.5	18.5
.068	1313DFR-2-.068-6.3-*	6.0	11.0	18.5
.082	1313DFR-2-.082-6.3-*	6.5	12.0	18.5
.1	1313DFR-2-.1-6.3-*	6.5	13.5	18.5
.12	1313DFR-2-.12-6.3-*	6.5	14.5	18.5
.15	1313DFR-2-.15-6.3-*	7.5	15.5	18.5
.18	1313DFR-2-.18-6.3-*	8.0	16.0	18.5
.22	1313DFR-2-.22-6.3-*	9.0	16.5	18.5
.27	1313DFR-2-.27-6.3-*	7.0	16.5	26.0
.33	1313DFR-2-.33-6.3-*	8.0	17.0	26.0
.39	1313DFR-2-.39-6.3-*	8.5	18.0	26.0
.47	1313DFR-2-.47-6.3-*	9.5	18.5	26.0
.56	1313DFR-2-.56-6.3-*	10.0	20.0	26.0
.68	1313DFR-2-.68-6.3-*	11.5	21.0	26.0
.82	1313DFR-2-.82-6.3-*	11.5	20.5	31.0
1.0	1313DFR-2-1.0-6.3-*	12.5	22.0	31.0
1.2	1313DFR-2-1.2-6.3-*	13.5	23.0	31.0
1.5	1313DFR-2-1.5-6.3-*	15.5	25.0	31.0
1.8	1313DFR-2-1.8-6.3-*	17.0	27.0	31.0
2.2	1313DFR-2-2.2-6.3-*	19.5	29.0	31.0

\* - Please insert appropriate tolerance code