

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

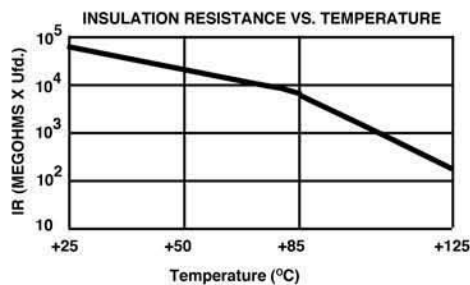
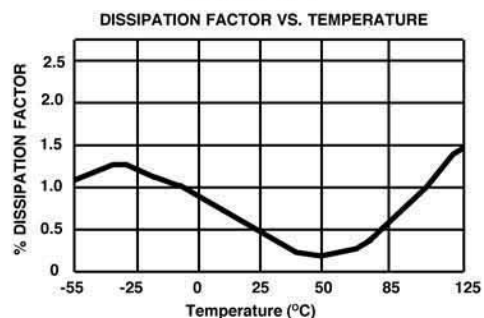
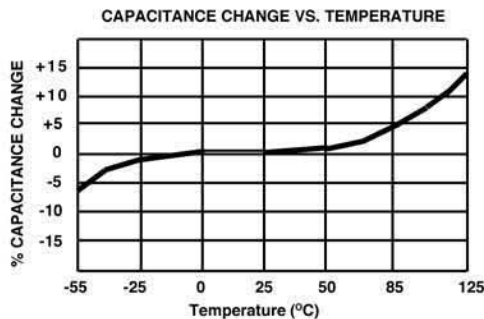
Series 1313 shall meet the requirements of MIL-STD. 202, Method 103B.

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 (μ F)

Voltage:

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

Tolerance:

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

*** Options**

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

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

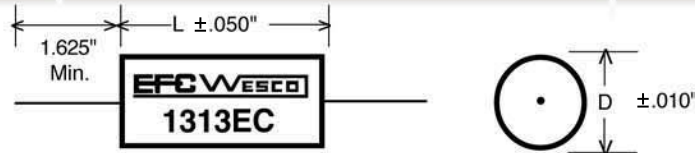


Please consult factory for special requirements, including non-standard values and sizes

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

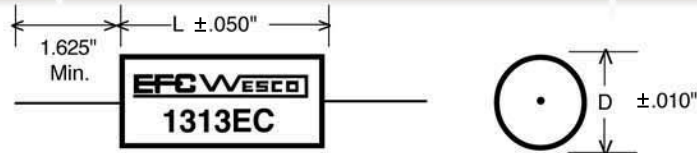


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.250 - .440D = 22AWG
Above .440D = 20 AWG



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