

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

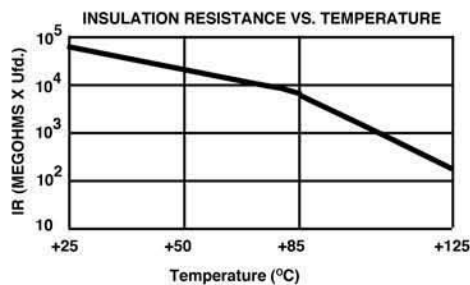
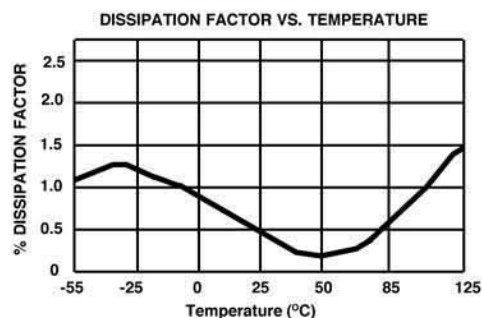
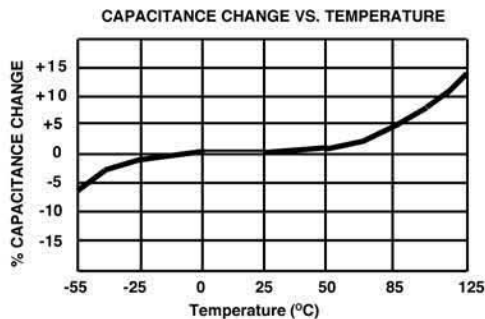
Series 1313 shall meet the requirements of MIL-STD. 202, Method 103B.

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

1313DFR

Epoxy Dipped (Radial Leads)

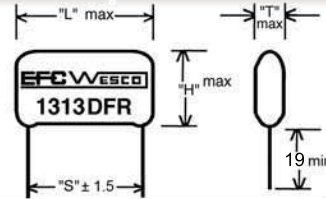
Standard Metallized Polyester Capacitors

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. μ F	Part #	T	H	L	Cap. μ 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)

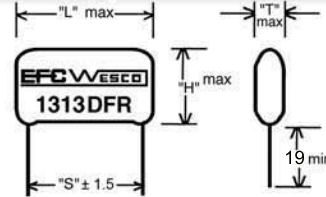
Standard Metallized Polyester Capacitors

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.		250 VDC		
μF	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.		400 VDC		
μF	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)

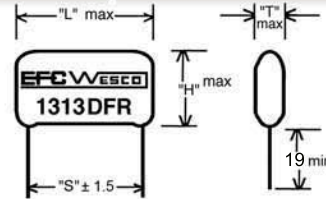
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L	S	LEAD DIA
10.5	7.5	0.6
12.5	10.0	0.6
18.0	15.0	0.8
26.0	22.5	0.8
31.0	27.5	0.8
44.0	38.0	1.0

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)

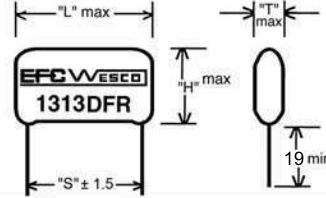
Miniature Metallized Polyester Capacitors

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)

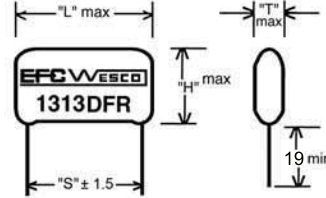
Miniature Metallized Polyester Capacitors

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