

# Type WMF Polyester Film Capacitors

## Film/Foil, Axial Leads - Commercial, Industrial Applications



Type WMF axial-leaded, polyester film/foil capacitors, available in a wide range of capacitance and voltage ratings, offer excellent moisture resistance capability with extended foil, non-inductive wound sections, epoxy sealed ends and a sealed outer wrapper. Like the Type DMT, Type WMF is an ideal choice for most applications, especially those with high peak currents.

### Highlights

- Very high dV/dt
- Very high peak current
- Low inductance

### Specifications

Capacitance Range	.001 to 5 $\mu$ F
Capacitance Tolerance @ 1 kHz/25 °C	$\pm$ 10% (K) Standard Tolerance, $\pm$ 5% (J)/ $\pm$ 20% (M) (Optional)
Rated Voltage	50 to 630 Vdc
Operating Temperature Range with Ripple	-55 °C to 125 °C* *Full rated voltage at 85 °C - derated linearly to 50% rated at 105 °C
Insulation Resistance	30,000 M $\Omega$ x $\mu$ F, 100,000 M $\Omega$ Min.
Dissipation Factor	.75% Max. (25 °C, 1 kHz)
Dielectric Strength	250%
Life Test	500 Hours at 85 °C at 125% Rated Voltage
RoHS Compliant	

Construction Details	
Case Material	UL510 Polyester Tape Wrap
Resin Material	UL94V-0 Epoxy Fill
Terminal Material	Tin Plated Copper - Clad Steel

### Dimensions



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### Part Numbering System



### Ratings

**NOTE:** Other ratings, sizes and performance specifications are available. Contact us.

Cap. $\mu\text{F}$	Catalog Part Number	D mm	L mm	d mm	dV/dt V/ $\mu\text{s}$
<b>50 Vdc</b>					
0.0820	WMF05S82K-F	7.1	20.6	0.5	1500
0.1000	WMF05P1K-F	7.1	20.6	0.5	1500
0.1200	WMF05P12K-F	7.5	20.6	0.6	1500
0.1500	WMF05P15K-F	8.0	20.6	0.6	1500
0.1800	WMF05P18K-F	8.6	20.6	0.6	1500
0.2200	WMF05P22K-F	9.1	20.6	0.6	1500
0.2700	WMF05P27K-F	10.7	20.6	0.6	1500
0.3300	WMF05P33K-F	10.9	20.6	0.6	1500
0.3900	WMF05P39K-F	10.3	27.0	0.6	920
0.4700	WMF05P47K-F	10.3	27.0	0.6	920
0.5000	WMF05P5K-F	10.8	27.0	0.6	920
0.5600	WMF05P56K-F	12.2	27.0	0.6	920
0.6800	WMF05P68K-F	13.3	27.0	0.6	920
0.8200	WMF05P82K-F	14.4	27.0	0.6	920
1.0000	WMF05W1K-F	14.3	34.9	0.6	660
1.2500	WMF05W1P25K-F	14.6	34.9	0.8	660
1.5000	WMF05W1P5K-F	16.4	34.9	0.8	660
2.0000	WMF05W2K-F	16.8	41.3	0.8	660
3.0000	WMF05W3K-F	20.1	41.3	1.0	660
4.0000	WMF05W4K-F	20.9	46.3	1.0	310
5.0000	WMF05W5K-F	23.2	46.3	1.0	310
<b>100 Vdc</b>					
0.0010	WMF1D1K-F	4.8	14.3	0.5	6300
0.0012	WMF1D12K-F	4.8	14.3	0.5	6300
0.0015	WMF1D15K-F	4.8	14.3	0.5	6300
0.0022	WMF1D22K-F	4.8	14.3	0.5	6300
0.0027	WMF1D27K-F	4.8	14.3	0.5	6300
0.0033	WMF1D33K-F	4.8	14.3	0.5	6300
0.0039	WMF1D39K-F	4.8	14.3	0.5	6300
0.0047	WMF1D47K-F	5.0	14.3	0.5	6300
0.0050	WMF1D5K-F	4.8	14.3	0.5	6300
0.0056	WMF1D56K-F	4.8	14.3	0.5	6300
0.0068	WMF1D68K-F	5.1	14.3	0.5	6300
0.0082	WMF1D82K-F	5.1	14.3	0.5	6300
0.0100	WMF1S1K-F	5.1	14.3	0.5	6300
0.0150	WMF1S15K-F	6.2	14.3	0.5	6300
0.0180	WMF1S18K-F	6.6	14.3	0.6	3200
0.0220	WMF1S22K-F	6.0	17.4	0.6	3200
0.0330	WMF1S33K-F	6.5	17.4	0.6	3200
0.0390	WMF1S39K-F	6.1	20.6	0.6	2100
0.0470	WMF1S47K-F	6.5	20.6	0.6	2100
0.0500	WMF1S5K-F	6.6	20.6	0.6	2100
0.0560	WMF1S56K-F	6.7	20.6	0.6	2100

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## Film/Foil, Axial Leads

Cap. μF	Catalog Part Number	D mm	L mm	d mm	dV/dt V/μs	Cap. μF	Catalog Part Number	D mm	L mm	d mm	dV/dt V/μs
<b>100 Vdc</b>						0.2700	WMF2P27K-F	12.7	30.1	0.6	1900
0.0680	WMF1S68K-F	7.5	20.6	0.6	2100	0.3300	WMF2P33K-F	13.8	32.0	0.6	1500
0.0820	WMF1S82K-F	7.0	23.8	0.6	1600	0.3900	WMF2P39K-F	14.3	33.3	0.8	1500
0.1000	WMF1P1K-F	8.5	23.8	0.6	1600	0.4700	WMF2P47K-F	15.5	33.3	0.8	1500
0.1200	WMF1P12K-F	8.0	23.8	0.6	1600	0.5600	WMF2P56K-F	16.8	33.3	1.0	1500
0.1500	WMF1P15K-F	8.6	23.8	0.6	1600	0.6800	WMF2P68K-F	16.8	41.3	1.0	1500
0.1800	WMF1P18K-F	8.8	27.0	0.6	1600	0.8200	WMF2P82K-F	18.2	41.3	1.0	1500
0.2200	WMF1P22K-F	9.5	27.0	0.6	1600	1.0000	WMF2W1K-F	18.8	44.4	1.0	1500
0.2700	WMF1P27K-F	9.5	30.1	0.6	1600	1.2500	WMF2W1P25K-F	20.7	44.4	1.0	1500
0.3300	WMF1P33K-F	10.5	30.1	0.6	1600	1.5000	WMF2W1P5K-F	20.5	46.0	1.0	650
0.3900	WMF1P39K-F	10.9	30.1	0.6	1600	2.0000	WMF2W2K-F	24.5	47.6	1.0	650
0.4700	WMF1P47K-F	12.5	31.7	0.6	840	<b>400 Vdc</b>					
0.5000	WMF1P5K-F	11.7	31.7	0.6	840	0.0010	WMF4D1K-F	4.8	17.4	0.5	14400
0.5600	WMF1P56K-F	12.3	31.7	0.8	840	0.0015	WMF4D15K-F	4.8	17.4	0.5	14400
0.6800	WMF1P68K-F	14.5	31.7	0.8	840	0.0018	WMF4D18K-F	4.8	17.4	0.5	14400
0.8200	WMF1P82K-F	13.7	35.9	0.8	840	0.0022	WMF4D22K-F	4.8	17.4	0.5	14400
1.0000	WMF1W1K-F	17.0	38.1	1.0	840	0.0027	WMF4D27K-F	5.3	17.4	0.5	14400
1.2500	WMF1W1P25K-F	16.4	38.1	1.0	840	0.0033	WMF4D33K-F	5.6	17.4	0.5	14400
1.5000	WMF1W1P5K-F	18.7	41.3	1.0	840	0.0039	WMF4D39K-F	5.9	17.4	0.5	14400
2.0000	WMF1W2K-F	21.2	41.3	1.0	840	0.0047	WMF4D47K-F	6.0	17.4	0.5	14400
<b>200/250 Vdc</b>						0.0056	WMF4D56K-F	6.7	17.4	0.6	14400
0.0010	WMF2D1K-F	4.8	14.3	0.5	7500	0.0068	WMF4D68K-F	7.2	17.4	0.6	14400
0.0015	WMF2D15K-F	4.8	14.3	0.5	7500	0.0082	WMF4D82K-F	7.7	17.4	0.6	14400
0.0022	WMF2D22K-F	4.8	14.3	0.5	7500	0.0100	WMF4S1K-F	8.4	17.4	0.6	14400
0.0027	WMF2D27K-F	4.8	14.3	0.5	7500	0.0150	WMF4S15K-F	9.9	17.4	0.6	14400
0.0033	WMF2D33K-F	4.8	14.3	0.5	7500	0.0180	WMF4S18K-F	8.0	20.6	0.6	14400
0.0039	WMF2D39K-F	4.8	14.3	0.5	7500	0.0220	WMF4S22K-F	8.9	20.6	0.6	7200
0.0047	WMF2D47K-F	5.1	14.3	0.5	7500	0.0270	WMF4S27K-F	9.6	20.6	0.6	7200
0.0050	WMF2D5K-F	5.1	14.3	0.5	7500	0.0330	WMF4S33K-F	9.5	22.2	0.6	6500
0.0056	WMF2D56K-F	5.1	14.3	0.5	7500	0.0390	WMF4S39K-F	10.2	22.2	0.6	6500
0.0068	WMF2D68K-F	5.1	14.3	0.5	7500	0.0470	WMF4S47K-F	11.0	22.2	0.6	6500
0.0082	WMF2D82K-F	5.5	14.3	0.5	7500	0.0560	WMF4S56K-F	9.8	27.0	0.6	3600
0.0100	WMF2S1K-F	5.8	14.3	0.5	7500	0.0680	WMF4S68K-F	10.3	27.0	0.6	3600
0.0150	WMF2S15K-F	6.7	14.3	0.6	7500	0.0820	WMF4S82K-F	10.3	27.0	0.6	3600
0.0180	WMF2S18K-F	7.1	14.3	0.6	7500	0.1000	WMF4P1K-F	12.4	27.0	0.6	3600
0.0220	WMF2S22K-F	6.6	17.4	0.6	3700	0.1500	WMF4P15K-F	13.6	31.7	0.6	2400
0.0270	WMF2S27K-F	6.6	17.4	0.6	3700	0.1800	WMF4P18K-F	13.6	34.9	0.6	2400
0.0330	WMF2S33K-F	7.0	20.6	0.6	2500	0.2200	WMF4P22K-F	15.1	34.9	0.8	2400
0.0390	WMF2S39K-F	7.5	20.6	0.6	2500	0.2700	WMF4P27K-F	15.5	38.1	0.8	2400
0.0470	WMF2S47K-F	7.5	20.6	0.6	2500	0.3300	WMF4P33K-F	15.9	41.3	0.8	2400
0.0560	WMF2S56K-F	7.5	20.6	0.6	2500	0.3900	WMF4P39K-F	15.9	41.3	0.8	2400
0.0680	WMF2S68K-F	8.0	20.6	0.6	2500	0.4700	WMF4P47K-F	18.5	41.3	1.0	2400
0.0820	WMF2S82K-F	7.6	23.8	0.6	1900	0.5600	WMF4P56K-F	19.2	44.4	1.0	2400
0.1000	WMF2P1K-F	8.1	23.8	0.6	1900	0.6800	WMF4P68K-F	20.8	44.4	1.0	2400
0.1500	WMF2P15K-F	9.5	23.8	0.6	1900	0.8200	WMF4P82K-F	22.7	44.4	1.0	2400
0.2200	WMF2P22K-F	10.5	30.1	0.6	1900	1.0000	WMF4W1K-F	22.7	50.8	1.0	1300

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## Film/Foil, Axial Leads

Cap. $\mu\text{F}$	Catalog Part Number	D mm	L mm	d mm	dV/dt V/ $\mu\text{s}$	Cap. $\mu\text{F}$	Catalog Part Number	D mm	L mm	d mm	dV/dt V/ $\mu\text{s}$
1.2500	WMF4W1P25K-F	25.1	50.8	1.0	1300	0.0220	WMF6S22K-F	8.5	23.8	0.6	5800
1.5000	WMF4W1P5K-F	25.3	58.7	1.0	1300	0.0270	WMF6S27K-F	9.3	23.8	0.6	5800
<b>600/630 Vdc</b>						0.0330	WMF6S33K-F	10.0	25.4	0.6	5800
0.0010	WMF6D1K-F	5.0	20.6	0.5	9000	0.0390	WMF6S39K-F	10.0	25.4	0.6	5800
0.0012	WMF6D12K-F	5.1	20.6	0.5	9000	0.0470	WMF6S47K-F	10.9	25.4	0.6	5800
0.0015	WMF6D15K-F	5.1	20.6	0.5	9000	0.0560	WMF6S56K-F	11.7	25.4	0.6	5800
0.0018	WMF6D18K-F	5.1	20.6	0.5	9000	0.0680	WMF6S68K-F	12.7	25.4	0.8	5800
0.0022	WMF6D22K-F	5.5	20.6	0.5	9000	0.0820	WMF6S82K-F	12.9	34.9	0.8	3700
0.0027	WMF6D27K-F	5.5	20.6	0.5	9000	0.1000	WMF6P1K-F	14.7	34.9	0.8	3700
0.0033	WMF6D33K-F	5.8	20.6	0.5	9000	0.1200	WMF6P12K-F	16.0	34.9	0.8	3700
0.0039	WMF6D39K-F	6.1	20.6	0.5	9000	0.1500	WMF6P15K-F	17.4	34.9	1.0	3700
0.0047	WMF6D47K-F	6.6	20.6	0.5	9000	0.1800	WMF6P18K-F	16.9	41.3	1.0	3700
0.0056	WMF6D56K-F	6.9	20.6	0.6	9000	0.2200	WMF6P22K-F	18.3	41.3	1.0	3700
0.0068	WMF6D68K-F	7.4	20.6	0.6	9000	0.2700	WMF6P27K-F	20.1	41.3	1.0	3700
0.0082	WMF6D82K-F	7.4	20.6	0.6	9000	0.3300	WMF6P33K-F	19.0	50.8	1.0	1600
0.0100	WMF6S1K-F	7.4	20.6	0.6	9000	0.3900	WMF6P39K-F	20.7	50.8	1.0	1600
0.0150	WMF6S15K-F	7.5	23.8	0.6	5800	0.4700	WMF6P47K-F	22.5	50.8	1.0	1600
0.0180	WMF6S18K-F	8.0	23.8	0.6	5800	0.5600	WMF6P56K-F	24.2	50.8	1.0	1600
						0.6800	WMF6P68K-F	26.2	50.8	1.0	1600
						0.8200	WMF6P82K-F	29.5	50.8	1.0	1600
						1.0000	WMF6W1K-F	30.1	65.1	1.0	1600