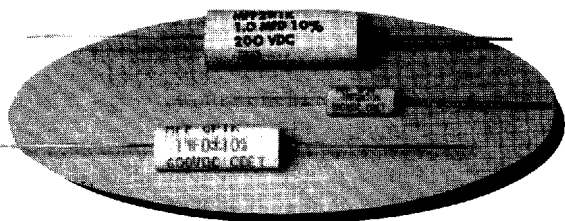


Polyester Capacitors

Type MFP—Film/Foil Oval, Axial Leads

Low Profile Circuit Cards



Type MFP axial-leaded, polyester film/foil oval capacitors are ideal when low height is critical. Recommended as the low-profile alternative to Type WMF. Type MFP offers the same ratings and specifications as Type WMF.

Specifications

Voltage Range: 50–600 Vdc (35–250 Vac)

Capacitance Range: .01–5 μF

Capacitance Tolerance: $\pm 10\%$ (K) standard
 $\pm 5\%$ (J) optional

Operating Temperature Range: -55°C to 125°C^*

*Full-rated voltage at 85°C —Derate linearly to 50%-rated voltage at 125°C

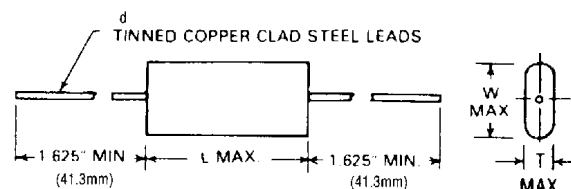
Dielectric Strength: 250%

Dissipation Factor: .75% Max.

Insulation Resistance: 30,000 $\text{M}\Omega \times \mu\text{F}$
100,000 $\text{M}\Omega$ Min.

Life Test: 500 Hours at 85°C at 150% Rated Voltage

Pulse Capability						
Rated Volts	Body Length					
	.562	.687	.812	.937-1.187	1.250-1.750	≥ 1.810
	dV/dt—volts per microsecond, maximum					
50			1500	920	660	310
100	6300	3200	2100	1600	840	360
200	7500	3700	2500	1900	1500	650
400		14400	7200	3600	2400	1300
600			5800	3700	1600	



Ratings and Dimensions

Cap. μF	Catalog Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d Inches (mm)
50 Vdc (35 Vac)					
.01	MFP05S1K	.137 (3.5)	.262 (6.7)	.562 (14.3)	.020 (.5)
.012	MFP05S12K	.141 (3.6)	.266 (6.8)	.562 (14.3)	.020 (.5)
.015	MFP05S15K	.159 (4.0)	.284 (7.2)	.562 (14.3)	.020 (.5)
.018	MFP05S18K	.172 (4.4)	.297 (7.5)	.562 (14.3)	.020 (.5)
.022	MFP05S22K	.172 (4.4)	.297 (7.5)	.562 (14.3)	.020 (.5)
.027	MFP05S27K	.187 (4.7)	.312 (7.9)	.562 (14.3)	.020 (.5)
.033	MFP05S33K	.207 (5.3)	.332 (8.4)	.562 (14.3)	.020 (.5)
.039	MFP05S39K	.218 (5.5)	.344 (8.7)	.562 (14.3)	.020 (.5)
.047	MFP05S47K	.177 (4.5)	.270 (6.9)	.687 (17.4)	.020 (.5)
.056	MFP05S56K	.192 (4.9)	.317 (8.1)	.687 (17.4)	.020 (.5)
.068	MFP05S68K	.212 (5.4)	.337 (8.6)	.687 (17.4)	.020 (.5)
.082	MFP05S82K	.227 (5.8)	.352 (8.9)	.687 (17.4)	.020 (.5)
.1	MFP05P1K	.202 (5.1)	.327 (8.3)	.875 (22.2)	.020 (.5)
.12	MFP05P12K	.217 (5.5)	.342 (8.7)	.875 (22.2)	.020 (.5)
.15	MFP05P15K	.242 (6.1)	.367 (9.3)	.875 (22.2)	.020 (.5)
.18	MFP05P18K	.272 (6.9)	.397 (10.1)	.875 (22.2)	.020 (.5)
.22	MFP05P22K	.287 (7.3)	.412 (10.5)	.875 (22.2)	.024 (.6)
.27	MFP05P27K	.287 (7.3)	.487 (12.4)	.875 (22.2)	.024 (.6)
.33	MFP05P33K	.322 (8.2)	.522 (13.3)	.875 (22.2)	.024 (.6)
.39	MFP05P39K	.287 (7.3)	.437 (11.1)	1.125 (28.6)	.024 (.6)
.47	MFP05P47K	.297 (7.5)	.497 (12.6)	1.125 (28.6)	.024 (.6)
.56	MFP05P56K	.337 (8.6)	.532 (13.5)	1.125 (28.6)	.024 (.6)
.68	MFP05P68K	.373 (9.5)	.598 (15.2)	1.125 (28.6)	.024 (.6)
.82	MFP05P82K	.413 (10.5)	.638 (16.2)	1.125 (28.6)	.032 (.8)

Cap. μF	Catalog Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d Inches (mm)
100 Vdc (65 Vac)					
.01	MFP1S1K	.200 (5.1)	.200 (5.1)	.562 (14.3)	.020 (.5)
.012	MFP1S12K	.225 (5.7)	.225 (5.7)	.562 (14.3)	.020 (.5)
.015	MFP1S15K	.245 (6.2)	.245 (6.2)	.562 (14.3)	.020 (.5)
.018	MFP1S18K	.260 (6.6)	.260 (6.6)	.562 (14.3)	.020 (.5)
.022	MFP1S22K	.251 (6.4)	.376 (9.6)	.562 (14.3)	.020 (.5)
.027	MFP1S27K	.251 (6.4)	.376 (9.6)	.687 (17.4)	.020 (.5)
.033	MFP1S33K	.219 (5.6)	.345 (8.8)	.687 (17.4)	.020 (.5)
.039	MFP1S39K	.219 (5.6)	.345 (8.8)	.812 (20.6)	.020 (.5)
.047	MFP1S47K	.219 (5.6)	.345 (8.8)	.812 (20.6)	.020 (.5)
.056	MFP1S56K	.219 (5.6)	.345 (8.8)	.812 (20.6)	.020 (.5)
.068	MFP1S68K	.250 (6.4)	.375 (9.5)	.812 (20.6)	.020 (.5)
.082	MFP1S82K	.250 (6.4)	.382 (9.7)	.812 (20.6)	.020 (.5)
.1	MFP1P1K	.250 (6.4)	.375 (9.5)	.937 (23.8)	.020 (.5)
.12	MFP1P12K	.250 (6.4)	.412 (10.5)	.937 (23.8)	.020 (.5)
.15	MFP1P15K	.282 (7.2)	.438 (11.1)	.937 (23.8)	.020 (.5)
.18	MFP1P18K	.312 (7.9)	.478 (12.1)	.937 (23.8)	.024 (.6)

Ratings and Dimensions

Type MFP

Cap. μF	Catalog Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d Inches (mm)
.22	MFP1P22K	.312 (7.9)	.500 (12.7)	1.060 (26.9)	.024 (.6)
.27	MFP1P27K	.343 (8.7)	.509 (12.9)	1.060 (26.9)	.024 (.6)
.33	MFP1P33K	.343 (8.7)	.562 (14.3)	1.190 (30.2)	.024 (.6)
.39	MFP1P39K	.376 (9.6)	.547 (13.9)	1.190 (30.2)	.024 (.6)
.47	MFP1P47K	.406 (10.3)	.594 (15.1)	1.310 (33.3)	.024 (.6)
.56	MFP1P56K	.447 (11.4)	.642 (16.3)	1.310 (33.3)	.032 (.8)
.68	MFP1P68K	.500 (12.7)	.750 (19.1)	1.310 (33.3)	.032 (.8)
.82	MFP1P82K	.577 (14.7)	.742 (18.8)	1.310 (33.3)	.032 (.8)
1	MFP1W1K	.562 (14.3)	.781 (19.8)	1.560 (39.6)	.032 (.8)
1.25	MFP1W1P25K	.625 (15.9)	.844 (21.4)	1.560 (39.6)	.032 (.8)
1.5	MFP1W1P5K	.718 (18.2)	.906 (23.0)	1.690 (42.9)	.040 (1.0)
2	MFP1W2K	.906 (23.0)	1.150 (29.2)	1.690 (42.9)	.040 (1.0)
200/250 Vdc (125 Vac)					
.01	MFP2S1K	.200 (5.1)	.200 (5.1)	.562 (14.3)	.020 (.5)
.012	MFP2S12K	.225 (5.7)	.225 (5.7)	.562 (14.3)	.020 (.5)
.015	MFP2S15K	.219 (5.6)	.343 (8.7)	.562 (14.3)	.020 (.5)
.018	MFP2S18K	.263 (6.7)	.362 (9.2)	.562 (14.3)	.020 (.5)
.022	MFP2S22K	.250 (6.4)	.375 (9.5)	.687 (17.4)	.020 (.5)
.027	MFP2S27K	.250 (6.4)	.375 (9.5)	.687 (17.4)	.020 (.5)
.033	MFP2S33K	.250 (6.4)	.375 (9.5)	.812 (20.6)	.020 (.5)
.039	MFP2S39K	.250 (6.4)	.375 (9.5)	.812 (20.6)	.020 (.5)
.047	MFP2S47K	.281 (7.1)	.407 (10.3)	.812 (20.6)	.020 (.5)
.056	MFP2S56K	.281 (7.1)	.407 (10.3)	.812 (20.6)	.020 (.5)
.068	MFP2S68K	.281 (7.1)	.468 (11.9)	.812 (20.6)	.020 (.5)
.082	MFP2S82K	.300 (7.6)	.468 (11.9)	.937 (23.8)	.024 (.6)
.1	MFP2P1K	.312 (7.9)	.562 (14.3)	.937 (23.8)	.024 (.6)
.12	MFP2P12K	.407 (10.3)	.625 (15.9)	.937 (23.8)	.024 (.6)
.15	MFP2P15K	.407 (10.3)	.625 (15.9)	.937 (23.8)	.024 (.6)
.18	MFP2P18K	.457 (11.6)	.602 (15.3)	.937 (23.8)	.032 (.8)
.22	MFP2P22K	.437 (11.1)	.625 (15.9)	1.190 (30.2)	.032 (.8)
.27	MFP2P27K	.457 (11.6)	.602 (15.3)	1.190 (30.2)	.032 (.8)
.33	MFP2P33K	.562 (14.3)	.687 (17.4)	1.190 (30.2)	.032 (.8)
.39	MFP2P39K	.562 (14.3)	.687 (17.4)	1.190 (30.2)	.032 (.8)
.47	MFP2P47K	.562 (14.3)	.718 (18.2)	1.310 (33.3)	.032 (.8)
.56	MFP2P56K	.593 (15.1)	.812 (20.6)	1.310 (33.3)	.032 (.8)
.68	MFP2P68K	.593 (15.1)	.781 (19.8)	1.690 (42.9)	.032 (.8)
.82	MFP2P82K	.622 (15.8)	.817 (20.8)	1.690 (42.9)	.032 (.8)
1	MFP2W1K	.687 (17.4)	.875 (22.2)	1.810 (46.0)	.032 (.8)
1.25	MFP2W1P25K	.718 (18.2)	.968 (24.6)	1.810 (46.0)	.040 (1.0)
1.5	MFP2W1P5K	.843 (21.4)	1.060 (26.9)	1.810 (46.0)	.040 (1.0)
2	MFP2W2K	.906 (23.0)	1.150 (29.2)	1.940 (49.3)	.040 (1.0)
400 Vdc (200 Vac)					
.01	MFP4S1K	.330 (8.4)	.330 (8.4)	.687 (17.4)	.020 (.5)
.012	MFP4S12K	.355 (9.0)	.355 (9.0)	.687 (17.4)	.020 (.5)
.015	MFP4S15K	.344 (8.7)	.468 (11.9)	.687 (17.4)	.020 (.5)
.018	MFP4S18K	.252 (6.4)	.377 (9.6)	.812 (20.6)	.020 (.5)
.022	MFP4S22K	.281 (7.1)	.407 (10.3)	.812 (20.6)	.020 (.5)
.027	MFP4S27K	.281 (7.1)	.392 (10.0)	.937 (23.8)	.020 (.5)
.033	MFP4S33K	.312 (7.9)	.437 (11.1)	.937 (23.8)	.020 (.5)
.039	MFP4S39K	.317 (8.1)	.442 (11.2)	.812 (20.6)	.020 (.5)
.047	MFP4S47K	.315 (8.0)	.532 (13.5)	.937 (23.8)	.020 (.5)
.056	MFP4S56K	.312 (7.9)	.427 (10.8)	1.060 (26.9)	.024 (.6)
.068	MFP4S68K	.344 (8.7)	.468 (11.9)	1.060 (26.9)	.024 (.6)
.082	MFP4S82K	.366 (9.3)	.492 (12.5)	1.060 (26.9)	.024 (.6)
.1	MFP4P1K	.406 (10.3)	.593 (15.1)	1.060 (26.9)	.024 (.6)

Cap. μF	Catalog Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d Inches (mm)
.12	MFP4P12K	.380 (9.7)	.577 (14.7)	1.310 (33.3)	.024 (.6)
.15	MFP4P15K	.437 (11.1)	.625 (15.9)	1.310 (33.3)	.032 (.8)
.18	MFP4P18K	.437 (11.1)	.625 (15.9)	1.430 (36.3)	.032 (.8)
.22	MFP4P22K	.562 (14.3)	.687 (17.4)	1.430 (36.3)	.032 (.8)
.27	MFP4P27K	.457 (11.6)	.652 (16.6)	1.680 (42.7)	.032 (.8)
.33	MFP4P33K	.562 (14.3)	.718 (18.2)	1.680 (42.7)	.032 (.8)
.39	MFP4P39K	.572 (14.5)	.767 (19.5)	1.680 (42.7)	.032 (.8)
.47	MFP4P47K	.656 (16.7)	.843 (21.4)	1.680 (42.7)	.032 (.8)
.56	MFP4P56K	.662 (16.8)	.862 (21.9)	1.810 (46.0)	.032 (.8)
.68	MFP4P68K	.750 (19.1)	.937 (23.8)	1.810 (46.0)	.040 (1.0)
.82	MFP4P82K	.712 (18.1)	.908 (23.1)	2.060 (52.3)	.040 (1.0)
1	MFP4W1K	.812 (20.6)	1.000 (25.4)	2.060 (52.3)	.040 (1.0)
1.25	MFP4W1P25K	.906 (23.0)	1.150 (29.2)	2.060 (52.3)	.040 (1.0)
1.5	MFP4W1P5K	.906 (23.0)	1.150 (29.2)	2.310 (58.7)	.040 (1.0)
600/630 Vdc (250 Vac)					
.01	MFP6S1K	.250 (6.4)	.375 (9.5)	.812 (20.6)	.020 (.5)
.012	MFP6S12K	.250 (6.4)	.375 (9.5)	.937 (23.8)	.020 (.5)
.015	MFP6S15K	.250 (6.4)	.375 (9.5)	.937 (23.8)	.020 (.5)
.018	MFP6S18K	.250 (6.4)	.375 (9.5)	.937 (23.8)	.020 (.5)
.022	MFP6S22K	.312 (7.9)	.437 (11.1)	.937 (23.8)	.024 (.6)
.027	MFP6S27K	.312 (7.9)	.437 (11.1)	.937 (23.8)	.020 (.5)
.033	MFP6S33K	.312 (7.9)	.437 (11.1)	1.060 (26.9)	.024 (.6)
.039	MFP6S39K	.362 (9.2)	.487 (12.4)	1.060 (26.9)	.024 (.6)
.047	MFP6S47K	.375 (9.5)	.500 (12.7)	1.060 (26.9)	.024 (.6)
.056	MFP6S56K	.382 (9.7)	.500 (12.7)	1.060 (26.9)	.024 (.6)
.068	MFP6S68K	.437 (11.1)	.625 (15.9)	1.060 (26.9)	.032 (.8)
.082	MFP6S82K	.372 (9.4)	.572 (14.5)	1.440 (36.6)	.024 (.6)
.1	MFP6P1K	.437 (11.1)	.656 (16.7)	1.440 (36.6)	.032 (.8)
.12	MFP6P12K	.457 (11.6)	.656 (16.7)	1.440 (36.6)	.032 (.8)
.15	MFP6P15K	.593 (15.1)	.750 (19.1)	1.440 (36.6)	.032 (.8)
.18	MFP6P18K	.472 (12.0)	.702 (17.8)	1.680 (42.7)	.032 (.8)
.22	MFP6P22K	.593 (15.1)	.812 (20.6)	1.680 (42.7)	.032 (.8)
.27	MFP6P27K	.497 (12.6)	.722 (18.3)	2.060 (52.3)	.032 (.8)
.33	MFP6P33K	.625 (15.9)	.843 (21.4)	2.060 (52.3)	.032 (.8)
.39	MFP6P39K	.625 (15.9)	.937 (23.8)	2.060 (52.3)	.032 (.8)
.47	MFP6P47K	.781 (19.8)	1.000 (25.4)	2.060 (52.3)	.040 (1.0)
.56	MFP6P56K	.752 (19.1)	.972 (24.7)	2.060 (52.3)	.040 (1.0)
.68	MFP6P68K	.906 (23.0)	1.150 (29.2)	2.060 (52.3)	.040 (1.0)
.82	MFP6P82K	.952 (24.2)	1.200 (30.5)	2.310 (58.7)	.040 (1.0)
1	MFP6W1K	1.150 (29.2)	1.340 (34.0)	2.560 (65.0)	.040 (1.0)