#### **Oval Axial Leaded Capacitors for AC Applications**



Type MMA oval axial-leaded metallized polyester capacitors are designed for AC applications. It is constructed with a UL 94V-0 flame retardant outer wrap and has secure epoxy end seals to resist moisture. The metallized polyester dielectric is self-healing, has a low DF and is crona free at high AC voltages. The Type MMA is the axial leaded alternative to Type DMMA for medium current and AC applications, This non-protected film capacitor has Underwriters Laboratories, Inc. recognition for onstruction only under U.L. File Number 128034(N).

#### **Highlights**

- Low ESR and DF
- Medium current
- AC applications

#### **RoHS Compliant**

### **Specifications**

**Capacitance Range:** .01 μF to 5.0 μF

Voltage Range: 125 to 480 Vac, 60 Hz (250 to 1000 Vdc)

Capacitance Tolerance: ±10% standard, ±5% optional

**Temperature Range:** -55 °C to 70 °C

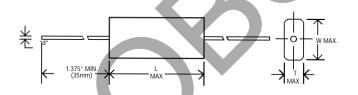
**Dielectric Strength:** 200% of rated voltagefor 1 minute

**Dissipation factor:** .60% Max. (25 °C, 1kHz)

**Insulation Resistance:** 10,000 M $\Omega$  x  $\mu$ F, 30,000 M $\Omega$  Min.

Lift Test: 500 hours at 70 °C at 115% rated voltage

#### **Outline Drawing**



**NOTE:** Other capacitance values, sizes and performance specification are available. Contact us.

### **Pulse Rating**

Pulse Capability						
	Body Length					
Rated	≤.875	875   1.000 - 1.250   1.312 - 1.500   ≥1.75				
Voltage	dV/dt — volts per microsecond, maximum					
125	34	16	9			
240	46	22	12			
360	111	72	42	29		
480	222	122	65	36		

#### Ratings .

Сар	Catalog	Т	W	L	d		
(µF)	Part Number	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)		
	125 Vac (250 Vdc)						
.047	MMAAS47K-F	.177 (4.5)	.275 (7.0)	.562 (14.3)	.024 (.6)		
.068	MMAAS68K-F	.166 (4.2)	.264 (6.7)	.687 (17.4)	.024 (.6)		
.10	MMAAP1K-F	.186 (4.7)	.311 (7.9)	.687 (17.4)	.024 (.6)		
.15	MMAAP15K-F	.228 (5.8)	.353 (9.0)	.687 (17.4)	.024 (.6)		
.22	MMAAP22K-F	.276 (7.0)	.401 (10.2)	.687 (17.4)	.024 (.6)		

Сар	Catalog	T	W	L	d	
(µF)	Part Number	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	
125 Vac (250 Vdc)						
.33	MMAAP33K-F	.339 (8.6)	.464 (11.8)	.687 (17.4)	.024 (.6)	
.47	MMAAP47K-F	.285 (7.2)	.410 (10.4)	1.000 (25.4)	.024 (.6)	
.68	MMAAP68K-F	.344 (8.7)	.469 (11.9)	1.000 (25.4)	.032 (.8)	
1.00	MMAAW1K-F	.407 (10.3)	.572 (14.5)	1.062 (27.0)	.032 (.8)	
1.50	MMAAW1P5K-F	.431 (10.9)	.611 (15.5)	1.250 (31.7)	.032 (.8)	

# **Type MMA Metallized Polyester Capacitors**

### **Ratings**

## **RoHS Compliant**

Сар	Catalog	T	W	L	d		
(µF)	Part Number	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)		
		125 Va	(250 Vdc)				
2.00	MMAAW2K-F	.502 (12.7)	.682 (17.3)	1.250 (31.7)	.032 (.8)		
3.00	MMAAW3K-F	.540 (13.7)	.720 (18.3)	1.500 (38.1)	.032 (.8)		
4.00	MMAAW4K-F	.638 (16.2)	.834 (21.2)	1.500 (38.1)	.040 (1.0)		
5.00	MMAAW5K-F	.712 (18.1)	.908 (23.1)	1.500 (38.1)	.040 (1.0)		
		240 Va	(400 Vdc)				
.022	MMABS22K-F	.184 (4.7)	.282 (7.2)	.687 (17.4)	.024 (.6)		
.033	MMABS33K-F	.144 (3.7)	.269 (6.8)	.687 (17.4)	.024 (.6)		
.047	MMABS47K-F	.170 (4.3)	.295 (7.5)	.687 (17.4)	.024 (.6)		
.068	MMABS68K-F	.203 (5.2)	.328 (8.3)	.687 (17.4)	.024 (.6)		
.100	MMABP1K-F	.175 (4.4)	.300 (7.6)	1.000 (25.4)	.024 (.6)		
.15	MMABP15K-F	.213 (5.4)	.338 (8.6)	1.000 (25.4)	.024 (.6)		
.22	MMABP22K-F	.253 (6.4)	.378 (9.6)	1.000 (25.4)	.024 (.6)		
.33	MMABP33K-F	.302 (7.7)	.453 (11.5)	1.000 (25.4)	.024 (.6)		
.47	MMABP47K-F	.316 (8.0)	.468 (11.9)	1.187 (30.1)	.024 (.6)		
.68	MMABP68K-F	.385 (9.8)	.536 (13.6)	1.187 (30.1)	.032 (.8)		
1.00	MMABW1K-F	.453 (11.5)	.663 (16.8)	1.250 (31.7)	.032 (.8)		
1.50	MMABW1P5K-F	.488 (12.4)	.698 (17.7)	1.500 (38.1)	.032 (.8)		
2.00	MMABW2K-F	.584 (14.8)	.780 (19.8)	1.500 (38.1)	.040 (1.0)		
3.00	MMABW3K-F	.732 (18.6)	.928 (23.6)	1.500 (38.1)	.040 (1.0)		
360 Vac (800 Vdc)							
.015	MMACS15K-F	.153 (3.9)	.278 (7.1)	.875 (22.2)	.024 (.6)		
.022	MMACS22K-F	.182 (4.6)	.307 (7.8)	.875 (22.2)	.024 (.6)		
.033	MMACS33K-F	.223 (5.7)	.348 (8.8)	.875 (22.2)	.024 (.6)		
.047	MMACS47K-F	.264 (6.7)	.389 (9.9)	.875 (22.2)	.024 (.6)		
.068	MMACS68K-F	.264 (6.7)	.444 (11.3)	.875 (22.2)	.024 (.6)		

Сар	Catalog	T	W	L	d		
(µF)	Part Number	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)		
	360 Vac (800 Vdc)						
.100	MMACP1K-F	.303 (7.7)	.428 (10.9)	1.062 (27.0)	.024 (.6)		
.15	MMACP15K-F	.373 (9.5)	.498 (12.6)	1.062 (27.0)	.032 (.8)		
.22	MMACP22K-F	.454 (11.5)	.593 (15.1)	1.125 (28.6)	.032 (.8)		
.33	MMACP33K-F	.544 (13.8)	.710 (18.0)	1.125 (28.6)	.032 (.8)		
.47	MMACP47K-F	.605 (15.4)	.756 (19.2)	1.250 (31.7)	.040 (1.0)		
.68	MMACP68K-F	.730 (18.5)	.881 (22.4)	1.500 (38.1)	.040 (1.0)		
1.00	MMACW1K-F	.727 (18.5)	.893 (22.7)	1.500 (38.1)	.040 (1.0)		
1.50	MMACW1P5K-F	.716 (18.2)	.936 (23.8)	1.937 (49.2)	.040 (1.0)		
2.00	MMACW2K-F	.834 (21.2)	1.054 (26.8)	1.937 (49.2)	.040 (1.0)		
	480 Vac (1000 Vdc)						
.010	MMADS1K-F	.185 (4.7)	.310 (7.9)	.875 (22.2)	.024 (.6)		
.015	MMADS15K-F	.226 (5.7)	.351 (8.9)	.875 (22.2)	.024 (.6)		
.022	MMADS22K-F	.273 (6.9)	.398 (10.1)	.875 (22.2)	.024 (.6)		
.033	MMADS33K-F	.336 (8.5)	.461 (11.7)	.875 (22.2)	.024 (.6)		
.047	MMADS47K-F	.295 (7.5)	.420 (10.7)	1.062 (27.0)	.024 (.6)		
.068	MMADS68K-F	.357 (9.1)	.482 (12.2)	1.062 (27.0)	.032 (.8)		
.10	MMADP1K-F	.393 (10.0)	.603 (15.3)	1.062 (27.0)	.032 (.8)		
.15	MMADP15K-F	.493 (12.5)	.703 (17.8)	1.125 (28.6)	.032 (.8)		
.22	MMADP22K-F	.495 (12.6)	.705 (17.9)	1.312 (33.3)	.032 (.8)		
.33	MMADP33K-F	.533 (13.5)	.743 (18.9)	1.500 (38.1)	.032 (.8)		
.47	MMADP47K-F	.663 (16.8)	.859 (21.8)	1.500 (38.1)	.040 (1.0)		
.56	MMADP56K-F	.683 (17.4)	.879 (22.3)	1.500 (38.1)	.040 (1.0)		
.68	MMADP68K-F	.722 (18.3)	.918 (23.3)	1.750 (44.4)	.040 (1.0)		
1.00	MMADW1K-F	.794 (20.2)	1.014 (25.7)	1.937 (49.2)	.040 (1.0)		
1.50	MMADW1P5K-F	.909 (23.1)	1.130 (28.7)	2.125 (54.0)	.040 (1.0)		

### Type MMA Metallized Polyester Capacitors

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