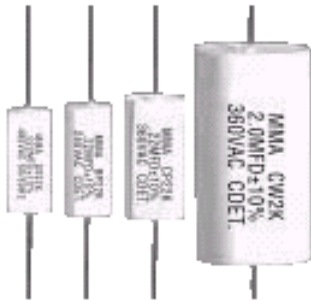


# Type MMA Metallized Polyester Capacitors

## Oval Axial Led Capacitors for AC Applications



Type MMA oval axial-led 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 corona free at high AC voltages. The Type MMA is the axial led alternative to Type DMMA for medium current and AC applications, This non-protected film capacitor has Underwriters Laboratories, Inc. recognition for construction only under U.L. File Number 128034(N).

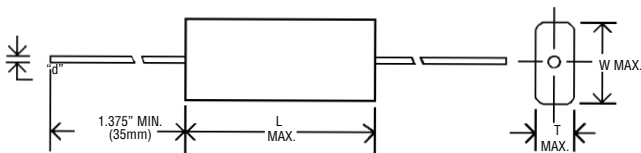
### Highlights

- Low ESR and DF
  - Medium current
  - AC applications
- [Regulatory Information](#)

### Specifications

<b>Capacitance Range:</b>	.01 $\mu$ F to 5.0 $\mu$ F
<b>Voltage Range:</b>	125 to 480 Vac, 60 Hz (250 to 1000 Vdc)
<b>Capacitance Tolerance:</b>	$\pm$ 10% standard, $\pm$ 5% optional
<b>Temperature Range:</b>	-55 °C to 70 °C
<b>Dielectric Strength:</b>	200% of rated voltage for 1 minute
<b>Dissipation factor:</b>	.60% Max. (25 °C, 1kHz)
<b>Insulation Resistance:</b>	10,000 M $\Omega$ x $\mu$ F, 30,000 M $\Omega$ Min.
<b>Lift Test:</b>	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				
Rated Voltage	Body Length			
	$\leq .875$	1.000 - 1.250	1.312 - 1.500	$\geq 1.750$
	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

Cap ( $\mu$ F)	Catalog Part Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d 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)

Cap ( $\mu$ F)	Catalog Part Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d 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

Cap ( $\mu$ F)	Catalog Part Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d Inches (mm)
<b>125 Vac (250 Vdc)</b>					
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)
<b>240 Vac (400 Vdc)</b>					
.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)
<b>360 Vac (800 Vdc)</b>					
.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)

## RoHS Compliant

Cap ( $\mu$ F)	Catalog Part Number	T Inches (mm)	W Inches (mm)	L Inches (mm)	d Inches (mm)
<b>360 Vac (800 Vdc)</b>					
.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)
<b>480 Vac (1000 Vdc)</b>					
.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

---

**Notice and Disclaimer:** All product drawings, descriptions, specifications, statements, information and data (collectively, the “Information”) in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements (“Cornell Dubilier”) has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.