

## AC METALLISED POLYPROPYLENE FILM CAPACITORS

### MPP AC Applications

**MAIN APPLICATION:** This series is specially designed for energy meter applications, voltage dropper, capacitive power supply, etc

**CONSTRUCTION (DIP TYPE):** Low inductive wound cell of metallised polypropylene film coated with flame retardant epoxy resin or encased in flame retardant box UL 94 V0 with epoxy resin

**CLIMATIC CATEGORY:** 40/100/56

Between 85°C and 100°C, a voltage derating of 1.25% per °C on the rated voltage has to be applied

**APPLICABLE SPECIFICATION:** IEC 384-16

**CAPACITANCE VALUE RATED VOLTAGE (AC):** Refer dimension chart

**CAPACITANCE TOLERANCE:** ±5%

**VOLTAGE PROOF:** Between terminals: 1250 V DC for 2 seconds

#### INSULATION RESISTANCE

Minimum Insulation Resistance  $R_{is}$   $C_R \leq 0.33 \mu F$   $C_R > 0.33 \mu F$   
(or) time constant  $T = C_R \times R_{is}$   $> 100000 M\Omega$   $> 30000 s$   
at 20° C, relative humidity ≤ 70%

#### TAN δ (DISSIPATION FACTOR) AT 20° C

Frequency (kHz)	$C_R \leq 0.1 \mu F$	$0.1 \mu F \leq C_R \leq 1 \mu F$
At 1	0.05%	0.05%
At 10	0.1%	0.08%

#### DAMP HEAT TEST (Steady state)

Temperature:	+40°C ± 2°C
Relative humidity:	93 ± 2% RH
Duration:	1000 hours

#### Criteria after the test:

$\Delta c/c$ : ≤ 10% of initial value

Increase in Tan δ: ≥ 0.002,  $C_R > 1\mu F$

Insulation resistance: ≥ 50% of the value mentioned in IR chart

#### LIFE TEST CONDITIONS (Loading at elevated temperature)

Loaded at 1.1 times of rated voltage at 70° C for 1000 hours

#### Criteria after the test:

$\Delta c/c$ : ≤ 10% of initial value

Increase in Tan δ: ≥ 0.002,  $C_R > 1\mu F$

Insulation resistance: ≥ 50% of the value mentioned in IR chart

**APPROVALS:** Capacitors are tested as per IEC 384-17

### Ordering codes and packaging units - Dip Type

Rated Voltage	Rated Cap. (µF)	Dimensions(mm)						DV/DT V/µs	Wt. g	Ordering code	Packing units Bulk
		W ±0.5	H ±0.5	L ±0.5	d ±0.05	S ±0.5	F -4				
275V AC	0.10	6.0	11.0	13	0.6	10.0	10.0	400	-	17 104 +03*^A	500
	0.15	7.0	13.0	13	0.6	10.0	10.0	400	-	17 154 +03*^A	500
	0.22	8.0	15.0	13	0.6	10.0	10.0	400	-	17 224 +03*^A	500
305V AC	0.10	6.5	11.0	13	0.6	10.0	10.0	475	-	17 104 +04*^A	500
	0.15	7.5	13.0	13	0.6	10.0	10.0	475	-	17 154 +04*^A	500
310V AC	0.10	6.5	12.5	13	0.6	10.0	10.0	475	-	17 104 +05*^A	500
440V AC	0.10	7.0	13.0	19	0.8	15.0	15.0	340	-	17 104 +06*^A	500
	0.15	8.0	14.0	19	0.8	15.0	15.0	340	-	17 154 +06*^A	500
	0.18	8.0	15.0	19	0.8	15.0	15.0	340	-	17 184 +06*^A	500
	0.19	8.0	15.0	19	0.8	15.0	15.0	340	-	17 194 +06*^A	500
	0.22	9.0	16.0	19	0.8	15.0	15.0	340	-	17 224 +06*^A	500
	0.27	10.0	16.0	19	0.8	15.0	15.0	340	-	17 274 +06*^A	500
440V AC	0.33	10.0	18.0	19	0.8	15.0	15.0	340	-	17 334 +06*^A	500
	0.15	6.0	13.0	26	0.8	22.5	22.5	170	-	17 154 +06*^A	500
	0.20	7.5	13.0	27	0.8	22.5	22.5	170	-	17 204 +06*^A	500
	0.22	7.0	14.0	26	0.8	22.5	22.5	170	-	17 224 +06*^A	500
	0.24	7.5	14.0	27	0.8	22.5	22.5	170	-	17 244 +06*^A	500
	0.27	8.0	14.0	26	0.8	22.5	22.5	170	-	17 274 +06*^A	500
	0.30	8.0	14.0	27	0.8	22.5	22.5	170	-	17 304 +06*^A	500
	0.33	9.0	15.0	26	0.8	22.5	22.5	170	-	17 334 +06*^A	500
	0.39	9.0	16.0	26	0.8	22.5	22.5	170	-	17 394 +06*^A	500
	0.41	9.0	17.0	26	0.8	22.5	22.5	170	-	17 414 +06*^A	500
	0.47	10.0	17.0	26	0.8	22.5	22.5	170	-	17 474 +06*^A	500
	0.56	10.0	18.0	26	0.8	22.5	22.5	170	-	17 564 +06*^A	500
	0.68	11.0	20.0	26	0.8	22.5	22.5	170	-	17 684 +06*^A	500
	0.82	12.0	21.0	26	0.8	22.5	22.5	170	-	17 824 +06*^A	500
1.00	13.0	23.0	26	0.8	22.5	22.5	170	-	17 105 +06*^A	500	

## AC METALLISED POLYPROPYLENE FILM CAPACITORS

### MPP AC Applications - Ordering codes and packaging units - *Box Type*

Rated Voltage	Rated Cap. (µF)	Dimensions(mm)					S ±0.5	F -4	DV/DT V/µs	Wt. g	Ordering code	Packing units Bulk
		W ±0.5	H ±0.5	L ±0.5	d ±0.05							
440V AC	0.10	6.0	12.0	18.0	0.8	15.0	15.0	340	-	22 104 +06*^	500	
	0.15	7.5	13.5	18.0	0.8	15.0	15.0	340	-	22 154 +06*^	500	
	0.22	8.5	14.5	18.0	0.8	15.0	15.0	340	-	22 224 +06*^	500	
	0.27	10.0	16.0	18.0	0.8	15.0	15.0	340	-	22 274 +06*^	500	
	0.33	10.0	16.0	18.0	0.8	15.0	15.0	340	-	22 334 +06*^	500	
440V AC	0.15	6.0	15.0	26.5	0.8	22.5	22.5	170	-	22 154 +06*^	500	
	0.22	6.0	15.0	26.5	0.8	22.5	22.5	170	-	22 224 +06*^	500	
	0.27	7.0	16.0	26.5	0.8	22.5	22.5	170	-	22 274 +06*^	500	
	0.33	8.5	17.0	26.5	0.8	22.5	22.5	170	-	22 334 +06*^	500	
	0.39	8.5	17.0	26.5	0.8	22.5	22.5	170	-	22 394 +06*^	500	
	0.41	8.5	17.0	26.5	0.8	22.5	22.5	170	-	22 414 +06*^	500	
	0.47	10.0	18.5	26.5	0.8	22.5	22.5	170	-	22 474 +06*^	500	
	0.56	10.0	18.5	26.5	0.8	22.5	22.5	170	-	22 564 +06*^	500	
	0.68	10.0	18.5	26.5	0.8	22.5	22.5	170	-	22 684 +06*^	500	
	0.82	11.0	20.0	26.5	0.8	22.5	22.5	170	-	22 824 +06*^	500	
	1.00	12.0	22.0	26.5	0.8	22.5	22.5	170	-	22 105 +06*^	500	

