

# MP

## Metallized Polypropylene Motor Run/AC Film Capacitors In Boxes

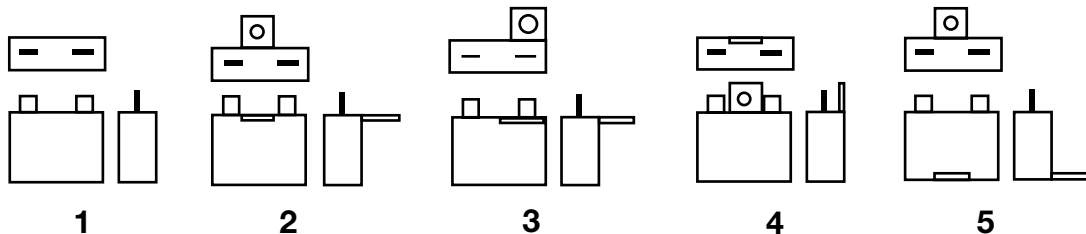


### APPLICATIONS

- Motor Run
- General Purpose AC
- UL/CSA 810 approved
- Motor Speed Controls
- Switching capacitor for industrial controls

### SPECIFICATIONS

Operating Temperature Range		-40°C to +85°C (UL P2, EN60252 VDE P0 class C) -40°C to +105°C					
Capacitance Tolerance		±10% at 1kHz, 20°C ±5%, +10%/-5% optional					
AC Voltage	VAC	250	350	400	450	500	600
Note VAC must be de-rated by 1.25% per °C exceeding 85°C							
Dissipation Factor (tan d) at 1kHz and 20°C	Freq	C<2.2uF	2.2uF<C≤15uF	15uF<C≤22uF	C>22uF		
	1 kHz	.0006	.001	.0012	.0014		
0.001 Max at 1 kHz and 20°C for safety mechanism capacitors							
Insulation Resistance @20°C (<70% RH) for 1 minute at 100VDC applied		1000MΩxµF					
Dielectric Strength	Terminal to Terminal			Terminal to Case (EN60252-1)			
	160% VAC for 60 Seconds and 20°C applied between terminals (200% VAC for EN 60252-1)			3KV at 60Hz for 60 Seconds applied between terminals and case			
Load Life	125% of rated VAC at 85°C & 105°C						
	6000 hours for class A (30000 hours of continuous service life) 2000 hours for class B (10000 hours of continuous service life) 600 hours for class C (3000 hours of continuous service life)						
Construction	Metallized Polypropylene film Segmented Metallized Polypropylene film( safety Mechanism capacitors)						
Electrodes	Vacuum deposited metal layers						
Coating	Solvent resistant plastic case (UL 94V-0) with epoxy end fill ( UL 94V-0)						
Certification	UL E311560						



Additional mounting tabs styles and lead terminations available.  
Contact Illinois Capacitor, Inc. for details.

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## PHYSICAL DIMENSIONS

VAC (µF)	250	350	400	450	500	600
1	32x18x10	32x20x10	38x24x12	38x26x14	38x28x17	38x30x20
3	32x27x16	32x28x18	48x31x19	38x35x26	48x35x24	48x40x30
5	38x30x18	38x33x22	48x35x25	48x38x29	48x40x30	58x45x34
7	38x33x21	38x37x26	48x40x30	48x45x34	58x45x32	68x45x35
10	38x38x27	48x36x25	58x45x34			
15	48x37x26	48x40x29	68x47x35			
20	51x38x30	58x40x28	60x50x38			
25	58x40x30	58x43x32	68x55x44			
30	68x40x30	68x43x31				
35	→	68x45x33				
40	→	68x48x36				

Convert to inches divide by 25.4

LxHxT (mm)

**\*Customized capacitors available upon request.  
Contact Illinois Capacitor Inc. for details.**

## STANDARD PART LISTING

Capacitance (µF)	VAC	IC <sup>®</sup> PART NUMBER	LxHxT (mm)
1	250	105MP#250K##	32x18x10
1	350	105MP#350K##	32x20x10
1	400	105MP#400K##	38x24x12
1	450	105MP#450K##	38x26x14
1	500	105MP#500K##	38x28x17
1	600	105MP#600K##	38x30x20
3	250	305MP#250K##	32x27x16
3	350	305MP#350K##	32x28x18
3	400	305MP#400K##	48x31x19
3	450	305MP#450K##	38x35x26
3	500	305MP#500K##	48x35x24
3	600	305MP#600K##	48x40x30
5	250	505MP#250K##	38x30x18
5	350	505MP#350K##	38x33x22
5	400	505MP#400K##	48x35x25
5	450	505MP#450K##	48x38x29
5	500	505MP#500K##	48x40x30
5	600	505MP#600K##	58x45x34
7	250	705MP#250K##	38x33x21
7	350	705MP#350K##	38x37x26

Capacitance (µF)	VAC	IC <sup>®</sup> PART NUMBER	LxHxT (mm)
7	400	705MP#400K##	48x40x30
7	450	705MP#450K##	48x45x34
7	500	705MP#500K##	58x45x32
7	600	705MP#600K##	68x45x35
10	250	106MP#250K##	38x38x27
10	350	106MP#350K##	48x36x25
10	400	106MP#400K##	58x45x34
15	250	156MP#250K##	48x37x26
15	350	156MP#350K##	48x40x29
15	400	156MP#400K##	68x47x35
20	250	206MP#250K##	51x38x30
20	350	206MP#350K##	58x40x28
20	400	206MP#400K##	58x40x28
25	250	256MP#250K##	58x40x30
25	350	256MP#350K##	58x43x32
25	400	256MP#400K##	68x55x44
30	250	306MP#250K##	68x40x30
30	350	306MP#350K##	68x43x31
35	350	356MP#350K##	68x45x33
40	350	406MP#350K##	68x48x36

**# replace with mounting tab style designation (1 to 5)  
## to be assigned by Illinois Capacitor, Inc.**



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## Safety Mechanism Capacitors UL 810 Class P2

VAC μF	250	400	450
1	32x20x11	38x22x12	38x24x12
3	32x35x14	38x30x20	48x28x18
5	38x26x16	38x35x27	48x34x24
7	38x30x20	48x36x27	48x40x30
8	38x30x21	48x40x28	

Convert to inches divide by 25.4

LxHxT  
(mm)

Additional case sizes and capacitance values available.  
Contact Illinois Capacitor, Inc. for details.

Capacitance (μF)	VAC	IC <sup>®</sup> PART NUMBER	LxHxT (mm)
1	250	105MP#250K2##	32x20x11
1	400	105MP#400K2##	38x22x12
1	450	105MP#450K2##	38x24x12
3	250	305MP#250K2##	32x35x14
3	400	305MP#400K2##	38x30x20
3	450	305MP#450K2##	48x28x18
5	250	505MP#250K2##	38x26x16

Capacitance (μF)	VAC	IC <sup>®</sup> PART NUMBER	LxHxT (mm)
5	400	505MP#400K2##	38x35x27
5	450	505MP#450K2##	48x34x24
7	250	705MP#250K2##	38x30x20
7	400	705MP#400K2##	48x36x27
7	450	705MP#450K2##	48x40x30
8	250	805MP#250K2##	38x30x21
8	400	805MP#400K2##	48x40x28

## EN 60252-1 VDE P0 Class C

VAC μF	400	450
1	38x24x12	38x26x14
3	38x34x23	38x35x26
5	48x36x24	48x39x28
7	48x40x30	48x45x34

Convert to inches  
divide by 25.4

LxHxT  
(mm)

Capacitance (μF)	VAC	IC <sup>®</sup> PART NUMBER	LxHxT (mm)
1	400	105MP#400KP0##	38x24x12
1	450	105MP#450KP0##	38x26x14
3	400	305MP#400KP0##	38x34x23
3	450	305MP#450KP0##	38x35x26

Capacitance (μF)	VAC	IC <sup>®</sup> PART NUMBER	LxHxT (mm)
5	400	505MP#400KP0##	48x36x24
5	450	505MP#450KP0##	48x39x28
7	400	705MP#400KP0##	48x40x30
7	450	705MP#450KP0##	48x45x34

# replace with mounting tab style designation  
## to be assigned by Illinois Capacitor, Inc.

