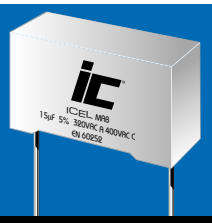
MAB

AC/Motor Run Film Capacitors



- *Motor Run*
- *General Purpose AC application*
- *Switching Capacitor for Industrial Controls*
- *SMPS*
- *High Frequency Electronic Ballasts*
- *Motor Speed Controls*

Operating Temperature Range	-40˚C to +105˚C without use of approvals -25˚C to +85˚C for use of approvals				
Capacitance Tolerance	+/- 10% at 1kHz, 20˚C				
Rated Voltage	See Voltage Code Table				
	Voltage must be derated by 1.25% per °C exceeding 85°C.				
Dissipation Factor (max) at 20˚C.	Freq (kHz)	C≤ 2.2µF	2.2µF<C≤15µF	15µF<C≤22µF	C>22µF
	1	.06%	.1%	.12%	.14%
Insulation Resistance @20˚C(<70% RH) for 1 minute at 100VDC	> 10,000MΩ x µF for C<1µF. > 30,00MΩ x µF for C≥1µF.				
Dielectric Strength	160% of rated VAC for 60 seconds at 20˚C between leads. 200% of rated VAC for 60 seconds at 20˚C between leads for EN 60252-1 approval. 3KV at 60HZ for 60 seconds between leads and case.				
Self Inductance	<1nH/mm of lead spacing and lead wire length.				
Capacitance Drift	<1.0% up to 40˚C after 2 years				
Temperature Coefficient	-200ppm/˚C +/- 100ppm/˚C				
Load Life Test Capacitance Change ≤3%	125% of rated voltage at +85°C				
	200 hrs. for Class D (1000 hours expected life, continuous service) 600 hrs. for Class C (3000 hours expected life, continuous service) 2000 hrs. for Class B (10000 hours expected life, continuous service) 6000 hrs. for Class A (30000 hours expected life, continuous service)				
Dielectric	Polypropylene				
Electrodes	Vacuum Deposited Metal Layers				
Construction	Metallized Film				
Leads	Solid or Stranded Tinned Copper Wire				
Coating	Solvent resistant plastic box (UL 94-V1) with epoxy fills (UL 94V-0)				

ILLINOIS CAPACITOR, INC. *3757 W. Touhy Ave., Lincolnwood, IL 60712 • (847) 675-1760 • Fax (847) 673-2850 • www.illcap.com*

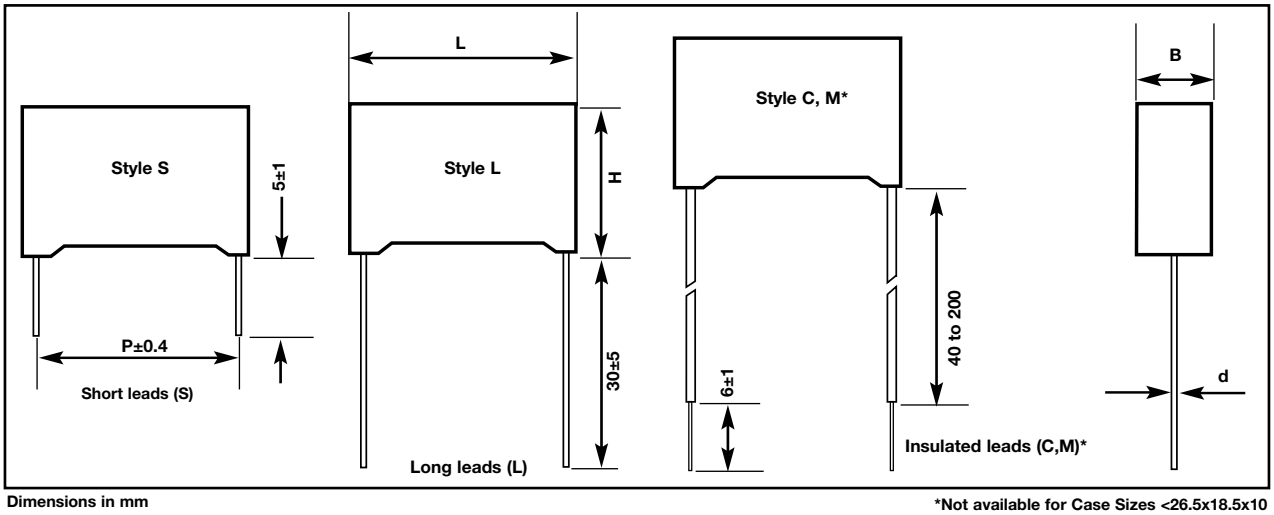
APPROVAL CODES

Voltage Code	WVDC/SVDC	VAC (50/60 Hz)	Agency Standard	Description	Approval Classification
A04			UL 810/CSA 22.2	Construction only (E192977)/190-M-1985	
A04	350/425	160		10,000 hrs. Continuous Service	Class B
A04		200		1000 hrs. Continuous Service	Class D
A03				Construction only (E192977)/190-M-1985	
A03	475/550	250		10,000 hrs. Continuous Service	Class B
A03		320		1000 hrs. Continuous Service	Class D
A02			UL 810/CSA 22.2	Construction only (E192977)/190-M-1985	
A02	575/680	320	EN 60252-1	30,000 hrs Continuous service	Class A
A02		400	EN 60252-1	10,000 hrs Continuous service	Class B
A02		430	EN 60252-1	1000 hrs Continuous service	Class D
A01		432	EN 60252-1	10,000 hrs Continuous service	Class B
A01		400	EN 60252-1	30,000 hrs Continuous service	Class A
A01	775/925	500	EN 60252-1	3000 hrs Continuous service	Class C
A01			UL 810/CSA 22.2	Construction only (E192977)/190-M-1985	
A05			UL 810/CSA 22.2	Construction only (E192977)/190-M-1985	
A05	1150/1350	600		3000 hrs Continuous service	Class C
A05		500		10,000 hrs Continuous service	Class B

Terminal Style Selection

S	5mm ± 1mm	Solid tinned copper leads
L	30mm ± 5mm	Solid tinned copper leads
C	Customer Specified	Insulated solid tinned copper leads
M	Customer Specified	Stranded insulated Tinned copper wire

L	26.5	32	39.5	42.5
S	22.5	27.5	35	37.5
d	0.8	0.8	0.8	1.0



Dimensions in mm

*Not available for Case Sizes <26.5x18.5x10

MAB

AC/Motor Run Film Capacitors

PHYSICAL DIMENSIONS

Voltage Code VDC / µF	A04 350	A03 475	A02 575	A01 775	A05 1150
0.1	→	→	→	26.5x16x7	26.5x16x7
0.12	→	→	→	26.5x16x7	26.5x17x8.5
0.15	→	→	→	26.5x17x8.5	26.5x17x8.5
0.18	→	→	→	→	26.5x18.5x10
0.22	→	→	→	26.5x18.5x10	26.5x20x11 32x20x11
0.27	→	→	→	26.5x18.5x10	26.5x22x13 32x20x11
0.33	→	→	26.5x16x7	26.5x18.5x10 32x20x11	32x22x13
0.39	→	→	26.5x16x7	26.5x18.5x10 32x20x11	32x22x13
0.47	→	→	26.5x17x8.5	26.5x20x11 32x20x11	32x28x14
0.56	→	→	26.5x17x8.5	26.5x22x13 32x20x11	32x28x14
0.62	→	→	26.5x18.5x10	26.5x22x13 32x20x11 39.5x26x15	
0.68	→	26.5x16x7	26.5x18.5x10 32x20x11	32x20x11 39.5x26x15 26.5x22x13	32x33x18
0.75	→	26.5x17x8.5	26.5x18.5x10 32x20x11	32x22x13 39.5x26x15	32x33x18
0.82	→	26.5x17x8.5	26.5x20x11 32x20x11	32x22x13 39.5x26x15	32x33x18
1	26.5x16x7	26.5x18.5x10	26.5x22x13 32x20x11	32x24.5x15 39.5x26x15	42.5x28x17
1.2	26.5x17x8.5	26.5x20x11 32x17x9	32x20x11 26.5x22x13	32x24.5x15 39.5x26x15	42.5x30x22
1.5	26.5x17x8.5	26.5x20x13 32x22x11	32x22x13 39.5x26x15	32x33x18 39.5x26x15	42.5x30x22
1.8	26.5x18.5x10 32x17x9	32x22x11	32x28x14	32x33x18 42.5x28x17	42.5x37x28
2	26.5x20x11 32x17x9	32x22x13	32x28x14 39.5x26x15	32x33x18 42.5x28x17	42.5x37x28
2.2	26.5x20x11 32x20x11	32x22x13	32x28x14 39.5x26x15	32x33x18 42.5x28x17	42.5x37x28
2.5	26.5x22x13 32x20x11	32x22x13	32x28x14 39.5x26x15	42.5x28x17	42.5x37x28
2.7	26.5x22x13 32x20x11	32x22x13	32x28x14 39.5x26x15	42.5x30x22	42.5x45x30
3	32x22x13	32x24.5x15	32x33x18 39.5x26x15 42.5x28x17	42.5x30x22	42.5x45x30
3.15	→	32x24.5x15 39.5x26x15			
3.3	32x22x13	32x24.5x15 39.5x26x15	32x33x18 39.5x26x15 42.5x28x17	42.5x30x22	42.5x45x30
3.5	32x22x13	32x24.5x15 39.5x26x15	32x33x18 42.5x28x17	42.5x33.5x22	42.5x45x30
4	32x22x13	32x33x18 39.5x26x15	32x33x18 42.5x28x17	42.5x33.5x22	

Convert to inches, divide by 25.4

LxHxT (mm)

PHYSICAL DIMENSIONS

Voltage Code VDC / µF	A04 350	A03 475	A02 575	A01 775	A05 1150
4.5	32x24.5x15	32x33x18 42.5x28x17	42.5x30x22	42.5x33.5x22	
4.7	32x28x14	32x33x18 42.5x28x17	42.5x30x22	42.5x37x28	
5	32x28x14	32x33x18 42.5x28x17	42.5x30x22	42.5x37x28	
5.5	→	→	→	42.5x37x28	
6	32x33x18 39.5x26x15	42.5x28x17	42.5x30x22	42.5x37x28	
6.3	→	→	42.5x30x22	42.5x37x28	
6.5	→	42.5x28x17			
6.8	32x33x18 39.5x26x15 42.5x28x17	→	42.5x33.5x22		
7	32x33x18 39.5x26x15 42.5x28x17	→	→	42.5x45x30	
8	32x33x18 42.5x28x17	42.5x30x22	42.5x33.5x22	42.5x45x30	
8.5	→	→	→	42.5x45x30	
10	42.5x28x17	42.5x30x22	42.5x37x28		
11	→	→	42.5x45x30		
12	42.5x30x22	42.5x37x28	42.5x45x30		
13	→	→	42.5x45x30		
14	→	→	42.5x45x30		
15	42.5x30x22	42.5x37x28	42.5x45x30		
18	42.5x37x28	42.5x45x30			
20	42.5x37x28	42.5x45x30			
22	42.5x37x28	42.5x45x30			
25	42.5x37x28				
27	42.5x45x30				
30	42.5x45x30				
33	42.5x45x30				

MAB

AC/Motor Run Film Capacitors

STANDARD PART LISTING

Capacitance (µF)	Voltage Series	PART NUMBER	dv/dt (v/µs)	Dimensions L x H x T (mm)
0.1	A05	104MABA05KG#	175	26.5x16x7
0.1	A01	104MABA01KG#	120	26.5x16x7
0.12	A05	124MABA05KG#	175	26.5x17x8.5
0.12	A01	124MABA01KG#	120	26.5x16x7
0.15	A05	154MABA05KG#	175	26.5x17x8.5
0.15	A01	154MABA01KG#	120	26.5x17x8.5
0.18	A05	184MABA05KG#	175	26.5x18.5x10
0.22	A05	224MABA05KG#	175	26.5x20x11
0.22	A05	224MABA05KH#	145	32x20x11
0.22	A01	224MABA01KG#	120	26.5x18.5x10
0.27	A05	274MABA05KG#	175	26.5x22x13
0.27	A05	274MABA05KH#	145	32x20x11
0.27	A01	274MABA01KG#	120	26.5x18.5x10
0.33	A05	334MABA05KH#	145	32x22x13
0.33	A02	334MABA02KG#	90	26.5x16x7
0.33	A01	334MABA01KG#	120	26.5x18.5x10
0.33	A01	334MABA01KH#	100	32x20x11
0.39	A05	394MABA05KH#	145	32x22x13
0.39	A02	394MABA02KG#	90	26.5x16x7
0.39	A01	394MABA01KG#	120	26.5x18.5x10
0.39	A01	394MABA01KH#	100	32x20x11
0.47	A05	474MABA05KH#	145	32x28x14
0.47	A02	474MABA02KG#	90	26.5x17x8.5
0.47	A01	474MABA01KG#	120	26.5x20x11
0.47	A01	474MABA01KH#	100	32x20x11
0.56	A05	564MABA05KH#	145	32x28x14
0.56	A02	564MABA02KG#	90	26.5x17x8.5
0.56	A01	564MABA01KG#	120	26.5X22X13
0.56	A01	564MABA01KH#	100	32x20x11
0.62	A01	624MABA01KG#	120	26.5x22x13
0.62	A01	624MABA01KH#	100	32x20x11
0.62	A01	624MABA01KI#	70	39.5x26x15
0.68	A05	684MABA05KH#	145	32x33x18
0.68	A03	684MABA03KG#	60	26.5x16x7
0.68	A02	684MABA02KG#	120	26.5x18.5x10
0.68	A02	684MABA02KH#	70	32x20x11
0.68	A01	684MABA01KG#	120	26.5x22x13
0.68	A01	684MABA01KH#	100	32x20x11
0.68	A01	684MABA01KI#	70	39.5x26x15
0.75	A05	754MABA05KH#	145	32x33x18
0.75	A03	754MABA03KG#	60	26.5x17x8.5
0.75	A01	754MABA01KH#	100	32x22x13
0.75	A01	754MABA01KI#	70	39.5x26x15
0.75	A02	754MABA02KGI#		
0.75	A02	754MABA02KHI#		
0.82	A02	824MABA02KH#	70	32x20x11
0.82	A05	824MABA05KH#	145	32x33x18
0.82	A03	824MABA03KG#	60	26.5x17x8.5
0.82	A02	824MABA02KG#	70	26.5x20x11
0.82	A01	824MABA01KH#	100	32x22x13
0.82	A01	824MABA01KI#	70	39.5x26x15
1	A05	105MABA05KJ#	90	42.5x28x17
1	A04	105MABA04KG#	50	26.5x16x7
1	A03	105MABA03KG#	60	26.5x18.5x10

Capacitance (µF)	Voltage Series	PART NUMBER	dv/dt (v/µs)	Dimensions L x H x T (mm)
1	A02	105MABA02KH#	70	32x20x11
1	A02	105MABA02KG#	70	26.5x22x13
1	A01	105MABA01KH#	100	32x24.5x15
1	A01	105MABA01KI#	70	39.5x26x15
1.2	A05	125MABA05KJ#	90	42.5x30x22
1.2	A04	125MABA04KG#	50	26.5x17x8.5
1.2	A03	125MABA03KG#	60	26.5x20x11
1.2	A03	125MABA03KH#	50	32x17x9
1.2	A02	125MABA02KH#	70	32x20x11
1.2	A02	125MABA02KG#	70	26.5x22x13
1.2	A01	125MABA01KH#	100	32x24.5x15
1.2	A01	125MABA01KI#	70	39.5x26x15
1.5	A05	155MABA05KJ#	90	42.5x30x22
1.5	A04	155MABA04KG#	50	26.5x17x8.5
1.5	A03	155MABA03KG#	60	26.5x20x13
1.5	A03	155MABA03KH#	50	32x20x11
1.5	A02	155MABA02KH#	70	32x22x13
1.5	A02	155MABA02KH#	70	37.5x26x15
1.5	A01	155MABA01KH#	100	32x33x18
1.5	A01	155MABA01KI#	70	39.5x26x15
1.8	A05	185MABA05KJ#	90	42.5x37x28
1.8	A04	185MABA04KG#	50	26.5x18.5x10
1.8	A04	185MABA04KH#	40	32x17x9
1.8	A03	185MABA03KH#	50	32x22x13
1.8	A02	185MABA02KH#	70	32x28x14
1.8	A01	185MABA01KH#	70	32x33x18
1.8	A01	185MABA01KJ#	65	42.5x28x17
2	A05	205MABA05KJ#	90	42.5x37x28
2	A04	205MABA04KG#	50	26.5x20x11
2	A04	205MABA04KH#	40	32x17x9
2	A03	205MABA03KH#	50	32x22x13
2	A02	205MABA02KH#	70	32x28x14
2	A02	205MABA02KI#	50	39.5x26x15
2	A01	205MABA01KH#	65	32x33x18
2	A01	205MABA01KJ#	65	42.5x28x17
2.2	A05	225MABA05KJ#	90	42.5x37x28
2.2	A04	225MABA04KG#	50	26.5x20x11
2.2	A04	225MABA04KH#	40	32x20x11
2.2	A03	225MABA03KH#	50	32x22x13
2.2	A02	225MABA02KH#	70	32x28x14
2.2	A02	225MABA02KI#	50	39.5x26x15
2.2	A01	225MABA01KH#	65	32x33x18
2.2	A01	225MABA01KJ#	65	42.5x28x17
2.5	A05	255MABA05KJ#	90	42.5x37x28
2.5	A04	255MABA04KG#	50	26.5x22x13
2.5	A04	255MABA04KH#	40	32x20x11
2.5	A03	255MABA03KH#	50	32x22x13
2.5	A02	255MABA02KH#	70	32x28x14
2.5	A02	255MABA02KI#	50	39.5x26x15
2.5	A01	255MABA01KJ#	65	42.5x28x17
2.7	A05	275MABA05KJ#	90	42.5x45x30
2.7	A04	275MABA04KG#	50	26.5x22x13
2.7	A04	275MABA04KH#	40	32x20x11
2.7	A03	275MABA03KH#	50	32x22x13

NOTE: Replace # with S, L, C, M for lead style (See Page 183)

MAB

AC/Motor Run Film Capacitors

STANDARD PART LISTING

Capacitance (µF)	Voltage Series	PART NUMBER	dv/dt (v/µs)	Dimensions L x H x T (mm)
2.7	A02	275MABA02KI#	50	39.5x26x15
2.7	A01	275MABA01KJ#	65	42.5x30x22
3	A05	305MABA05KJ#	90	42.5x45x30
3	A04	305MABA04KH#	40	32x22x13
3	A03	305MABA03KH#	50	32x24.5x15
3	A02	305MABA02KH#	70	32x33x18
3	A02	305MABA02KI#	50	39.5x26x15
3	A02	305MABA02KJ#	50	42.5x28x17
3	A01	305MABA01KJ#	65	42.5x30x22
3.15	A03	315MABA03KH#	50	32x24.5x15
3.15	A03	315MABA03KI#	40	39.5x26x15
3.3	A05	335MABA05KJ#	90	42.5x45x30
3.3	A04	335MABA04KH#	40	32x22x13
3.3	A03	335MABA03KH#	50	32x24.5x15
3.3	A03	335MABA03KI#	40	39.5x26x15
3.3	A02	335MABA02KH#	70	32x33x18
3.3	A02	335MABA02KI#	50	39.5x26x15
3.3	A02	335MABA02KJ#	50	42.5x28x17
3.3	A01	335MABA01KJ#	65	42.5x30x22
3.5	A05	355MABA05KJ#	90	42.5x45x30
3.5	A04	355MABA04KH#	40	32x22x13
3.5	A03	355MABA03KH#	50	32x24.5x15
3.5	A03	355MABA03KI#	40	39.5x26x15
3.5	A02	355MABA02KH#	70	32x33x18
3.5	A02	355MABA02KJ#	50	42.5x28x17
3.5	A01	355MABA01KJ#	65	42.5x33.5x22
4	A04	405MABA04KH#	40	32x22x13
4	A03	405MABA03KH#	50	32x33x18
4	A03	405MABA03KI#	40	39.5x26x15
4	A02	405MABA02KH#	70	32x33x18
4	A02	405MABA02KJ#	50	42.5x33.5x22
4	A01	405MABA01KJ#	65	42.5x37x28
4.5	A04	455MABA04KH#	40	32x24.5x15
4.5	A03	455MABA03KH#	50	32x33x18
4.5	A03	455MABA03KJ#	35	42.5x28x17
4.5	A02	455MABA02KJ#	50	42.5x30x22
4.5	A01	455MABA01KJ#	65	42.5x33.5x22
4.7	A04	475MABA04KH#	40	32x28x14
4.7	A03	475MABA03KH#	50	32x33x18
4.7	A03	475MABA03KJ#	35	42.5x28x17
4.7	A02	475MABA02KJ#	50	42.5x30x22
4.7	A01	475MABA01KJ#	65	42.5x37x28
5	A04	505MABA04KH#	40	32x28x14
5	A03	505MABA03KH#	50	32x33x18
5	A03	505MABA03KJ#	35	42.5x28x17
5	A02	505MABA02KJ#	50	42.5x30x22
5	A01	505MABA01KJ#	65	42.5x37x28

Capacitance (µF)	Voltage Series	PART NUMBER	dv/dt (v/µs)	Dimensions L x H x T (mm)
5.5	A01	555MABA01KJ#	65	42.5x37x28
6	A04	605MABA04KH#	40	32x33x18
6	A04	605MABA04KI#	30	39.5x26x15
6	A03	605MABA03KJ#	35	42.5x28x17
6	A02	605MABA02KJ#	50	42.5x30x22
6	A01	605MABA01KJ#	65	42.5x37x28
6.3	A02	635MABA02KJ#	50	42.5x30x22
6.3	A01	635MABA01KJ#	65	42.5x37x28
6.3	A03	635MABA01KG#	35	42.5x28x17
6.5	A03	655MABA03KJ#	35	42.5x28x17
6.8	A04	685MABA04KH#	40	32x33x18
6.8	A04	685MABA04KI#	30	39.5x26x15
6.8	A04	685MABA04KJ#	25	42.5x28x17
6.8	A02	685MABA02KJ#	50	42.5x33.5x22
7	A04	705MABA04KH#	40	32x33x18
7	A04	705MABA04KI#	30	39.5x26x15
7	A04	705MABA04KJ#	25	42.5x28x17
7	A01	705MABA01KJ#	65	42.5x45x30
8	A04	805MABA04KH#	40	32x33x18
8	A04	805MABA04KJ#	25	42.5x28x17
8	A03	805MABA03KJ#	35	42.5x30x22
8	A02	805MABA02KJ#	50	42.5x33.5x22
8	A01	805MABA01KJ#	65	42.5x45x30
8.5	A01	855MABA01KJ#	65	42.5x45x30
10	A04	106MABA04KJ#	25	42.5x28x17
10	A03	106MABA03KJ#	35	42.5x30x22
10	A02	106MABA02KJ#	50	42.5x37x28
11	A02	116MABA02KJ#	50	42.5x45x30
12	A04	126MABA04KJ#	25	42.5x30x22
12	A03	126MABA03KJ#	35	42.5x37x28
12	A02	126MABA02KJ#	50	42.5x45x30
13	A02	136MABA02KJ#	50	42.5x45x30
14	A02	146MABA02KJ#	50	42.5x45x30
15	A04	156MABA04KJ#	25	42.5x30x22
15	A03	156MABA03KJ#	35	42.5x37x28
15	A02	156MABA02KJ#	50	42.5x45x30
18	A04	186MABA04KJ#	25	42.5x37x28
18	A03	186MABA03KJ#	35	42.5x45x30
20	A04	206MABA04KJ#	25	42.5x37x28
20	A03	206MABA03KJ#	35	42.5x45x30
22	A04	226MABA04KJ#	25	42.5x37x28
22	A03	226MABA03KJ#	35	42.5x45x30
25	A04	256MABA04KJ#	25	42.5x37x28
27	A04	276MABA04KJ#	25	42.5x45x30
30	A04	306MABA04KJ#	25	42.5x45x30
33	A04	336MABA04KJ#	25	42.5x45x30

NOTE: Replace # with S, L, C, M for lead style (See Page 183)