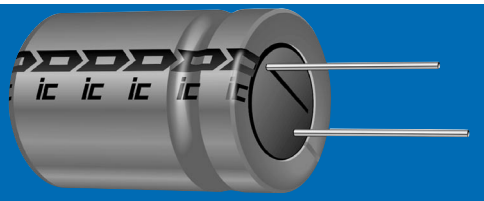
KBM

10,000 Hour Radial Lead Aluminum Electrolytic Capacitors



For Ballast applications and Switching power supplies.

FEATURES

- *Electronic Ballasts*
- *Switching Power Supplies*
- *Power Adapters*
- *Long Life*
- *High Temperature*
- *RoHS Compliant*

SPECIFICATIONS

Operating Temperature Range		**-40°C to + 105°C**							
Capacitance Tolerance		**±20% at 120Hz, 20°C**							
Surge Voltage	**WVDC**	**6.3**	**10**	**16**	**25**	**35**	**50**	**63**	**100**
	SVDC	7.9	13	20	32	44	63	79	125
Dissipation Factor (120 Hz, 20°C)	**WVDC**	**6.3**	**10**	**16**	**25**	**35**	**50**	**63**	**100**
	tan δ	.22	.19	.16	.14	.12	.1	.09	.08
	Add .02 for every 1000µF above 1000µF								

Leakage Current	**Time**	**2 minutes**			
	.01CV or 3µA, Whichever is greater				
Low Temperature Stability Impedance Ratio (120 Hz)	WVDC	6.3	10	16	25 to 100
	-25°C/+28°C	4	3	2	2
	-40°C/+20°C	8	6	4	3

Load Life	After application of rated voltage and ripple current applied at 105*C		
	WVDC	6.3 to 10	16 to 100
		D≤6.3mm, 4000 Hrs. D=8 to 10mm, 5000Hrs. D≥12mm, 8000 Hrs.	D≤6.3mm, 5000 Hrs. D=8 to 10mm, 7000Hrs. D≥12mm, 10,000 Hrs.
	Capacitance change Dissipation factor Leakage current	≤ 25% of initial measured value ≤ 200% of maximum specified value <100% of maximum specified value	
Shelf Life	1000 hours at 105°C with no voltage applied		
	Capacitance change Dissipation factor Leakage current	≤ 25% of initial measured value ≤ 200% of maximum specified value <100% of maximum specified value	

Ripple Current Multipliers	**Frequency (Hz)**				**Temperature (°C)**		
Capacitance (µF)	120	1k	10k	100k	≤65	75	85
.47 to 10	.42	.6	.8	1.0	2.12	1.69	1.0
22 to 33	.55	.75	.90	1.0	2.12	1.69	1.0
47 to 330	.7	.85	.95	1.0	2.12	1.69	1.0
470 to 1000	.75	.9	.98	1.0	2.12	1.69	1.0
2200 to 15000	.8	.95	1.0	1.0	2.12	1.69	1.0

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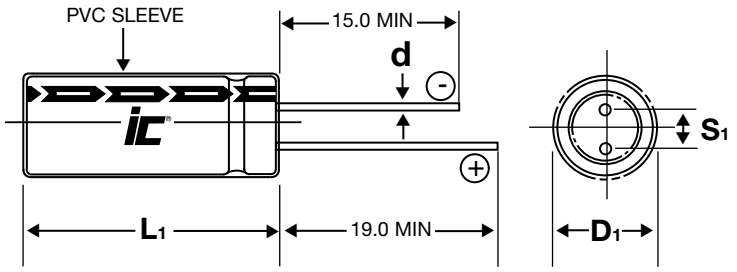
PHYSICAL DIMENSIONS

WVDC (SV) / (μF)	6.3 (7.9)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
0.47	→	→	→	→	→	5x11	→	5x11
1	→	→	→	→	→	5x11	→	5x11
2.2	→	→	→	→	→	5x11	→	5x11
3.3	→	→	→	→	→	5x11	→	5x11
4.7	→	→	→	→	→	5x11	→	5x11
10	→	→	→	→	→	5x11	5x11	6.3x11
22	→	→	→	→	→	5x11	6.3x11	8x11.5
33	→	→	→	→	5x11	6.3x11	8x11.5	10x12.5
47	→	→	→	5x11	→	6.3x11	8x11.5	10x16
100	→	5x11	→	6.3x11	8x11.5	8x14	10x16	12.5x20
220	→	6.3x11	→	8x11.5	10x12.5	10x16	10x25	16x25
330	6.3x11	→	8x11.5	10x12.5	10x16	10x20	12.5x20	16x25
470	→	8x11.5	10x12.5	10x16	10x20	12.5x20	12.5x25	
1000	10x12.5	10x16	10x20	12.5x20	12.5x25	16x25	16x35.5	
2200	→	12.5x20	12.5x25	16x25	16x31.5	18x35.5		
3300	12.5x20	12.5x25	16x25	16x31.5	18x35.5			
4700	→	16x25	16x31.5	18x35.5				
6800	16x25	16x31.5	18x35.5					
10000	16x31.5	18x35.5						
15000	18x35.5							

D x L (mm)



LEAD Spacing vs. Case Diameter

D	5	6.3	8	10	12.5	16	18
S	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
B	1.5	1.5	1.5	1.5	1.5	1.5	1.5

L_1=L+1.5mm Max.
D_1=D+0.5mm Max.
S_1=S+0.5mm

mm

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STANDARD PART LISTING

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Impedance Ω +20°C/-10°C 100kHz	Maximum RMS Ripple Current (mA) +105°C 100kHz	Dimensions DxL (mm)
0.47	50	**474KBM050M**	352.916	5.658/16.973	25	5x11
0.47	100	**474KBM100M**	282.333	5.301/15.902	26	5x11
1	50	**105KBM050M**	165.87	3.989/11.966	36	5x11
1	100	**105KBM100M**	132.696	3.737/11.211	37	5x11
2.2	50	**225KBM050M**	75.3957	2.417/7.252	55	5x11
2.2	100	**225KBM100M**	60.3165	2.265/6.794	55	5x11
3.3	50	**335KBM050M**	50.2638	2.014/6.043	65	5x11
3.3	100	**335KBM100M**	40.211	1.887/5.662	65	5x11
4.7	50	**475KBM050M**	35.2916	1.697/5.092	80	5x11
4.7	100	**475KBM100M**	28.2333	1.59/4.771	80	5x11
10	50	**106KBM050M**	16.587	1.33/3.989	110	5x11
10	63	**106KBM063M**	14.9283	1.246/3.737	120	5x11
10	100	**106KBM100M**	13.2696	1.246/3.737	130	6.3x11
22	50	**226KBM050M**	7.53957	0.725/2.176	140	5x11
22	63	**226KBM063M**	6.78561	0.679/2.038	180	6.3x11
22	100	**226KBM100M**	6.03165	0.679/2.038	190	8x11.5
33	35	**336KBM035M**	6.03165	0.635/1.905	160	5x11
33	50	**336KBM050M**	5.02638	0.564/1.692	200	6.3x11
33	63	**336KBM063M**	4.52374	0.528/1.585	250	8x11.5
33	100	**336KBM100M**	4.0211	0.317/0.951	270	10x12.5
47	25	**476KBM025M**	4.94082	0.539/1.616	170	5x11
47	50	**476KBM050M**	3.52916	0.453/1.358	230	6.3x11
47	63	**476KBM063M**	3.17624	0.424/1.272	280	8x11.5
47	100	**476KBM100M**	2.82333	0.254/0.763	350	10x16
100	10	**107KBM010M**	3.15154	0.482/1.446	210	5x11
100	25	**107KBM025M**	2.32219	0.348/1.045	280	6.3x11
100	35	**107KBM035M**	1.99045	0.329/0.988	370	8x11.5
100	50	**107KBM050M**	1.6587	0.292/0.877	420	8x14
100	63	**107KBM063M**	1.49283	0.192/0.575	530	10x16
100	100	**107KBM100M**	1.32696	0.164/0.493	640	12.5x20
220	10	**227KBM010M**	1.43252	0.249/0.747	350	6.3x11
220	25	**227KBM025M**	1.05554	0.18/0.54	480	8x11.5
220	35	**227KBM035M**	0.90475	0.128/0.383	640	10x12.5
220	50	**227KBM050M**	0.75396	0.113/0.34	760	10x16
220	63	**227KBM063M**	0.67856	0.099/0.297	960	10x25
220	100	**227KBM100M**	0.60317	0.085/0.255	1200	16x25
330	6.3	**337KBM6R3M**	1.1058	0.246/0.737	410	6.3x11
330	16	**337KBM016M**	0.80422	0.152/0.455	520	8x11.5

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Impedance Ω +20°C/-10°C 100kHz	Maximum RMS Ripple Current (mA) +105°C 100kHz	Dimensions DxL (mm)
330	25	**337KBM025M**	0.7037	0.108/0.324	700	10x12.5
330	35	**337KBM035M**	0.6032	0.102/0.306	870	10x16
330	50	**337KBM050M**	0.5026	0.091/0.272	1020	10x20
330	63	**337KBM063M**	0.4524	0.079/0.238	1210	12.5x20
330	100	**337KBM100M**	0.4021	0.068/0.204	1470	16x25
470	10	**477KBM010M**	0.6705	0.138/0.415	560	8x11.5
470	16	**477KBM016M**	0.5647	0.093/0.279	690	10x12.5
470	25	**477KBM025M**	0.4941	0.088/0.265	860	10x16
470	35	**477KBM035M**	0.4235	0.084/0.251	1070	10x20
470	50	**477KBM050M**	0.3529	0.074/0.223	1290	12.5x20
470	63	**477KBM063M**	0.3176	0.065/0.195	1480	12.5x25
1000	6.3	**108KBM6R3M**	0.3649	0.066/0.199	920	10x12.5
1000	10	**108KBM010M**	0.3152	0.063/0.189	1070	10x16
1000	16	**108KBM016M**	0.2654	0.06/0.18	1230	10x20
1000	25	**108KBM025M**	0.2322	0.057/0.171	1580	12.5x20
1000	35	**108KBM035M**	0.1990	0.054/0.162	1940	12.5x25
1000	50	**108KBM050M**	0.1659	0.048/0.144	2390	16x25
1000	63	**108KBM063M**	0.1493	0.042/0.126	2900	16x35.5
2200	10	**228KBM010M**	0.1734	0.036/0.108	1720	12.5x20
2200	16	**228KBM016M**	0.1508	0.034/0.103	1960	12.5x25
2200	25	**228KBM025M**	0.1357	0.032/0.097	2540	16x25
2200	35	**228KBM035M**	0.1206	0.031/0.092	3070	16x31.5
2200	50	**228KBM050M**	0.1056	0.027/0.082	3650	18x35.5
3300	6.3	**338KBM6R3M**	0.1307	0.032/0.095	1910	12.5x20
3300	10	**338KBM010M**	0.1257	0.03/0.09	2170	12.5x25
3300	16	**338KBM016M**	0.1106	0.029/0.086	2570	16x25
3300	25	**338KBM025M**	0.1005	0.027/0.081	3180	16x31.5
3300	35	**338KBM035M**	0.0905	0.026/0.077	3870	18x35.5
4700	10	**478KBM010M**	0.0953	0.025/0.076	2730	16x25
4700	16	**478KBM016M**	0.0847	0.024/0.073	3100	16x31.5
4700	25	**478KBM025M**	0.0776	0.023/0.069	3880	18x35.5
6800	6.3	**688KBM6R3M**	0.0732	0.024/0.071	2920	16x25
6800	10	**688KBM010M**	0.0756	0.023/0.068	3300	16x31.5
6800	16	**688KBM016M**	0.0683	0.022/0.065	3800	18x35.5
10000	6.3	**109KBM6R3M**	0.0663	0.021/0.064	3450	16x31.5
10000	10	**109KBM010M**	0.0614	0.02/0.061	3940	18x35.5
15000	6.3	**159KBM6R3M**	0.0553	0.02/0.061	4130	18x35.5

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