

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	

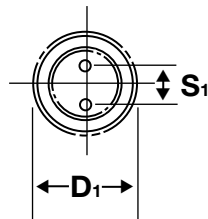
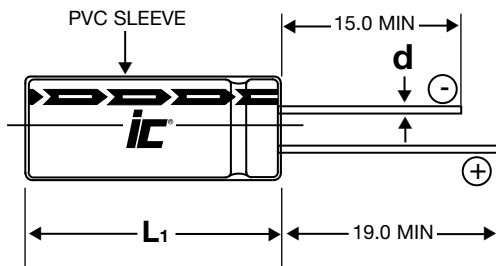
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10,000 Hour
Radial Lead Aluminum
Electrolytic Capacitors

PHYSICAL DIMENSIONS

WVDC (μ F)	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

$L_1 = L + 1.5\text{mm Max.}$

$D_1 = D + 0.5\text{mm Max.}$

$S_1 = S + 0.5\text{mm}$

mm

STANDARD PART LISTING

Capacitance (μ F)	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 (μ F)	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