CKH/CKE

+105°C General Purpose Radial Lead Aluminum Electrolytic Capacitors

Features

- Standard case sizes
- Multiple case sizes
- Lead free leads

Applications

- Bypass
- Coupling
- Filtering
- De-coupling

Specifications

Operating Temperature Range		**-55°C to +105°C (6.3 to 100 WVDC), -40°C to +105°C (160 to 400 WVDC) -25°C to +85°C (450 WVDC)**													
Capacitance Tolerance		**±20% at 120 Hz, 20°C**													
Surge voltage	**WVDC**	**6.3**	**10**	**16**	**25**	**35**	**50**	**63**	**100**	**160**	**200**	**250**	**350**	**400**	**450**
	SVDC	7.9	13	20	32	44	63	79	125	200	250	300	400	450	500
Dissipation Factor	**WVDC**	**6.3**	**10**	**16**	**25**	**35**	**50**	**63**	**100**	**160**	**200**	**250**	**350**	**400**	**450**
	Tan δ	.24	.2	.17	.15	.12	.1	.1	.08	.15	.15	.15	.2	.2	.2
		Add .02 for every 1000uF above 1000uF													

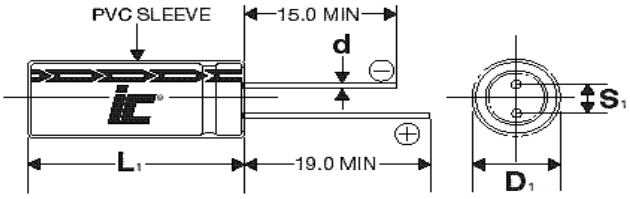
Leakage current	**6.3 to 100 WVDC**		**160 to 450 WVDC**
	1 Minutes	**2 Minutes**	**2 Minutes**
	.03CV or 4uA, Whichever is greater	.01CV or 3uA, Whichever is greater	.03CV+40uA

Low temperature stability Impedance ratio (120 Hz)	**WVDC**	**6.3**	**10**	**16**	**25**	**35**	**50**	**63**	**100**	**160**	**200**	**250**	**350**	**400**	**450**
	-25°C to +20°C	4	3	2	2	2	2	2	2	3	3	3	6	6	15
	-40°C to +20°C	5	10	8	6	4	3	3	3	3	4	4	10	10	-

Load Life	**2000 hours at 105°C with rated WVDC and ripple current applied**
	Capacitance change ≤20% of initial measured value
	Dissipation factor ≤150% of maximum specified value
	Leakage current ≥100% of maximum specified value

Shelf Life	**1000 hours at 105°C with no voltage applied**
	Capacitance change ≤20% initial measured value
	Dissipation factor ≤200% of maximum specified value
	Leakage current ≥100% of maximum specified value

Ripple Current Multipliers		**Frequency (Hz)**				**Temperature (°C)**			
	WVDC	**50**	**120**	**1k**	**10k**	**+105**	**+85**	**+70**	**+60**
	6.3 to 25V	.85	1.0	1.10	1.20	1.0	1.4	1.4	1.75
	35 to 100V	.8	1.0	1.15	1.25	1.0	1.4	1.4	1.75
	160 to 250V	.75	1.0	1.25	1.40	1.0	1.4	1.4	1.75
	350 to 450V	.7	1.0	1.30	1.80	1.0	1.4	1.4	1.75



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

mm

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

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CKH_CKE

+105°C, Extended life 2000 hour

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxL (mm)
0.1	50	104CKH050M	1657.86	5	5x11
0.15	50	154CKH050M	1105.24	5	5x11
0.22	50	224CKH050M	753.575	7	5x11
0.33	50	334CKH050M	502.38	10	5x11
0.47	100	474CKH100M	282.19	12	5x11
0.47	250	474CKH250M	529.106	15	6.3x11
0.68	50	684CKH050M	243.804	10	5x11
1	50	105CKH050M	165.79	17	5x11
1	100	105CKE100M	132.63	19	5x11
1	250	105CKE250M	248.68	21	6.3x11
1	350	105CKE350M	331.57	21	6.3x11
1	400	105CKE400M	331.57	21	8x11.5
1	450	105CKE450M	331.57	22	10x12.5
1.5	50	155CKH050M	110.52	15	5x11
2.2	50	225CKH050M	75.358	25	5x11
2.2	100	225CKE100M	60.286	28	5x11
2.2	250	225CKH250M	113.036	31	6.3x11
2.2	350	225CKE350M	150.71	21	6.3x11
2.2	400	225CKE400M	150.71	26	8x11.5
2.2	450	225CKE450MJM	150.71	20	8x11.5
2.2	450	225CKE450M	150.71	31	10x12.5
3.3	50	335CKE050M	50.238	31	5x11
3.3	100	335CKE100M	40.19	34	5x11
3.3	200	335CKE200M	75.358	34	6.3x11
3.3	250	335CKE250M	75.358	44	8x11.5
3.3	250	335CKE250MGM	75.358	28	6.3x11
3.3	350	335CKE350MJM	100.477	30	8x11.5
3.3	400	335CKE400M	100.477	41	10x12.5
3.3	400	335CKE400MJM	100.477	34	8x11.5
3.3	450	335CKE450MLN	100.477	28	10x13
3.3	450	335CKE450M	100.477	50	12.5x20
4.7	100	475CKE100M	28.219	41	5x11
4.7	160	475CKE160M	52.911	38	6.3x11
4.7	200	475CKE200M	52.911	35	6.3x11
4.7	250	475CKE250MGM	52.911	35	6.3x11
4.7	250	475CKH250M	52.911	60	10x12.5
4.7	250	475CKE250M	52.911	50	8x11.5
4.7	350	475CKE350M	70.547	47	10x12.5
4.7	350	475CKE350MJM	70.547	39	8x11.5
4.7	400	475CKE400M	70.547	55	10x16
4.7	400	475CKE400MLN	70.547	42	10x12.5
4.7	450	475CKH450M	70.547	60	12.5x20
4.7	450	475CKE450M	70.547	43	10x20
4.7	450	475CKE450MLN	70.547	32	10x12.5
6.8	50	685CKH050M	24.381	40	5x11
6.8	63	685CKH063M	24.381	42	5x11
6.8	100	685CKH100M	19.504	52	6.3x11
6.8	250	685CKH250M	36.571	65	10x16
10	50	106CKH050M	16.579	55	5x11
10	63	106CKE063M	16.579	55	5x11
10	100	106CKH100M	13.263	65	6.3x11
10	100	106CKE100MEM	13.263	50	5x11
10	160	106CKE160M	24.868	65	8x11.5
10	200	106CKE200M	24.868	75	10x12.5
10	200	106CKE200MJM	24.868	57	8x11.5
10	250	106CKE250MLN	24.868	71	10x12.5
10	250	106CKH250M	24.868	90	10x16
10	350	106CKE350M	33.157	85	10x20

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxL (mm)
10	350	106CKE350MLQ	33.157	64	10x16
10	400	106CKE400M	33.157	73	10x20
10	400	106CKE400MLQ	33.157	64	10x16
10	450	106CKE450MLU	33.157	27	10x21
10	450	106CKE450M	33.157	65	12.5x20
15	50	156CKH050M	11.052	58	5x11
15	63	156CKH063M	11.052	65	6.3x11
15	100	156CKH100M	8.842	80	8x11.5
15	160	156CKH160M	11.052	80	10x16
15	250	156CKH250M	11.052	90	10x20
22	50	226CKH050M	7.536	80	5x11
22	63	226CKH063M	7.536	85	6.3x11
22	63	226CKE063M	7.536	80	5x11
22	100	226CKH100M	6.029	110	8x11.5
22	100	226CKE100M	6.029	100	6.3x11
22	160	226CKE160MLN	11.304	92	10x12.5
22	160	226CKE160M	11.304	110	10x16
22	200	226CKE200MLQ	11.304	105	10x16
22	200	226CKH200M	11.3036	130	10x20
22	250	226CKE250MLU	11.304	105	10x20
22	250	226CKE250M	11.304	160	12.5x20
22	350	226CKE350MNU	15.072	105	12.5x20
22	400	226CKE400M	15.072	150	12.5x25
22	450	226CKE450M	15.072	130	16x25
22	450	226CKH450M	15.071	160	16x31.5
22	450	226CKE450MNV	15.0715	100	13x26
33	50	336CKE050M	5.024	95	5x11
33	63	336CKE063M	5.024	110	6.3x11
33	100	336CKE100M	4.019	140	8x11.5
33	100	336CKH100M	4.019	140	10x12.5
33	160	336CKE160M	7.536	150	10x20
33	160	336CKE160MLQ	7.536	125	10x16
33	200	336CKE200MLU	7.536	140	10x20
33	250	336CKE250M	7.536	190	12.5x20
33	350	336CKE350MNV	10.048	170	12.5x25
33	400	336CKE400M	10.048	160	16x25
33	400	336CKH400M	10.048	210	16x31.5
33	450	336CKE450MQV	10.048	120	16x25
33	450	336CKE450M	10.048	230	18x35.5
47	25	476CKH025M	5.291	95	5x11
47	35	476CKE035M	4.233	110	5x11
47	50	476CKE050M	3.527	130	6.3x11
47	63	476CKE063M	3.527	130	6.3x11
47	63	476CKH063M	3.527	135	8x11.5
47	100	476CKE100MJM	2.822	140	8x11.5
47	100	476CKH100M	2.822	190	10x16
47	100	476CKE100M	2.822	180	10x12.5
47	160	476CKE160MLU	5.291	150	10x20
47	160	476CKE160M	5.291	190	12.5x20
47	200	476CKE200M	5.291	210	12.5x20
47	250	476CKE250MNU	5.291	190	13x21
47	250	476CKE250M	5.291	250	12.5x25
47	350	476CKH350M	7.055	250	16x35.5
47	350	476CKE350M	7.055	190	16x25
47	400	476CKE400M	7.055	210	16x31.5
47	400	476CKE400MQV	7.055	200	16x25
47	450	476CKE450MQW	7.055	155	16x31.5
68	16	686CKH016M	4.145	95	5x11

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CKH_CKE

+105°C, Extended life 2000 hour

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxL (mm)
68	25	686CKH025M	3.657	105	6.3x11
68	50	686CKH050M	2.438	165	8x11.5
68	63	686CKH063M	2.438	190	10x12.5
68	100	686CKH100M	1.95	255	10x16
68	200	686CKH200M	3.657	235	16x25
68	250	686CKH250M	3.657	255	16x31.5
100	16	107CKE016M	2.818	130	5x11
100	25	107CKE025MEM	2.487	125	5x11
100	35	107CKE035M	1.989	170	6.3x11
100	50	107CKH050M	1.658	220	8x11.5
100	63	107CKH063M	1.658	240	10x12.5
100	63	107CKE063MJM	1.658	200	8x11.5
100	100	107CKE100MLQ	1.326	240	10x16
100	100	107CKE100M	1.326	320	10x20
100	160	107CKE160M	2.487	310	12.5x25
100	200	107CKE200M	2.487	340	16x25
100	250	107CKE250M	2.487	410	16x31.5
100	250	107CKE250MQV	2.487	310	16x25
100	350	107CKE350M	3.316	410	18x40
100	350	107CKE350MRY	3.316	370	18x35.5
100	400	107CKE400M	3.316	310	18x35.5
150	10	157CKH010M	2.211	125	6.3x11
150	25	157CKH025M	1.658	180	8x11.5
150	35	157CKH035M	1.326	230	10x12.5
150	50	157CKH050M	1.105	260	10x16
150	63	157CKH063M	1.105	315	10x20
150	100	157CKH100M	0.884	410	12.5x20
150	160	157CKH160M	1.658	330	16x31.5
150	200	157CKH200M	1.658	350	16x35.5
220	10	227CKE010M	1.5072	180	5x11
220	16	227CKE016M	1.2811	220	6.3x11
220	25	227CKE025MGM	1.13	200	6.3x11
220	35	227CKE035M	0.904	300	8x11.5
220	50	227CKE050M	0.754	350	10x12.5
220	50	227CKH050M	0.7536	360	10x16
220	63	227CKH063M	0.7536	400	10x20
220	63	227CKE063M	0.754	390	10x16
220	100	227CKE100M	0.603	560	12.5x25
220	100	227CKH100M	0.603	540	16x25
220	100	227CKE100MNU	0.603	390	12.5x20
220	160	227CKE160MQW	1.13	410	16x31.5
220	200	227CKE200M	1.13	500	16x35.5
220	250	227CKE250M	1.13	485	18x35.5
330	10	337CKE010M	1.005	250	6.3x11
330	16	337CKE016MGM	0.854	225	6.3x11
330	25	337CKE025M	0.754	330	8x11.5
330	35	337CKE035M	0.603	390	10x12.5
330	50	337CKH050M	0.502	490	10x20
330	50	337CKE050M	0.502	480	10x16
330	63	337CKE063M	0.502	520	10x20
330	63	337CKH063M	0.502	530	12.5x20
330	100	337CKH100M	0.402	660	16x25
330	100	337CKE100M	0.402	690	12.5x25
330	160	337CKE160M	0.754	550	18x35.5
330	200	337CKE200M	0.754	675	18x40
470	10	477CKE010M	0.7055	290	6.3x11
470	16	477CKE016M	0.5997	370	8x11.5
470	16	477CKH016M	0.599	370	10x12.5

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxL (mm)
470	25	477CKE025M	0.529	420	10x12.5
470	35	477CKE035M	0.423	520	10x16
470	50	477CKE050M	0.353	630	10x20
470	50	477CKH050M	0.353	630	12.5x20
470	63	477CKH063M	0.353	690	12.5x25
470	63	477CKE063M	0.353	670	12.5x20
470	100	477CKE100M	0.282	830	16x25
470	100	477CKH100M	0.282	870	16x31.5
680	6.3	687CKH6R3M	0.585	375	10x12.5
680	16	687CKH016M	0.415	490	10x16
680	35	687CKH035M	0.293	695	12.5x20
680	50	687CKH050M	0.244	825	12.5x25
680	63	687CKH063M	0.244	925	16x25
1000	6.3	108CKE6R3M	0.398	460	8x11.5
1000	10	108CKE010M	0.332	530	10x12.5
1000	16	108CKE016M	0.282	630	10x16
1000	16	108CKE016MLN	0.282	500	10x12.5
1000	16	108CKH016M	0.282	660	10x20
1000	25	108CKE025M	0.249	740	10x20
1000	25	108CKE025MLQ	0.249	610	10x16
1000	35	108CKH035M	0.199	890	12.5x20
1000	50	108CKH050M	0.166	1010	16x25
1000	50	108CKE050M	0.166	1070	12.5x25
1000	63	108CKE063M	0.166	1080	16x25
1000	63	108CKH063M	0.166	1120	16x31.5
1000	100	108CKE100M	0.133	1580	18x40
1000	100	108CKE100MRY	0.133	1000	18x35.5
1500	6.3	158CKH6R3M	0.287	585	10x20
1500	16	158CKH016M	0.21	800	12.5x20
1500	25	158CKH025M	0.188	905	12.5x25
1500	35	158CKH035M	0.1547	1140	16x25
1500	50	158CKH050M	0.133	1250	18x31.5
2200	6.3	228CKE6R3M	0.211	760	10x16
2200	10	228CKE010MLQ	0.1809	705	10x16
2200	10	228CKE010M	0.1809	910	10x20
2200	16	228CKE016M	0.1583	1050	12.5x20
2200	16	228CKE016MLU	0.1583	710	10x20
2200	16	228CKH016M	0.158	1090	12.5x25
2200	25	228CKE025M	0.1432	1220	12.5x25
2200	25	228CKH025M	0.143	1210	16x25
2200	35	228CKH035M	0.121	1440	16x31.5
2200	35	228CKE035M	0.1206	1350	16x25
2200	50	228CKE050MQW	0.1055	1410	16x31.5
2200	50	228CKH050M	0.106	1700	18x35.5
2200	50	228CKE050M	0.1055	1700	16x35.5
2200	63	228CKE063M	0.1055	1650	18x35.5
3300	6.3	338CKE6R3M	0.1507	990	10x20
3300	10	338CKE010M	0.131	1140	12.5x20
3300	16	338CKE016M	0.116	1340	12.5x25
3300	16	338CKH016M	0.116	1270	16x25
3300	25	338CKH025M	0.106	1530	16x31.5
3300	25	338CKE025M	0.106	1420	16x25
3300	35	338CKE035M	0.0905	1810	16x35.5
3300	35	338CKE035MQW	0.0905	1500	16x31.5
3300	50	338CKE050M	0.0804	2060	18x35.5
4700	10	478CKE010M	0.0847	1420	12.5x25
4700	10	478CKH010M	0.0988	1350	16x25
4700	16	478CKH016M	0.0882	1560	16x31.5

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CKH_CKE

+105°C, Extended life 2000 hour

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxL (mm)
4700	16	478CKE016M	0.0741	1510	16x25
4700	25	478CKE025M	0.081	1740	16x31.5
4700	25	478CKH025M	0.081	1780	18x31.5
4700	25	478CKE025MQV	0.081	1570	16x25
4700	35	478CKE035M	0.0706	2110	18x35.5
4700	35	478CKE035MQY	0.0706	1780	16x35.5
6800	6.3	688CKE6R3M	0.0585	1500	12.5x25
6800	10	688CKE010M	0.0488	1600	16x25
6800	16	688CKE016M	0.071	1860	16x31.5
6800	16	688CKE016MQV	0.071	1600	16x25
6800	25	688CKE025M	0.0658	2170	18x35.5
6800	25	688CKE025MQY	0.0658	1850	16x35.5
6800	35	688CKE035M	0.0585	2000	18x40
10000	6.3	109CKH6R3M	0.07	1730	16x31.5

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxL (mm)
10000	6.3	109CKE6R3M	0.0398	1660	16x25
10000	10	109CKE010MLQ	0.063	1820	16x31.5
10000	10	109CKH010M	0.063	2030	18x35.5
10000	10	109CKE010M	0.063	2040	16x35.5
10000	16	109CKE016M	0.058	1960	18x35.5
10000	16	109CKE016MQY	0.058	1930	16x35.5
10000	25	109CKE025M	0.0547	2000	18x40
15000	6.3	159CKE6R3M	0.0575	2140	16x35.5
15000	6.3	159CKE6R3MQW	0.0575	1820	16x31.5
15000	10	159CKE010M	0.0531	2370	18x35.5
15000	10	159CKE010MQY	0.0531	2050	16x35.5
15000	16	159CKE016M	0.0497	2210	18x40
22000	6.3	229CKE6R3MRY	0.0497	2280	18x35.5
22000	10	229CKE010M	0.0467	2420	18x40

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Стандарт Электрон Связь

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Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

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