

Applications

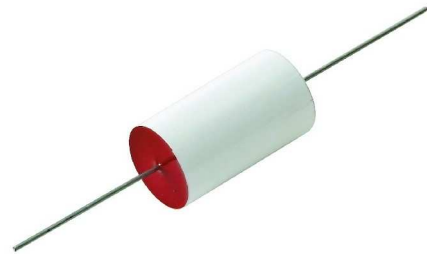
- AC or DC voltages
- Professional Applications
- Tuned circuits, filters, timers
- Integrators, S/ H
- Coupling / decoupling, Audio
- Instrumentation
- Signalling

Main Characteristics

- Dry plastic film technology
- Nominal Voltage: 63 VDC to 400 VDC
- Climatic Category: 55/125/56
- Tolerances $\pm 20\%$, $\pm 10\%$, $\pm 5\%$, $\pm 2\%$, $\pm 1\%$

Design

- Metallized polycarbonate film
- Polyester wrap
- Tinned copper wire axial leads
- Epoxy resin end-seal (UL-V0)



CKM 311

1.0 Rated Values and Operation Data

DC	Nominal Voltage U_{R1} [VDC]	$\leq 85^{\circ}\text{C}$	63	160	250	400
	Category Voltage U_c [VDC]	$\leq 125^{\circ}\text{C}$	31.5	80	125	200
	Test Voltage U_T [VDC]	1 minute / 23°C	100	260	400	640
AC	Nominal Voltage U_N -50/60 Hz [VAC]	$\leq 85^{\circ}\text{C}$	40	100	160	200

2.0 Capacitance Range

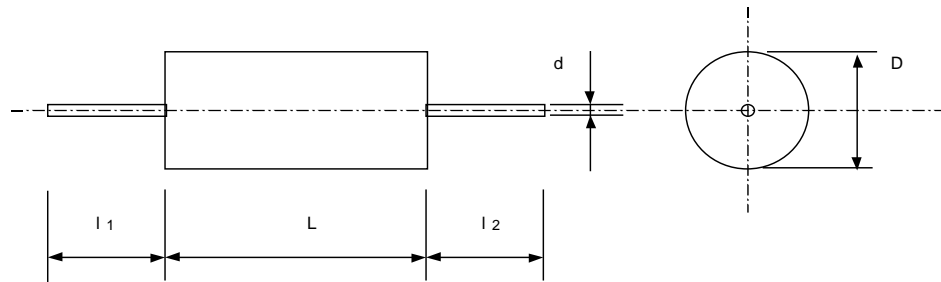
Cn =>	10 nF	→	2.2 μF	6.8 μF	15 μF	22 μF	33 μF
63 VDC							
100 VDC							
160 VDC							
250 VDC							
400 VDC							

3.0 Characteristics

			Min	Typ	Max
Dissipation factor	tg δ	≤ 1 μF		9 ... 12	30 x 10 ⁻⁴
		> 1 μF		15 ... 25	50 x 10 ⁻⁴
Insulation resistance 1min à 23°C	R _i [MOhms]	≤ 0.33 μF	≤ 100 V: 10V	15000	30000
			> 100 V: 100 V	30000	60000
Time Constant 1min at 23°C	R _i C [s]	> 0.33 μF	≤ 100 V: 10V	5000	10000
			> 100 V: 100 V	10000	20000
Temperature coefficient	α _c [ppm]		- 30 ... +80°C	+ 40	+ 70
Long term Stability	ΔC / C [%]		2 years, ≤ 50% RH, ≤ 40°C		-0.5 ... +1

5.0 Dimensions, shapes:

The capacitors are axial.



l_1, l_2
min 30 mm

The capacitors are delivered in bulk.

On special request we can deliver tape-mounted

CKM 311 63 VDC

B4F6	Type	Cn	Dimension		
Pos.		[μ F]	\varnothing [mm]	L [mm]	\varnothing lead [mm]
1	CKM 311 6-122	0.022	6	14.5	0.6
2	CKM 311 6-127	0.027	6	14.5	0.6
3	CKM 311 6-133	0.033	6	14.5	0.6
4	CKM 311 6-139	0.039	6.5	14.5	0.6
5	CKM 311 6-147	0.047	6.5	14.5	0.6
6	CKM 311 6-156	0.056	6.5	14.5	0.6
7	CKM 311 6-168	0.068	6.5	14.5	0.6
8	CKM 311 6-182	0.082	6.5	14.5	0.6
8	CKM 311 6-010	0.10	6.5	14.5	0.6
9	CKM 311 6-012	0.12	7	20	0.8
10	CKM 311 6-015	0.15	7	20	0.8
11	CKM 311 6-018	0.18	8	20	0.8
12	CKM 311 6-022	0.22	8	20	0.8
13	CKM 311 6-027	0.27	8.5	20	0.8
14	CKM 311 6-033	0.33	8.5	20	0.8
15	CKM 311 6-039	0.39	9	20	0.8
16	CKM 311 6-047	0.47	9.5	20	0.8
17	CKM 311 6-056	0.56	10	20	0.8
18	CKM 311 6-068	0.68	10.5	20	0.8
19	CKM 311 6-082	0.82	11.5	20	0.8
20	CKM 311 6-1.0	1.0	12	20	0.8
21	CKM 311 6-1.2	1.2	10.5	33	1.0
22	CKM 311 6-1.5	1.5	10.5	33	1.0
23	CKM 311 6-1.8	1.8	11	33	1.0
24	CKM 311 6-2.2	2.2	11.5	33	1.0
25	CKM 311 6-2.7	2.7	12.6	33	1.0
26	CKM 311 6-3.3	3.3	13.8	33	1.0
27	CKM 311 6-3.9	3.9	15	33	1.0
28	CKM 311 6-4.7	4.7	16.2	33	1.0
29	CKM 311 6-5.6	5.6	17.4	33	1.0
30	CKM 311 6-6.8	6.8	19.2	33	1.0
31	CKM 311 6-8.2	8.2	20.4	33	1.0
32	CKM 311 6-10	10	22.8	33	1.0

CKM 311 160VDC

B4F6	Type	Cn	Dimension		
Pos.		[μ F]	\varnothing [mm]	L [mm]	\varnothing lead [mm]
1	CKM 311 16-115	0.015	6.5	14.5	0.6
2	CKM 311 16-118	0.018	6.5	14.5	0.6
3	CKM 311 16-122	0.022	6.5	14.5	0.6
4	CKM 311 16-127	0.027	6.5	14.5	0.6
5	CKM 311 16-133	0.033	6.5	14.5	0.6
6	CKM 311 16-139	0.039	7	14.5	0.6
7	CKM 311 16-147	0.047	7	14.5	0.6
8	CKM 311 16-156	0.056	7.5	20	0.8
9	CKM 311 16-168	0.068	7.5	20	0.8
10	CKM 311 16-182	0.082	7.5	20	0.8
11	CKM 311 16-010	0.10	7.5	20	0.8
12	CKM 311 16-012	0.12	8	20	0.8
13	CKM 311 16-015	0.15	8.5	20	0.8
14	CKM 311 16-018	0.18	9.5	20	0.8
15	CKM 311 16-022	0.22	10	20	0.8
16	CKM 311 16-027	0.27	10.5	20	0.8
17	CKM 311 16-033	0.33	11	20	0.8
18	CKM 311 16-039	0.39	12	20	0.8
19	CKM 311 16-047	0.47	12.6	20	0.8
20	CKM 311 16-056	0.56	10	33	1.0
21	CKM 311 16-068	0.68	11	33	1.0
22	CKM 311 16-082	0.82	11	33	1.0
23	CKM 311 16-1.0	1.0	12.6	33	1.0
24	CKM 311 16-1.2	1.2	13.2	33	1.0
25	CKM 311 16-1.5	1.5	14.4	33	1.0
26	CKM 311 16-1.8	1.8	15.6	33	1.0
27	CKM 311 16-2.2	2.2	16.8	33	1.0
28	CKM 311 16-2.7	2.7	18.6	33	1.0
29	CKM 311 16-3.3	3.3	20.4	33	1.0
30	CKM 311 16-3.9	3.9	22.2	33	1.0
31	CKM 311 16-4.7	4.7	24	33	1.0

CKM 311 250VDC

B4F6	Type	Cn	Dimension		
Pos.		[μ F]	\varnothing [mm]	L [mm]	\varnothing lead [mm]
1	CKM 311 25-233	0.0033	6	12	0.6
2	CKM 311 25-239	0.0039	6	12	0.6
3	CKM 311 25-247	0.0047	6	12	0.6
4	CKM 311 25-256	0.0056	6	12	0.6
5	CKM 311 25-268	0.0068	6	12	0.6
6	CKM 311 25-282	0.0082	6	12	0.6
7	CKM 311 25-110	0.010	6	14.5	0.6
8	CKM 311 25-112	0.012	6.5	14.5	0.6
9	CKM 311 25-115	0.015	6.5	14.5	0.6
10	CKM 311 25-118	0.018	7	14.5	0.6
11	CKM 311 25-122	0.022	7	14.5	0.6
12	CKM 311 25-127	0.027	7.5	20	0.8
13	CKM 311 25-133	0.033	7.5	20	0.8
14	CKM 311 25-139	0.039	7.5	20	0.8
15	CKM 311 25-147	0.047	7.5	20	0.8
16	CKM 311 25-156	0.056	8	20	0.8
17	CKM 311 25-168	0.068	8.5	20	0.8
18	CKM 311 25-182	0.082	9.5	20	0.8
19	CKM 311 25-010	0.10	9.5	20	0.8
20	CKM 311 25-012	0.12	10.5	20	0.8
21	CKM 311 25-015	0.15	11	20	0.8
22	CKM 311 25-018	0.18	12	20	0.8
23	CKM 311 25-022	0.22	12.6	20	0.8
24	CKM 311 25-027	0.27	10.5	33	1.0
25	CKM 311 25-033	0.33	11	33	1.0
26	CKM 311 25-039	0.39	12	33	1.0
27	CKM 311 25-047	0.47	12.6	33	1.0
28	CKM 311 25-056	0.56	13.8	33	1.0
29	CKM 311 25-068	0.68	15	33	1.0
30	CKM 311 25-082	0.82	15.6	33	1.0
31	CKM 311 25-1.0	1.0	16.8	33	1.0
32	CKM 311 25-1.2	1.2	18.6	33	1.0
33	CKM 311 25-1.5	1.5	20.4	33	1.0
34	CKM 311 25-1.8	1.8	22.8	33	1.0
35	CKM 311 25-2.2	2.2	24	33	1.0

CKM 311 400VDC

B4F6	Type	Cn	Dimension		
Pos.		[μ F]	\varnothing [mm]	L [mm]	\varnothing lead [mm]
1	CKM 311 40-210	0.0010	6	12	0.6
2	CKM 311 40-212	0.0012	6	12	0.6
3	CKM 311 40-215	0.0015	6	12	0.6
4	CKM 311 40-218	0.0018	6	12	0.6
5	CKM 311 40-222	0.0022	6	12	0.6
6	CKM 311 40-227	0.0027	6	12	0.6
7	CKM 311 40-233	0.0033	6	12	0.6
8	CKM 311 40-239	0.0039	6	14.5	0.6
9	CKM 311 40-247	0.0047	6	14.5	0.6
10	CKM 311 40-256	0.0056	6.5	14.5	0.6
11	CKM 311 40-268	0.0068	6.5	14.5	0.6
12	CKM 311 40-282	0.0082	7	14.5	0.6
13	CKM 311 40-110	0.010	7	14.5	0.6
14	CKM 311 40-112	0.012	7.5	20	0.8
15	CKM 311 40-115	0.015	7.5	20	0.8
16	CKM 311 40-118	0.018	7.5	20	0.8
17	CKM 311 40-122	0.022	7.5	20	0.8
18	CKM 311 40-127	0.027	8	20	0.8
19	CKM 311 40-133	0.033	8.5	20	0.8
20	CKM 311 40-139	0.039	9	20	0.8
21	CKM 311 40-147	0.047	9	20	0.8
22	CKM 311 40-156	0.056	9.5	20	0.8
23	CKM 311 40-168	0.068	10	20	0.8
24	CKM 311 40-182	0.082	10.5	20	0.8
25	CKM 311 40-010	0.10	11.5	20	0.8
26	CKM 311 40-012	0.12	9.5	33	1.0
27	CKM 311 40-015	0.15	10	33	1.0
28	CKM 311 40-018	0.18	10.5	33	1.0
29	CKM 311 40-022	0.22	11	33	1.0
30	CKM 311 40-027	0.27	12	33	1.0
31	CKM 311 40-033	0.33	13.2	33	1.0
32	CKM 311 40-039	0.39	13.8	33	1.0
33	CKM 311 40-047	0.47	15.6	33	1.0
34	CKM 311 40-056	0.56	16.2	33	1.0
35	CKM 311 40-068	0.68	18	33	1.0
363	CKM 311 40-082	0.82	19.2	33	1.0
37	CKM 311 40-1.0	1.0	22.2	33	1.0