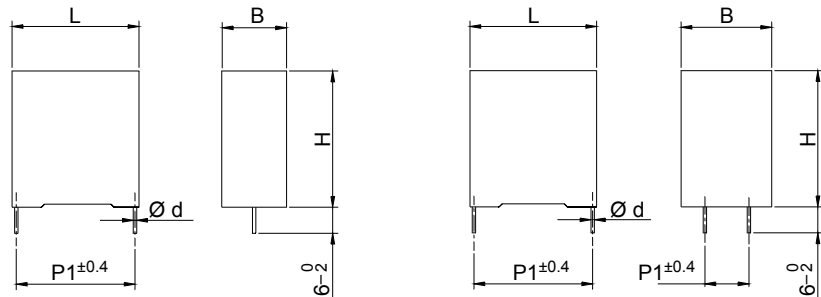


## General characteristics

- Self-Healing
- Low losses
- High ripple current
- High contact reliability
- Suitable for high frequency applications



Wire Diameter	0.8 mm 20 AWG	1.2 mm 16 AWG
13 <sup>th</sup> digit code	1	3

## TECHNICAL DATA

General technical data	VDE 0560 - IEC61071 - EN61071
Application class (DIN 40040)	GPD / LS
Temperature range (Case)	-40 to + 85 °C
Max permissible ambient temperature	+70 °C
Capacitance tolerance code (15 <sup>th</sup> digit )	J = ± 5 % ; K = ± 10%
Peak non-repetitive max current	$I_{PKR} \times 1.5$
Test voltage terminal to terminal $U_{TT}$	2 $U_n$ for 10 seconds
Test voltage terminal to case $U_{TC}$	3kV - 50Hz for 60 seconds
Dissipation factor (tgδ)	$\leq 5 \times 10^{-4}$ at 1 kHz and 20 °C
Permissible relative humidity	Annual average $\leq 95\%$ on 30 days / year, continuously 100% on other days occasionally 100%. Dewing not admissible
IEC climatic category	40 / 85 / 56 according to IEC 68-1
Capacitance deviation in the operating temperature range of -40 to +85 °C	$\pm 1.5\%$ max on capacitance value measured at +20 °C
Change of capacitance versus operating time	-3% after 30.000 hours at $U_{RMS}$ or after 100.000 hours at $U_n$
Case components	Solvent resistant plastic case with epoxy resin sealing. Flame retardant execution (UL class 94 V0).
Terminals	Tinned copper 2 or 4 wires (See figure on top)
Installation	Whatever Position
Life Expectancy	$\geq 30.000$ hours at $U_{RMS}$ ; $\geq 100.000$ hours at $U_n$
Failure quota	300 / 10 <sup>9</sup> components hour

PEAK VOLTAGE TABLE

Un	850 V	1000 V	1200 V	2000 V	3000 V
U <sub>MAX</sub>	1200 V	1300 V	1600 V	2400 V	3500 V

GENERAL CHARACTERISTICS

Code	C μF	Un Vdc	U <sub>RMS</sub> Vac	dv/dt V/μs	I <sub>PKR</sub> A	ESR (mΩ) max @ 100kHz			I <sub>RMS</sub> (A) 100kHz @70°C			DIMENSIONS mm				
						d=0.8	d=1.2	d=1.2	d=0.8	d=1.2	d=1.2	B	H	L	p	p1
						2 wires	2 wires	4 wires	2 wires	2 wires	4 wires					
C4ASMB_3150_A_	0.15	850	500	1232	185	14.3	13.6	-	8	8	-	10	20	32	27.5	-
C4ASMB_3220_B_	0.22	850	500	1232	271	10.2	9.5	-	9	10	-	13	22	32	27.5	-
C4ASMB_3330_C_	0.33	850	500	1232	407	7.6	6.9	6.0	9	13	14	14	28	32	27.5	5.1
C4ASMB_3470_E_	0.47	850	500	1232	579	6.2	5.3	4.3	9	14	19	18	33	32	27.5	5.1
C4ASMB_3680_G_	0.68	850	500	1232	838	5.2	4.2	3.1	9	14	25	22	37	32	27.5	10.2
C4ASMB_4100_F_	1	850	500	758	758	6.2	5.2	4.1	9	14	22	20	40	41.5	37.5	10.2
C4ASMB_4200_H_	2	850	500	758	1516	4.6	3.5	2.3	9	14	29	24	44	41.5	37.5	10.2
C4ASMB_4300_M_	3	850	500	469	1407	5.6	4.5	3.2	9	14	29	30	45	57.5	52.5	10.2
C4ASMB_4400_M_	4	850	500	469	1876	4.9	3.8	2.5	9	14	29	30	45	57.5	52.5	20.3
C4ASMB_4500_N_	5	850	500	469	2345	4.7	3.5	2.1	9	14	29	35	50	57.5	52.5	20.3
C4ASNB_3150_A_	0.15	1000	600	1344	202	13.3	12.7	-	8	8	-	10	20	32	27.5	-
C4ASNB_3220_B_	0.22	1000	600	1344	296	9.7	9.0	8.3	9	11	11	13	22	32	27.5	5.1
C4ASNB_3330_C_	0.33	1000	600	1344	444	7.3	6.5	5.6	9	14	15	14	28	32	27.5	5.1
C4ASNB_3470_E_	0.47	1000	600	1344	632	6.0	5.1	4.1	9	14	20	18	33	32	27.5	5.1
C4ASNB_3680_G_	0.68	1000	600	1344	914	5.0	4.0	3.0	9	14	25	22	37	32	27.5	10.2
C4ASNB_4100_F_	1	1000	600	827	827	5.9	5.0	3.9	9	14	22	20	40	41.5	37.5	10.2
C4ASNB_4150_J_	1.5	1000	600	827	1241	4.7	3.8	2.7	9	14	29	28	37	42.5	37.5	10.2
C4ASNB_4200_L_	2	1000	600	827	1654	4.5	3.4	2.2	9	14	29	30	45	42	37.5	20.3
C4ASNB_4220_L_	2.2	1000	600	827	1819	4.4	3.3	2.0	9	14	29	30	45	42	37.5	20.3
C4ASNB_4300_M_	3	1000	600	512	1536	5.4	4.3	3.0	9	14	29	30	45	57.5	52.5	20.3
C4ASNB_4400_N_	4	1000	600	512	2048	5.0	3.8	2.4	9	14	29	35	50	57.5	52.5	20.3
C4ASNB_4470_N_	4.7	1000	600	512	2406	4.7	3.5	2.1	9	14	29	35	50	57.5	52.5	20.3
C4ASPB_3100_A_	0.1	1200	630	1568	157	17.4	16.8	-	7	7	-	10	20	32	27.5	-
C4ASPB_3150_B_	0.15	1200	630	1568	235	12.2	11.6	-	9	10	-	13	22	32	27.5	-
C4ASPB_3220_C_	0.22	1200	630	1568	345	9.2	8.4	7.5	9	12	13	14	28	32	27.5	5.1
C4ASPB_3330_E_	0.33	1200	630	1568	517	7.0	6.1	5.1	9	14	18	18	33	32	27.5	5.1
C4ASPB_3470_G_	0.47	1200	630	1568	737	5.8	4.8	3.7	9	14	23	22	37	32	27.5	10.2
C4ASPB_3680_F_	0.68	1200	630	965	656	7.0	6.0	4.9	9	14	20	20	40	41.5	37.5	10.2
C4ASPB_4100_F_	1	1200	630	965	965	5.6	4.6	3.5	9	14	26	20	40	41.5	37.5	10.2
C4ASPB_4120_J_	1.2	1200	630	965	1158	5.0	4.0	2.9	9	14	28	28	37	42.5	37.5	10.2
C4ASPB_4200_M_	2	1200	630	598	1196	6.2	5.0	3.8	9	14	28	30	45	57.5	52.5	10.2
C4ASPB_4220_M_	2.2	1200	630	598	1316	5.9	4.7	3.5	9	14	29	30	45	57.5	52.5	10.2
C4ASPB_4250_M_	2.5	1200	630	598	1495	5.5	4.4	3.1	9	14	29	30	45	57.5	52.5	20.3
C4ASPB_4300_N_	3	1200	630	598	1794	5.3	4.1	2.7	9	14	29	35	50	57.5	52.5	20.3
C4ASPB_4350_N_	3.5	1200	630	598	2093	5.0	3.7	2.4	9	14	29	35	50	57.5	52.5	20.3
C4ASWB_2330_A_	0.033	2000	700	2240	74	40.0	39.3	-	5	5	-	10	20	32	27.5	-
C4ASWB_2470_A_	0.047	2000	700	2240	105	28.5	27.9	-	6	6	-	10	20	32	27.5	-
C4ASWB_2680_B_	0.068	2000	700	2240	152	20.3	19.6	-	8	8	-	13	22	32	27.5	-
C4ASWB_3100_C_	0.1	2000	700	2240	224	14.6	13.8	13.0	9	10	11	14	28	32	27.5	5.1
C4ASWB_3150_E_	0.15	2000	700	2240	336	10.7	9.8	8.8	9	14	15	18	33	32	27.5	5.1
C4ASWB_3220_E_	0.22	2000	700	2240	493	8.0	7.1	6.1	9	14	17	18	33	32	27.5	10.2
C4ASWB_3330_F_	0.33	2000	700	1380	455	9.4	8.5	7.4	9	14	16	20	40	41.5	37.5	10.2
C4ASWB_3680_H_	0.68	2000	700	1380	937	6.1	5.0	3.8	9	14	25	24	44	41.5	37.5	10.2
C4ASWB_4100_M_	1	2000	700	850	850	7.7	6.6	5.3	9	14	24	30	45	57.5	52.5	10.2
C4ASWB_4150_N_	1.5	2000	700	850	1280	6.3	5.1	3.7	9	14	29	35	50	57.5	52.5	20.3
C4ASYB_2220_A_	0.022	3000	750	3360	74	47.9	47.3	-	5	5	-	10	20	32	27.5	-
C4ASYB_2330_B_	0.033	3000	750	3360	111	32.6	31.9	-	7	7	-	13	22	32	27.5	-
C4ASYB_2470_C_	0.047	3000	750	3360	158	23.7	22.9	22.0	9	9	9	14	28	32	27.5	5.1
C4ASYB_2680_C_	0.068	3000	750	3360	228	17.0	16.2	15.3	9	10	11	14	28	32	27.5	5.1
C4ASYB_3100_E_	0.1	3000	750	3360	336	12.4	11.5	10.5	9	13	15	18	33	32	27.5	10.2
C4ASYB_3150_G_	0.15	3000	750	3360	504	9.2	8.2	7.2	9	14	19	22	37	32	27.5	10.2
C4ASYB_3220_F_	0.22	3000	750	2070	455	10.5	9.4	8.2	9	14	18	20	40	41.5	37.5	10.2
C4ASYB_3330_H_	0.33	3000	750	2070	682	7.9	6.8	5.6	9	14	21	24	44	41.5	37.5	10.2
C4ASYB_3470_M_	0.47	3000	750	1280	601	10.1	9.0	7.7	9	14	20	30	45	57.5	52.5	10.2
C4ASYB_3820_N_	0.82	3000	750	1280	1050	7.2	6.0	4.6	9	14	27	35	50	57.5	52.5	20.3

PEAK VOLTAGE TABLE

Un	250 V	400 V	450 V	600 V	700 V	850 V
U <sub>MAX</sub>	400 V	600 V	660 V	800 V	1000 V	1200 V

GENERAL CHARACTERISTICS

Code	C μF	Un Vdc	U <sub>RMS</sub> Vac	dv/dt V/μs	I <sub>PKR</sub> A	ESR (mΩ) max @ 100kHz			I <sub>RMS</sub> (A) 100kHz @70°C			DIMENSIONS mm				
						d=0.8	d=1.2	d=1.2	d=0.8	d=1.2	d=1.2	B	H	L	p	p1
						2 wires	2 wires	4 wires	2 wires	2 wires	4 wires					
C4ATDB_4100_0_	1	250	160	30	30	23.3	22.6	-	5	5	-	10	20	32	27.5	-
C4ATDB_4220_0_	2.2	250	160	30	66	11.8	11.0	-	7	8	-	10	20	32	27.5	-
C4ATDB_4330_0_	3.3	250	160	30	99	8.7	7.8	-	7	10	-	13	22	32	27.5	-
C4ATDB_4500_0_	5	250	160	30	150	6.8	5.8	-	7	12	-	14	28	32	27.5	-
C4ATDB_5100_0_	10	250	160	30	300	5.2	4.0	3.1	7	12	20	18	33	32	27.5	10.2
C4ATDB_5200_0_	20	250	160	20	400	5.5	4.2	3.1	7	12	22	28	37	42.5	37.5	10.2
C4ATDB_5300_0_	30	250	160	20	600	5.3	3.7	2.6	7	12	22	30	45	42.5	37.5	20.3
C4ATDB_5400_0_	40	250	160	15	600	5.7	4.2	3.1	7	12	22	30	45	57.5	52.5	20.3
C4ATDB_5500_0_	50	250	160	15	750	5.7	4.1	2.8	7	12	22	35	50	57.5	52.5	20.3
C4ATDB_5600_0_	60	250	160	15	900	5.7	3.9	2.6	7	12	22	35	50	57.5	52.5	20.3
C4ATFB_4100_A_	1	400	250	74	74	10.8	10.2	-	8	8	-	10	20	32	27.5	-
C4ATFB_4150_A_	1.5	400	250	74	111	7.7	7.1	-	8	10	-	10	20	32	27.5	-
C4ATFB_4200_B_	2.0	400	250	74	148	6.3	5.6	-	9	11	-	13	22	32	27.5	-
C4ATFB_4330_C_	3.3	400	250	74	244	4.8	4.0	3.1	9	13	18	14	28	32	27.5	5.1
C4ATFB_4400_E_	4	400	250	74	296	4.5	3.6	2.6	9	14	21	18	33	32	27.5	10.2
C4ATFB_4500_E_	5	400	250	74	370	4.0	3.2	2.2	9	14	23	18	33	32	27.5	10.2
C4ATFB_4680_G_	6.8	400	250	74	504	3.8	2.8	1.7	9	14	25	22	37	32	27.5	10.2
C4ATFB_5100_F_	10	400	250	50	502	4.3	3.3	2.2	9	14	28	20	40	41.5	37.5	10.2
C4ATFB_5150_J_	15	400	250	50	753	4	2.9	1.7	9	14	25	28	37	42.5	37.5	10.2
C4ATFB_5200_L_	20	400	250	50	1004	3.7	2.6	1.4	9	14	29	30	45	42	37.5	20.3
C4ATFB_5250_M_	25	400	250	34	846	4.4	3.3	2.0	9	14	29	30	45	57.5	52.5	20.3
C4ATFB_5300_M_	30	400	250	34	1015	4.1	3.0	1.7	9	14	29	30	45	57.5	52.5	20.3
C4ATFB_5350_N_	35	400	250	34	1184	4.2	2.9	1.6	9	14	29	35	50	57.5	52.5	20.3
C4ATFB_5400_N_	40	400	250	34	1350	4.0	2.8	1.4	9	14	29	35	50	57.5	52.5	20.3
C4ATGB_4100_A_	1	450	275	82	82	10.0	9.4	-	8	8	-	10	20	32	27.5	-
C4ATGB_4330_E_	3.3	450	275	82	269	4.8	3.8	2.9	9	14	21	18	33	32	27.5	5.1
C4ATGB_4680_G_	6.8	450	275	82	554	3.6	2.7	1.6	9	14	29	22	37	32	27.5	10.2
C4ATGB_5100_F_	10	450	275	55	552	4.5	3.3	2.1	9	14	29	20	40	41.5	37.5	10.2
C4ATGB_5150_L_	15	450	275	55	828	3.9	2.8	1.6	9	14	29	30	45	42	37.5	20.3
C4ATGB_5200_M_	20	450	275	37	744	4.6	3.5	2.2	9	14	29	30	45	57.5	52.5	10.2
C4ATGB_5330_N_	33	450	275	37	1228	4.1	2.9	1.5	9	14	29	35	50	57.5	52.5	20.3
C4ATHB_3680_A_	0.68	600	350	104	70	11.5	10.9	-	8	8	-	10	20	32	27.5	-
C4ATHB_4100_B_	1	600	350	104	103	8.4	7.7	-	9	10	-	13	22	32	27.5	-
C4ATHB_4200_E_	2	600	350	104	207	5.6	4.7	3.7	9	14	18	18	33	32	27.5	5.1
C4ATHB_4220_E_	2.2	600	350	104	228	5.3	4.4	3.4	9	14	19	18	33	32	27.5	5.1
C4ATHB_4330_G_	3.3	600	350	104	342	4.4	3.5	2.4	9	14	25	22	37	32	27.5	10.2
C4ATHB_4470_F_	4.7	600	350	70	330	5.3	4.4	3.3	9	14	22	20	40	41.5	37.5	10.2
C4ATHB_4500_F_	5	600	350	70	351	5.2	4.2	3.1	9	14	22	20	40	41.5	37.5	10.2
C4ATHB_4680_J_	6.8	600	350	70	477	4.8	3.6	2.4	9	14	28	28	37	42	37.5	10.2
C4ATHB_4900_L_	9	600	350	70	632	4.3	3.2	1.9	9	14	29	30	45	42	37.5	20.3
C4ATHB_5100_L_	10	600	350	70	702	4.1	3.0	1.8	9	14	29	30	45	42	37.5	20.3
C4ATHB_5120_M_	12	600	350	47	568	5.2	4.0	2.8	9	14	29	30	45	57.5	52.5	10.2
C4ATHB_5200_N_	20	600	350	47	947	4.5	3.2	1.9	9	14	29	35	50	57.5	52.5	20.3
C4ATJB_3470_A_	0.47	700	400	119	55	14.3	13.6	-	7	7	-	10	20	32	27.5	-
C4ATJB_4100_D_	1	700	400	119	119	7.9	7.1	6.3	9	12	13	15	24.5	32	27.5	5.1
C4ATJB_4150_E_	1.5	700	400	119	178	6.2	5.3	4.3	9	14	17	18	33	32	27.5	5.1
C4ATJB_4220_E_	2.2	700	400	119	260	4.9	4.0	3.0	9	14	20	18	33	32	27.5	10.2
C4ATJB_4300_G_	3	700	400	119	355	4.4	3.4	2.3	9	14	25	22	37	32	27.5	10.2
C4ATJB_4500_L_	5	700	400	80	400	4.8	3.8	2.8	8	14	27	28	37	42.5	37.5	10.2
C4ATJB_4900_M_	9	700	400	54	487	5.6	4.5	3.2	9	14	29	30	45	57.5	52.5	10.2
C4ATJB_5100_M_	10	700	400	54	540	5.3	4.2	2.9	9	14	29	30	45	57.5	52.5	10.2
C4ATJB_5150_N_	15	700	400	54	811	4.7	3.5	2.1	9	14	29	35	50	57.5	52.5	20.3
C4ATMB_3220_A_	0.22	850	450	148	32.6	23.8	23.1	-	5	5	-	10	20	32	27.5	-
C4ATMB_3470_B_	0.47	850	450	148	69	12.1	11.4	-	8	8	-	13	22	32	27.5	-
C4ATMB_4100_E_	1	850	450	148	148	7.1	6.2	5.2	9	14	16	18	33	32	27.5	5.1
C4ATMB_4150_G_	1.5	850	450	148	222	5.6	4.7	3.6	9	14	21	22	37	32	27.5	10.2
C4ATMB_4330_J_	3.3	850	450	100	331	5.7	4.6	3.3	9	14	24	28	37	42.5	37.5	10.2
C4ATMB_4470_L_	4.7	850	450	100	471	4.8	3.7	2.5	9	14	29	30	45	42	37.5	20.3
C4ATMB_4680_M_	6.8	850	450	68	460	5.8	4.6	3.4	9	14	28	30	45	57.5	52.5	20.3
C4ATMB_5100_N_	10	850	450	68	676	5.1	3.8	2.5	9	14	29	35	50	57.5	52.5	20.3