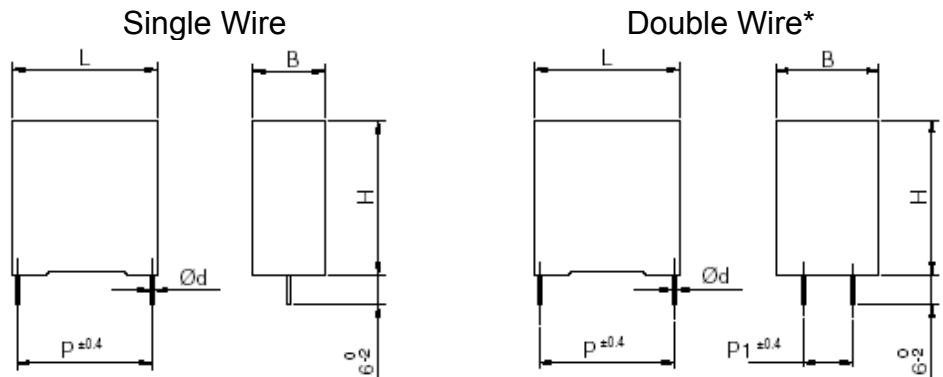


### BOX CAPACITOR SNUBBER APPLICATIONS

#### General Characteristics

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



#### TECHNICAL DATA

General technical data	VDE 0560 – IEC 61071 – EN 61071
Application class (DIN 40040)	GPD / LS
Temperature range (Case)	-40 to +85 °C
Max permissible ambient temperature (operation at rated power, rated current and natural cooling)	+ 70 °C
Capacitance tolerance code (15 <sup>th</sup> digit)	J = ±5%; K = ±10%
Peak non-repetitive max current	$I_{PK} \times 1.5$
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 (tg $\delta$ )	$\leq 5 \times 10^{-4}$ at 1kHz and 20°C
Permissible relative humidity	Annual average humidity should be $\leq 95\%$ ; however, on 30 days per year it can be continuously 100% and on the other days it can be occasionally 100%. Dewing not permitted
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 above)*
Installation	Any position
Life Expectancy	$\geq 30,000$ hours at $U_{RMS}$ ; $\geq 100,000$ hours at $U_N$
Failure quota	$300 / 10^9$ components hour

\* Double wire—1.2mm only

## BOX CAPACITOR SNUBBER APPLICATIONS

### Peak Voltage Table

Un	850V	1000V	1200V	2000V	3000V
Umax	1200V	1300V	1600V	2400V	3500V

### GENERAL CHARACTERISTICS

C $\mu$ F	UN V-	URMS V-	dv/dt V/ $\mu$ s	IPK A	ESR max @ 100kHz (m $\Omega$ )			IRMS (100kHz) @ 70°C (A)			DIMENSIONS (mm)					Part Number
					d=0.8 2 wires	d=1.2 2 wires	d=1.2 4 wires	d=0.8 2 wires	d=1.2 2 wires	d=1.2 4 wires	B	H	L	P	P1	
0.15	850	450	450	68	12.8	11.9	-	7	8	-	10	20	32	27.5	-	C4ASMB-3150-0-
0.22	850	450	450	99	9.4	8.6	-	7	10	-	13	22	32	27.5	-	C4ASMB-3220-0-
0.33	850	450	450	149	7.4	6.4	-	7	12	-	15	24.5	32	27.5	-	C4ASMB-3330-0-
0.47	850	450	450	212	6.3	5.1	4.3	7	12	18	18	33	32	27.5	10.2	C4ASMB-3470-0-
0.68	850	450	450	306	5.6	4.3	3.3	7	12	22	22	37	32	27.5	10.2	C4ASMB-3680-0-
1	850	450	300	300	5.9	4.6	3.6	7	12	22	28	37	42.5	37.5	10.2	C4ASMB-4100-0-
1.5	850	450	300	450	5.2	3.8	2.8	7	12	22	28	37	42.5	37.5	20.3	C4ASMB-4150-0-
2	850	450	300	600	5.2	3.7	2.5	7	12	22	30	45	42	37.5	20.3	C4ASMB-4200-0-
2.2	850	450	300	660	5.2	3.6	2.4	7	12	22	30	45	42	37.5	20.3	C4ASMB-4220-0-
2.5	850	450	200	500	5.6	4.2	3.1	7	12	22	30	45	57.5	52.5	20.3	C4ASMB-4250-0-
3	850	450	200	600	5.6	4.0	2.9	7	12	22	30	45	57.5	52.5	20.3	C4ASMB-4300-0-
3.3	850	450	200	660	5.5	3.9	2.8	7	12	22	30	45	57.5	52.5	20.3	C4ASMB-4330-0-
4	850	450	200	800	5.5	3.8	2.6	7	12	22	35	50	57.5	52.5	20.3	C4ASMB-4400-0-
0.1	1000	480	600	60	15.4	14.5	-	7	7	-	10	20	32	27.5	-	C4ASNB-3100-0-
0.15	1000	480	600	90	11.0	10.1	-	7	9	-	13	22	32	27.5	-	C4ASNB-3150-0-
0.22	1000	480	600	132	9.4	8.4	-	7	10	-	15	24.5	32	27.5	-	C4ASNB-3220-0-
0.33	1000	480	600	198	7.0	5.8	4.9	7	12	17	18	33	32	27.5	10.2	C4ASNB-3330-0-
0.47	1000	480	600	282	6.1	4.8	3.8	7	12	22	22	37	32	27.5	10.2	C4ASNB-3470-0-
0.68	1000	480	380	258	6.4	5.1	4.2	7	12	22	28	37	42.5	37.5	10.2	C4ASNB-3680-0-
1	1000	480	380	380	5.5	4.2	3.2	7	12	22	28	37	42.5	37.5	10.2	C4ASNB-4100-0-
1.5	1000	480	380	570	5.4	3.8	2.7	7	12	22	30	45	42	37.5	20.3	C4ASNB-4150-0-
2	1000	480	230	460	5.8	4.3	3.2	7	12	22	30	45	57.5	52.5	20.3	C4ASNB-4200-0-
2.2	1000	480	230	506	5.8	4.2	3.1	7	12	22	30	45	57.5	52.5	20.3	C4ASNB-4220-0-
2.5	1000	480	230	575	5.7	4.1	2.9	7	12	22	35	50	57.5	52.5	20.3	C4ASNB-4250-0-
3	1000	480	230	690	5.7	4.0	2.7	7	12	22	35	50	57.5	52.5	20.3	C4ASNB-4300-0-
3.3	1000	480	230	759	5.7	4.0	2.7	7	12	22	35	50	57.5	52.5	20.3	C4ASNB-4330-0-
0.1	1200	500	700	70	14.7	13.8	-	7	8	-	13	22	32	27.5	-	C4ASPB-3100-0-
0.15	1200	500	700	105	10.6	9.7	-	7	10	-	15	24.5	32	27.5	-	C4ASPB-3150-0-
0.22	1200	500	700	154	8.3	7.2	6.4	7	12	15	18	33	32	27.5	10.2	C4ASPB-3220-0-
0.33	1200	500	700	231	6.9	5.7	4.7	7	12	19	22	37	32	27.5	10.2	C4ASPB-3330-0-
0.47	1200	500	430	202	7.2	6.0	5.2	7	12	22	28	37	42.5	37.5	10.2	C4ASPB-3470-0-
0.68	1200	500	430	292	6.2	4.9	3.9	7	12	22	28	37	42.5	37.5	10.2	C4ASPB-3680-0-
1	1200	500	430	430	5.7	4.2	3.1	7	12	22	30	45	42	37.5	20.3	C4ASPB-4100-0-
1.2	1200	500	430	516	5.7	4.1	2.9	7	12	22	30	45	42	37.5	20.3	C4ASPB-4120-0-
1.5	1200	500	270	405	6.2	4.7	3.6	7	12	22	30	45	57.5	52.5	20.3	C4ASPB-4150-0-
2	1200	500	270	540	5.9	4.3	3.1	7	12	22	35	50	57.5	52.5	20.3	C4ASPB-4200-0-
2.2	1200	500	270	594	5.9	4.2	3.0	7	12	22	35	50	57.5	52.5	20.3	C4ASPB-4220-0-
2.5	1200	500	270	675	5.9	4.1	2.8	7	12	22	35	50	57.5	52.5	20.3	C4ASPB-4250-0-
0.022	2000	630	1100	24	49.4	48.7	-	4	4	-	10	20	32	27.5	-	C4ASWB-2220-0-
0.033	2000	630	1100	36	33.9	33.0	-	5	5	-	10	20	32	27.5	-	C4ASWB-2330-0-
0.047	2000	630	1100	52	24.4	23.6	-	6	6	-	13	22	32	27.5	-	C4ASWB-2470-0-
0.068	2000	630	1100	75	17.9	16.9	-	7	8	-	15	24.5	32	27.5	-	C4ASWB-2680-0-
0.1	2000	630	1100	110	13.2	12.1	11.3	7	12	12	18	33	32	27.5	10.2	C4ASWB-3100-0-
0.15	2000	630	1100	165	10.1	8.9	7.9	7	12	15	22	37	32	27.5	10.2	C4ASWB-3150-0-
0.22	2000	630	670	147	10.0	8.8	7.9	7	12	17	28	37	42.5	37.5	10.2	C4ASWB-3220-0-
0.33	2000	630	670	221	7.9	6.6	5.6	7	12	20	28	37	42.5	37.5	10.2	C4ASWB-3330-0-
0.47	2000	630	670	315	7.0	5.5	4.4	7	12	22	30	45	42	37.5	20.3	C4ASWB-3470-0-
0.68	2000	630	400	272	7.5	6.1	5.0	7	12	22	30	45	57.5	52.5	20.3	C4ASWB-3680-0-
1	2000	630	400	400	6.8	5.2	3.9	7	12	22	35	50	57.5	52.5	20.3	C4ASWB-4100-0-
1.2	2000	630	400	480	6.6	4.9	3.6	7	12	22	35	50	57.5	52.5	20.3	C4ASWB-4120-0-
0.01	3000	750	1850	18.5	93.4	92.6	-	3	3	-	10	20	32	27.5	-	C4ASYB-2100-0-
0.015	3000	750	1850	27.8	63	62.2	-	4	4	-	13	22	32	27.5	-	C4ASYB-2150-0-
0.022	3000	750	1850	41	43.8	42.9	-	5	5	-	15	24.5	32	27.5	-	C4ASYB-2220-0-
0.033	3000	750	1850	61	30.3	29.3	-	7	7	-	18	33	32	27.5	-	C4ASYB-2330-0-
0.047	3000	750	1850	87	22.5	21.3	20.4	7	9	9	18	33	32	27.5	10.2	C4ASYB-2470-0-
0.068	3000	750	1850	126	16.8	15.4	14.4	7	12	12	22	37	32	27.5	10.2	C4ASYB-2680-0-
0.1	3000	750	1100	110	15.1	13.9	13.0	7	12	14	28	37	42.5	37.5	10.2	C4ASYB-3100-0-
0.15	3000	750	1100	165	11.4	10.0	9.0	7	12	16	28	37	42.5	37.5	20.3	C4ASYB-3150-0-
0.22	3000	750	1100	242	9.5	7.9	6.7	7	12	22	30	45	45	37.5	20.3	C4ASYB-3220-0-
0.33	3000	750	700	231	9.7	8.1	7.0	7	12	22	30	45	57.5	52.5	20.3	C4ASYB-3330-0-
0.47	3000	750	700	329	8.4	6.7	5.4	7	12	22	35	50	57.5	52.5	20.3	C4ASYB-3470-0-

Single wire = U; double wire = W  
 Wire diameter: 0.8mm = A1; 1.2mm = A3  
 (A1 not recommended for 4 wire)  
 Tolerance: J ( $\pm$ 5%); K ( $\pm$ 10%)