

FEATURES

- High performance DC filter
- Good self-healing properties
- Low ESR
- High peak current capabilities
- High RMS current capabilities
- AEC-Q200 qualified
- RoHS-compatible



APPLICATIONS

- High performance DC filtering
- HEV/EV: i.e. power train and OBC
- Renewable energies inverters
- Motor drives
- Power supplies

CONSTRUCTION

- Dielectric: Polypropylene (MKP)
- Plastic case (UL 94V-0)
- Epoxy resin sealing (UL 94V-0)
- Terminals: Tinned copper

TECHNICAL DATA

工作温度范围/Operating temperature range	Max. Operating temperature, Top, max: +105 °C Upper category temperature: +85 °C Lower category temperature: -40 °C
容量范围/Capacitance range	1~200µF
额定电压/Rated voltage	300V.DC~2000V.DC
容量偏差/Capacitance tolerance	±5% (J) ; ±10% (K)
最大纹波电压/ Maximum applicable peak to peak ripple voltage	0.2×U _{NDC}
耐电压/Withstand voltage	1.5U _N DC /60S
过电压/Over voltage	1.1U _N (30% of on -load -dur.)
	1.15U _N (30min/day)
	1.2U _N (5min/day)
	1.3U _N (1min/day)
	1.5U _N (100ms every time, 1000 times during the lifetime)
损耗角正切/Dissipation factor	Tgδ ≤ 0.0015 f = 100Hz
自感/Self inductance	< 1 nH per mm of lead spacing
绝缘电阻/Insulation resistance	R _S × C ≥ 10000S (at 20°C 100V.DC)
耐脉冲电流冲击/Withstand strike current	See the specification sheet
有效电流/I _{rms}	See the specification sheet
寿命预期/Lifetime expectancy	Useful lifetime: > 100000h at U _{NDC} and 70°C FIT: < 10 × 10 ⁻⁹ /h (10 per 10 ⁹ component h) at 0.5 × U _{NDC} , 40°C
阻燃性/Flame retardation	UL94V-0
引用标准/Reference standard	IEC61071

SAFETY APPROVALS

 E496566	UL	UL810,VoltageLimits:Max. 2000 VDC, 105℃ Certificate No.: E496566
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DC VOLTAGE RATINGS

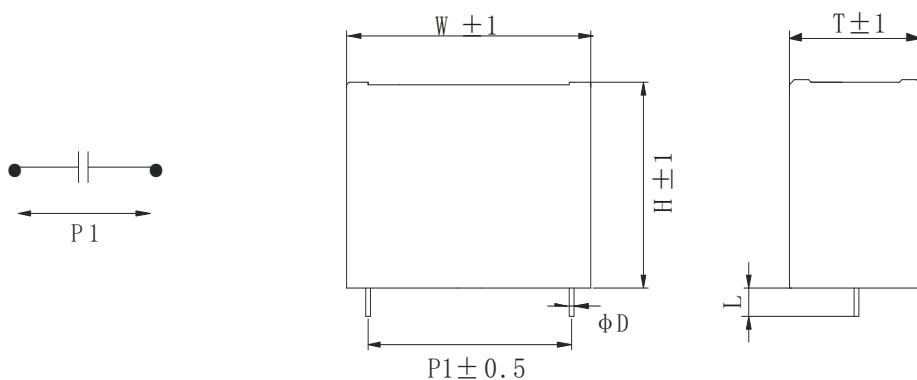
U _{NDC} at 85℃	450V	700V	800V	1100V	1200V	1800V
U _{NDC} at 70℃	550V	800V	900V	1200V	1500V	2000V
U _{OPDC} at 105℃	300V	500V	570V	750V	850V	1100V

PART NUMBERSYSTEM

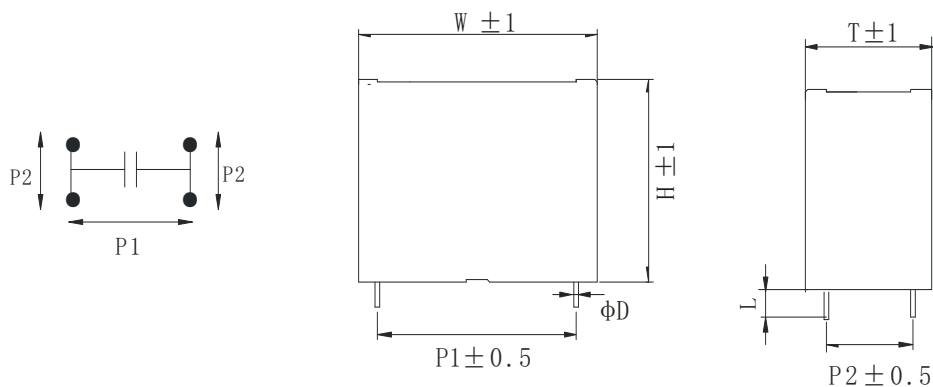
Type code	Capacitance	Rated Voltage (DC)	Tolerance	Pin	LeadPitch P1 (mm)	LeadPitch P2 (mm)	Length L (mm)	Internal code
1~3	4~6	7~10	11	12	13	14	15	16~17
DPS	756=75×10 ⁶ pF=75μF	0700=700VDC	J=±5% K=±10%	2: 2Pin 4: 4Pin	1: P1=37.5 2: P1=52.5 3: P1=27.5	0: 无 1: P1=10.2 2: P1=20.3	1: L=5.5 2: L=15	01

THE CONTOURMAP

2 PINS



4 PINS



SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μs)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 450V.DC(85℃) 550V.DC(70℃) 300V.DC(105℃)												
4	2	0.8	32	11	20	27.5	---	20.5	75	300	4	DPS4050450*230***
5	2	0.8	32	11	20	27.5	---	21.9	75	375	5	DPS5050450*230***
7	2	0.8	32	15	25	27.5	---	11.5	75	525	6.5	DPS7050450*230***
10	2	0.8	32	15	25	27.5	---	7.5	75	750	6.5	DPS1060450*230***
12	2	1	32	21	31	27.5	---	7	75	900	10	DPS1260450*230***
20	2	1.2	42.5	24.5	27.5	37.5	---	7	40	800	11	DPS2060450*210***
22	2	0.8	32	22	37	27.5	---	5.9	75	1650	10	DPS2260450*230***
30	4	1.2	42.5	24	44	37.5	20.3	6.5	40	1200	15	DPS3060450*412***
35	4	1.0	42	24	36	37.5	10.2	8	40	1400	13.5	DPS3560450*411***
40	4	1.0	41.5	27.5	37.5	37.5	10.2	5	40	1600	14.5	DPS4060450*411***
45	4	1.2	42.5	29	37	37.5	20.3	6	40	1800	17	DPS4560450*412***
50	4	1.2	41	28	43	37.5	12.7	4	40	2000	16	DPS5060450*413***
50	4	1.2	42	30	45	37.5	20.3	4	40	2000	16	DPS5060450*412***
60	4	1.2	42.5	30	45	37.5	20.3	4.5	40	2400	18.5	DPS6060450*412***
60	4	1.2	42.5	33	45	37.5	20.3	4.5	40	2400	18.5	DPS6060450*412***
75	4	1.2	42.5	35	50	37.5	20.3	3	20	1500	19	DPS7560450*412***
75	4	1.2	57	29.5	43.5	37.5	12.7	5.5	20	1500	16	DPS7560450*413***
75	4	1.2	57.5	30	45	52.5	20.3	3.2	20	1500	18	DPS7560450*422***
80	4	1.2	57	29.5	43.5	52.5	20.3	5	20	1600	16.5	DPS8060450*422***
100	4	1.2	42.5	40	55	37.5	20.3	2.8	20	2000	20	DPS1070450*412***
100	4	1.2	57.5	35	50	52.5	20.3	3	20	2000	22	DPS1070450*422***
110	4	1.2	57.5	35	50	52.5	20.3	3	20	2200	23	DPS1170450*422***
120	4	1.2	57.5	38	54	52.5	20.3	2.8	20	2400	25	DPS1270450*422***
150	4	1.2	57.5	42.5	56	52.5	20.3	2.5	20	3000	28	DPS1570450*422***
150	4	1.2	57.5	45	55	52.5	20.3	2.5	20	3000	28	DPS1570450*422***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μs)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 450V.DC(85℃) 550V.DC(70℃) 300V.DC(105℃)												
200	4	1.2	57.5	45	65	52.5	20.3	2.3	20	4000	28	DPS2070450*422***
U _N 700V.DC (85℃) 800V.DC(70℃) 500V.DC(105℃)												
2	2	0.8	32	9	18	27.5	----	47.8	75	150	2.8	DPS2050700*230***
3	2	0.8	32	11	20	27.5	----	23	75	225	4	DPS3050700*230***
4	2	0.8	32	11	20	27.5	----	23.9	75	300	4.1	DPS4050700*230***
5	2	0.8	32	15	25	27.5	----	14	75	375	6	DPS5050700*230***
6	2	0.8	32	15	25	27.5	----	18.6	75	450	7.1	DPS6050700*230***
7	2	0.8	32	15	25	27.5	----	15.9	75	525	8.3	DPS7050700*230***
8	2	1	32	18	28	27.5	----	8.5	75	600	8.5	DPS8050700*230***
9	2	0.8	32	16	30	27.5	----	12.4	75	675	10.7	DPS9050700*230***
10	2	1	32	21	31	27.5	----	7	75	750	10	DPS1060700*230***
10	2	1.2	42.5	24.5	27.5	37.5	----	10	40	400	10	DPS1060700*210***
12	2	0.8	32	18	33	27.5	----	10.8	75	900	12	DPS1260700*230***
12	2	1	41	16	30	37.5	----	16.3	40	480	7.4	DPS1260700*210***
15	2	0.8	32	22	37	27.5	----	9	75	1125	12	DPS1560700*230***
15	4	0.8	32	22	37	27.5	10.2	7.4	75	1125	16.5	DPS1560700*431***
18	2	0.8	32	22	37	27.5	----	8	75	1350	12	DPS1860700*230***
18	4	0.8	32	22	37	27.5	10.2	6.2	75	1350	17	DPS1860700*431***
20	4	1.2	42.5	24	44	37.5	20.3	7.5	40	800	12	DPS2060700*412***
25	4	1.2	42.5	29	37	37.5	20.3	6	40	1000	12	DPS2560700*412***
40	4	1.2	42.5	33	45	37.5	20.3	5.5	40	1600	13	DPS4060700*412***
40	4	1.2	57.5	30	45	52.5	20.3	6	20	800	15	DPS4060700*422***
45	4	1.2	42.5	35	50	37.5	20.3	5	40	1800	15	DPS4560700*412***
50	4	1.2	57.5	30	45	52.5	20.3	5.5	20	1000	18	DPS5060700*422***
55	4	1.2	42.5	40	55	37.5	20.3	4.5	40	2200	18	DPS5560700*412***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 700V.DC(85℃) 800V.DC(70℃) 500V.DC(105℃)												
60	4	1.2	57.5	35	50	52.5	20.3	5	20	1200	20	DPS6060700*422***
75	4	1.2	57.5	35	50	52.5	20.3	4.5	20	1500	22	DPS7560700*422***
80	4	1.2	57.5	38	54	52.5	20.3	4	20	1600	22	DPS8060700*422***
90	4	1.2	57.5	42.5	56	52.5	20.3	3.5	20	1800	25	DPS9060700*422***
100	4	1.2	57.5	42.5	56	52.5	20.3	3.2	20	2000	27.5	DPS1070700*422***
100	4	1.2	57.5	45	55	52.5	20.3	3.2	20	2000	27.5	DPS1070700*422***
110	4	1.2	57.5	45	65	52.5	20.3	3	20	2200	28	DPS1170700*422***
U _N 800V.DC(85℃) 900V.DC(70℃) 570V.DC(105℃)												
2	2	0.8	32	9	18	27.5	---	45.4	75	75	2.9	DPS2050800*230***
2	2	0.8	32	11	20	27.5	----	31	75	150	3.5	DPS2050800*230**
3	2	0.8	32	11	20	27.5	----	30.3	75	225	4.4	DPS3050800*230***
3.3	2	0.8	32	16	30	27.5	----	18.8	75	247.5	7	DPS3350800*230***
4	2	0.8	32	15	25	27.5	----	15.5	75	300	5.5	DPS4050800*230**
5	2	0.8	32	15	25	27.5	----	18.2	75	375	7.3	DPS5050800*230***
6	2	1	32	18	28	27.5	----	10.5	75	450	7.5	DPS6050800*230**
7	2	0.8	32	16	30	27.5	----	13	75	525	10.2	DPS7050800*230***
8	2	1	32	21	31	27.5	----	8	75	600	9.5	DPS8050800*230**
8	2	1	41	16	30	37.5	----	22.3	40	320	5.4	DPS8050800*210***
9	2	0.8	32	18	33	27.5	----	11.1	75	675	11.8	DPS9050800*230***
9	2	1	41	16	30	37.5	----	19.8	40	360	6.1	DPS9050800*210***
10	2	0.8	32	22	37	27.5	----	11	75	750	12	DPS1060800*230***
10	4	0.8	32	22	37	27.5	10.2	9.1	75	750	14.5	DPS1060800*431***
10	2	1	41	18.5	33.5	37.5	----	17.8	40	400	6.7	DPS1060800*210***
11	2	0.8	32	22	37	27.5	----	10	75	825	12	DPS1160800*230***
11	4	0.8	32	22	37	27.5	10.2	8.3	75	825	16	DPS1160800*431***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 800V.DC(85℃) 900V.DC(70℃) 570V.DC(105℃)												
12	2	0.8	32	22	37	27.5	----	9.3	75	900	12	DPS1260800*230***
12	4	0.8	32	22	37	27.5	10.2	7.6	75	900	16	DPS1260800*431***
12	2	1	41	18.5	33.5	37.5	----	14.9	40	480	8.1	DPS1260800*210***
13	2	0.8	32	22	37	27.5	----	8.8	75	975	12	DPS1360800*230***
13	4	0.8	32	22	37	27.5	12.7	8.1	75	975	16.2	DPS1360800*433***
14	2	0.8	32	22	37	27.5	----	8.2	75	1050	12	DPS1460800*230***
14	4	0.8	32	22	37	27.5	12.7	7.6	75	1050	16.5	DPS1460800*433***
14	2	1	41	18.5	33.5	37.5	----	13.8	40	560	9.4	DPS1460800*210***
15	2	1.2	42.5	24	44	37.5	----	10	40	600	10	DPS1560800*210***
15	4	1	42	20	40	37.5	10.2	11.9	40	600	10.1	DPS1560800*411***
20	4	1	42	24	44	37.5	12.7	8.9	40	800	13.5	DPS2060800*413***
20	4	1.2	42.5	29	37	37.5	20.3	7.5	40	800	12	DPS2060800*412***
25	4	1	42	24	44	37.5	12.7	7.1	40	1000	16.8	DPS2560800*413***
25	4	1.2	57	25	45	52.5	12.7	14.3	20	500	8.4	DPS2560800*423***
30	4	1.2	42	30	45	37.5	12.7	5.9	40	1200	20.2	DPS3060800*413***
30	4	1.2	42.5	33	45	37.5	20.3	4.5	40	1200	16	DPS3060800*412***
30	4	1.2	57	25	45	52.5	12.7	11.9	20	600	10.1	DPS3060800*423***
35	4	1.2	42	35	50	37.5	20.3	5.5	40	1400	22	DPS3560800*412***
35	4	1.2	57	25	45	52.5	12.7	10.2	20	700	11.8	DPS3560800*423***
35	4	1.2	57.5	30	45	52.5	20.3	5.5	20	700	14	DPS3560800*422***
40	4	1.2	42	35	50	37.5	20.3	4.8	40	1600	25.1	DPS4060800*412***
40	4	1.2	57	29.5	43.5	52.5	12.7	8.9	20	800	13.5	DPS4060800*423***
40	4	1.2	57	29.5	43.5	52.5	20.3	8.9	20	800	13.5	DPS4060800*422***
45	4	1.2	42.5	35	50	37.5	20.3	4.2	40	1800	17	DPS4560800*412***
45	4	1.2	57	29.5	43.5	52.5	12.7	7.9	20	900	15.1	DPS4560800*423***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 800V.DC(85℃) 900V.DC(70℃) 570V.DC(105℃)												
45	4	1.2	57	29.5	43.5	52.5	20.3	7.9	20	900	15.1	DPS4560800*422***
50	4	1.2	42	40	55	37.5	20.3	3.8	40	2000	31.4	DPS5060800*412***
50	4	1.2	57	35	50	52.5	12.7	7.1	20	1000	16.8	DPS5060800*423***
50	4	1.2	57.5	35	50	52.5	20.3	4.5	20	1000	18	DPS5060800*422***
55	4	1.2	42.5	40	55	37.5	20.3	4	40	2200	18	DPS5560800*412***
55	4	1.2	57	35	50	52.5	20.3	6.5	20	1100	18.5	DPS5560800*422***
60	4	1.2	42	45	60	37.5	20.3	3.2	40	2400	35	DPS6060800*412***
60	4	1.2	57.5	38	54	52.5	20.3	4.5	20	1200	20	DPS6060800*422***
65	4	1.2	42	45	60	37.5	20.3	2.9	40	2600	35	DPS6560800*412***
65	4	1.2	57	45	55	52.5	20.3	5.5	20	1300	21.9	DPS6560800*422***
70	4	1.2	57.5	42.5	56	52.5	20.3	3.5	20	1400	22	DPS7060800*422***
75	4	1.2	57.5	45	55	52.5	20.3	3.2	20	1500	24	DPS7560800*422***
80	4	1.2	57	45	55	52.5	20.3	4.6	20	1600	25.9	DPS8060800*422***
85	4	1.2	57.5	45	65	52.5	20.3	3	20	1700	26	DPS8560800*422***
90	4	1.2	57	45	55	52.5	20.3	4.2	20	1800	28.3	DPS9060800*422***
95	4	1.2	57	45	65	52.5	20.3	4	20	1900	29.8	DPS9560800*422***
100	4	1.2	57	45	65	52.5	20.3	3.8	20	2000	31.4	DPS1070800*422***
110	4	1.2	57	45	65	52.5	20.3	3.5	20	2200	34.5	DPS1170800*422***
U _N 900(85℃) 1000V.DC(70℃) 600V.DC(105℃)												
1	2	0.8	32	9	18	27.5	----	86	75	75	1.5	DPS1050900*230***
2	2	0.8	32	11	20	27.5	----	43	75	150	3.1	DPS2050900*230***
3	2	0.8	32	13	22	27.5	----	28.7	75	225	4.6	DPS3050900*230***
4	2	0.8	32	15	25	27.5	----	21.5	75	300	6.1	DPS4050900*230***
4.7	2	1	41	15	26	37.5	----	35.6	40	188	3.4	DPS4750900*210***
5	2	0.8	32	16	30	27.5	----	17.2	75	375	7.7	DPS5050900*230***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 900(85℃) 1000V.DC(70℃) 600V.DC(105℃)												
5	2	1	41	16	30	37.5	----	33.4	40	200	3.6	DPS5050900*210***
6	2	0.8	32	18	33	27.5	-----	18	75	450	6.9	DPS6050900*230***
6	2	1	41	16	30	37.5	-----	27.9	40	240	4.3	DPS6050900*210***
7	2	0.8	32	18	33	27.5	----	13	75	525	10.2	DPS7050900*230***
7	2	1	41	16	30	37.5	----	23.9	40	280	5	DPS7050900*210***
8	2	0.8	32	22	37	27.5	----	11.5	75	600	11.4	DPS8050900*230***
8	4	0.8	32	22	37	27.5	10.2	10.7	75	600	12.3	DPS8050900*431***
8	2	1	41	18.5	33.5	37.5	----	20.9	40	320	5.7	DPS8050900*210***
9	2	0.8	32	22	37	27.5	----	10.4	75	675	12	DPS9050900*230***
9	4	0.8	32	22	37	27.5	12.7	9.6	75	675	13.8	DPS9050900*433***
10	2	0.8	32	22	37	27.5	----	12	75	750	12.2	DPS1060900*230***
10	4	0.8	32	22	37	27.5	12.7	8.6	75	750	15.4	DPS1060900*433***
10	4	1.0	42	20	40	37.5	10.2	16.7	40	400	7.2	DPS1060900*411***
12	4	1.0	41	22	37	37.5	10.2	13.9	40	480	8.6	DPS1260900*411***
15	4	1.0	42	24	44	37.5	12.7	11.1	40	600	10.8	DPS1560900*413***
15	4	1.2	57	25	45	52.2	10.2	22.3	20	300	5.4	DPS1560900*421***
18	4	1.0	42	24	44	37.5	12.7	9.3	40	720	12.9	DPS1860900*413***
20	4	1.0	42	24	44	37.5	12.7	8.4	40	800	14.4	DPS2060900*413***
20	4	1.2	57	25	45	52.5	12.7	16.7	20	400	7.2	DPS2060900*423***
25	4	1.2	42	30	45	37.5	12.7	6.7	40	1000	17.9	DPS2560900*413***
25	4	1.2	42	30	45	37.5	20.3	6.7	40	1000	17.9	DPS2560900*412***
25	4	1.2	57	25	45	52.5	12.7	13.4	20	500	9	DPS2560900*423***
30	4	1.2	42	35	50	37.5	20.3	5.6	40	1200	21.5	DPS3060900*412***
30	4	1.2	57	29.5	43.5	52.5	12.7	11.1	20	600	10.8	DPS3060900*423***
30	4	1.2	57	29.5	43.5	52.5	20.3	11.1	20	600	10.8	DPS3060900*422***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 900(85℃) 1000V.DC(70℃) 600V.DC(105℃)												
35	4	1.2	42	40	55	37.5	20.3	5.1	40	1400	23.4	DPS3560900*412***
35	4	1.2	57	29.5	43.5	52.5	12.7	9.6	20	700	12.6	DPS3560900*423***
35	4	1.2	57	29.5	43.5	52.5	20.3	9.6	20	700	12.6	DPS2560900*422***
40	4	1.2	42	40	55	37.5	20.3	4.5	40	1600	26.8	DPS4060900*412***
40	4	1.2	57	35	50	52.5	20.3	8.4	20	800	14.4	DPS4060900*422***
45	4	1.2	42	45	60	37.5	20.3	4	40	1800	30.1	DPS4560900*412***
45	4	1.2	57	35	50	52.2	20.3	7.4	20	900	16.1	DPS4560900*422***
50	4	1.2	42	45	60	37.5	20.3	3.6	40	2000	33.5	DPS5060900*412***
50	4	1.2	57	35	50	52.5	20.3	6.7	20	1000	17.9	DPS5060900*422***
55	4	1.2	57	45	55	52.5	20.3	6.1	20	1100	19.7	DPS5560900*422***
60	4	1.2	57	45	55	52.5	20.3	5.6	20	1200	21.5	DPS6060900*422***
65	4	1.2	57	45	55	52.5	20.3	5.1	20	1300	23.3	DPS6560900*422***
70	4	1.2	57	45	65	52.5	20.3	4.8	20	1400	25.1	DPS7060900*422***
75	4	1.2	57	45	65	52.5	20.3	4.7	20	1500	25.7	DPS7560900*422***
80	4	1.2	57	45	65	52.5	20.3	4.5	20	1600	26.8	DPS8060900*422***
85	4	1.2	57	45	65	52.5	20.3	4.2	20	1700	28.5	DPS8560900*422***
U _N 1000(85℃) 1100 V.DC(70℃) 680V.DC(105℃)												
1	2	0.8	32	9	18	27.5	---	76.4	75	75	1.7	DPS1051000230***
2	2	0.8	32	13	22	27.5	---	38.2	75	150	3.5	DPS2051000230***
3	2	0.8	32	15	25	27.5	---	25.5	75	225	5.2	DPS3051000*230***
4	2	0.8	32	16	30	27.5	---	19.1	75	300	6.9	DPS4051000*230***
5	2	0.8	32	18	33	27.5	---	15.3	75	375	8.6	DPS5051000*230***
5	2	1	41	16	30	37.5	---	31.2	40	200	3.8	DPS5051000*210***
6	2	0.8	32	18	33	27.5	---	14.9	75	450	8.9	DPS6051000*230***
6	2	1	41	16	30	37.5	---	26	40	240	4.6	DPS6051000*210***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 1000(85℃) 1100V.DC(70℃) 680V.DC(105℃)												
7	2	0.8	32	22	37	27.5	----	14.5	75	525	9.4	DPS7051000*230***
7	4	0.8	32	22	37	27.5	12.7	11.4	75	525	11.6	DPS7051000*433***
7	2	1	41	18.5	33.5	37.5	----	22.3	40	280	5.4	DPS7051000*210***
8	2	0.8	32	22	37	27.5	----	13	75	600	10.8	DPS8051000*230***
8	4	0.8	32	22	37	27.5	12.7	10	75	600	13.3	DPS8051000*433***
8	2	1	41	18.5	33.5	37.5	----	19.5	40	320	6.2	DPS8061000*210***
10	2	1	42	20	40	37.5	----	15.6	40	400	6.7	DPS1061000*210***
10	4	1	42	20	40	37.5	10.2	15.6	40	400	7.7	DPS1061000*411***
12	2	1	41	22	37	37.5	----	15	40	480	8	DPS1261000*210***
12	4	1	41	22	37	37.5	12.7	13	40	480	9.2	DPS1261000*413***
15	4	1	42	24	44	37.5	12.7	10.4	40	600	11.5	DPS1561000*413***
15	4	1.2	57	25	45	52.5	12.7	20.8	20	300	5.8	DPS1561000*423***
18	4	1.2	42	30	45	37.5	12.7	8.7	40	720	13.8	DPS1861000*413***
18	4	1.2	42	30	45	37.5	20.3	8.7	40	720	13.8	DPS1861000*412***
20	4	1.2	42	30	45	37.5	12.7	7.8	40	800	15.4	DPS2061000*413***
20	4	1.2	42	30	45	37.5	20.3	7.8	40	800	15.4	DPS2061000*412***
20	4	1.2	57	25	45	52.5	12.7	15.6	20	400	7.7	DPS2061000*423***
25	4	1.2	42	35	50	37.5	20.3	6.2	40	1000	19.2	DPS2561000*412***
25	4	1.2	57	25	45	52.5	12.7	12.5	20	500	9.6	DPS2561000*423***
30	4	1.2	42	40	55	37.5	20.3	5.2	40	1200	23.1	DPS3061000*412***
30	4	1.2	57	29.5	43.5	52.5	12.7	10.4	20	600	11.5	DPS3061000*423***
30	4	1.2	57	29.5	43.5	52.5	20.3	10.4	20	600	11.5	DPS3061000*422***
30	4	1.2	57	30	45	52.5	12.7	10.4	20	600	11.5	DPS3061000*423***
30	4	1.2	57	30	45	52.5	20.3	10.4	20	600	11.5	DPS3061000*422***
35	4	1.2	42	40	55	37.5	20.3	4.8	40	1400	25.1	DPS3561000*412***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 1000(85℃) 1100V.DC(70℃) 680V.DC(105℃)												
35	4	1.2	57	35	50	52.5	20.3	8.9	20	700	13.5	DPS3561000*422***
40	4	1.2	42	45	60	37.5	20.3	4.2	40	1600	28.7	DPS4061000*412***
40	4	1.2	57	35	50	52.5	20.3	7.8	20	800	15.4	DPS4061000*422***
45	4	1.2	57	45	55	52.5	20.3	6.9	20	900	17.3	DPS4561000*422***
50	4	1.2	57	45	55	52.5	20.3	6.2	20	1000	19.2	DPS5061000*422***
55	4	1.2	57	45	55	52.5	20.3	5.7	20	1100	21.1	DPS5561000*422***
60	4	1.2	57	45	65	52.5	20.3	5.2	20	1200	23.1	DPS6061000*422***
65	4	1.2	57	45	65	52.5	20.3	4.8	20	1300	25	DPS6561000*422***
70	4	1.2	57	45	65	52.5	20.3	4.5	20	1400	26.9	DPS7061000*422***
U _N 1100(85℃) 1200V.DC(70℃) 750V.DC(105℃)												
1	2	0.8	32	11	21	27.5	---	45.5	95	95	3	DPS1051100*310***
2	2	0.8	32	15	25	27.5	----	23	95	190	4.5	DPS2051100*310***
3	2	1	32	18	28	27.5	----	15.5	95	285	6	DPS3051100*310***
4	2	1	32	21	31	27.5	----	11.5	95	380	8	DPS4051100*310***
10	2	1.2	42.5	24	44	37.5	----	11	40	429	11	DPS1061100*210***
15	4	1.2	42.5	29	37	37.5	20.3	8	40	600	15	DPS1561100*412***
20	4	1.2	42.5	30	45	37.5	20.3	5	40	800	18	DPS2061100*412***
20	4	1.2	42.5	33	45	37.5	20.3	5	40	800	18	DPS2061100*412***
20	4	1.2	57.5	30	45	52.5	20.3	7	25	500	15	DPS2061100*422***
25	4	1.2	57.5	35	50	52.5	20.3	6	25	625	17	DPS2561100*422***
30	4	1.2	57.5	35	50	52.5	20.3	5	25	750	18	DPS3061100*422***
35	4	1.2	42.5	35	50	37.5	20.3	4.5	40	1400	19	DPS3561100*412***
40	4	1.2	57.5	35	50	52.5	20.3	5	25	1000	18	DPS4061100*422***
45	4	1.2	57.5	38	54	52.5	20.3	4.5	25	1125	18.5	DPS4561100*422***
50	4	1.2	57.5	42.5	56	52.5	20.3	3.5	25	1250	20	DPS5061100*422***

SPECIFICATION TABLE

C _N (μF)	wires	ΦD (mm)	W (mm)	T (mm)	H (mm)	LeadPitch(mm)		ESR (mΩ)	Dv/dt (V/μS)	I _p (A)	I _{rms} @10KHz 85℃ (A)	Partnumber
						P1	P2					
U _N 1100(85℃) 1200V.DC(70℃) 750V.DC(105℃)												
55	4	1.2	57.5	42.5	56	52.5	20.3	3.5	25	1375	21	DPS5561100*422***
60	4	1.2	57.5	45	55	52.5	20.3	3.2	25	1500	22	DPS6061100*422***
70	4	1.2	57.5	45	65	52.5	20.3	3	25	1750	24	DPS7061100*422***
U _N 1200V.DC(85℃) 1500V.DC(70℃) 850V.DC(105℃)												
1	2	0.8	32	11	21	27.5	----	43	100	100	3	DPS1051200*230***
2	2	0.8	32	15	25	27.5	----	21.5	100	200	5	DPS2051200*230***
3	2	1	32	18	28	27.5	----	14.5	100	300	6.5	DPS3051200*230***
4	2	1	32	21	31	27.5	----	11	100	400	8	DPS4051200*230***
12	4	1.2	42.5	30	45	37.5	20.3	5	50	600	15	DPS1261200*412***
12	4	1.2	57.5	30	45	52.5	20.3	11	40	480	13	DPS1261200*422***
18	4	1.2	42.5	35	50	37.5	20.3	4.5	50	900	18	DPS1861200*412***
20	4	1.2	42.5	40	55	37.5	20.3	7	50	1000	16	DPS2061200*412***
20	4	1.2	57.5	35	50	52.5	20.3	8	40	800	17	DPS2061200*422***
25	4	1.2	57.5	42.5	56	52.5	20.3	7	40	1000	20	DPS2561200*422***
40	4	1.2	57.5	45	55	52.5	20.3	6	25	1000	22	DPS4061200*422***
45	4	1.2	57.5	45	65	52.5	20.3	5.5	25	1125	24	DPS4561200*422***
U _N 1800V.DC(85℃) 2000V.DC(70℃) 1100V.DC(105℃)												
6	4	1.2	42.5	30	45	37.5	20.3	24	100	600	5	DPS6051800*412***
8	4	1.2	42.5	35	50	37.5	20.3	20	100	800	8	DPS8051800*412***
10	4	1.2	42.5	40	55	37.5	20.3	18	100	1000	10	DPS1061800*412***
8	4	1.2	57.5	30	45	52.5	20.3	12	50	400	13	DPS8051800*422***
10	4	1.2	57.5	35	50	52.5	20.3	10	50	500	17	DPS1061800*422***
15	4	1.2	57.5	42.5	56	52.5	20.3	8	50	750	20	DPS1561800*422***
18	4	1.2	57.5	45	55	52.5	20.3	7.5	50	900	21	DPS1861800*422***
20	4	1.2	57.5	45	65	52.5	20.3	7	45	900	22	DPS2061800*422***

■ Maximum increase of the component temperature (ΔT), resulting from the component's power dissipation and heat conductivity.

The maximum component temperature-increase ΔT is the difference between the temperature measured on the capacitor's housing and the ambient temperature (in proximity to the capacitor) when the capacitor is working during normal operation.

During operation ΔT must not exceed 15°C at rated temperature. ΔT corresponds the rise of the component

temperature caused by the I_{rms} . In order not to exceed ΔT of 15°C at rated temperature, the I_{rms} must be

decreased with an increase of the ambient temperature.

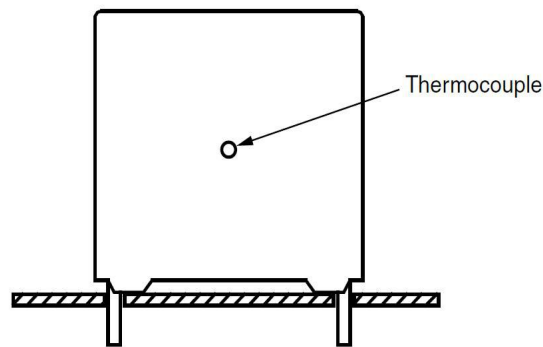
$$\Delta T = P/G$$

$$\Delta T = T_C - T_{\text{amb}}$$

$$P = I_{\text{rms}}^2 \times \text{ESR} = \text{power dissipation (mW)}$$

$$G = \text{heat conductivity (mW/^{\circ}\text{C})}$$

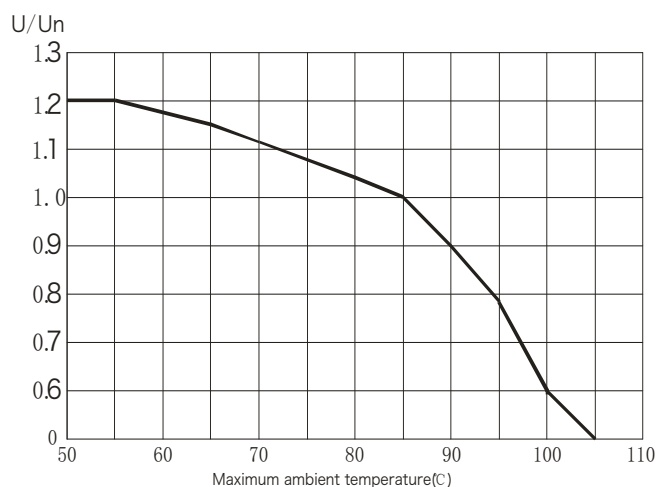
■ MEASURING THE COMPONENT TEMPERATURE



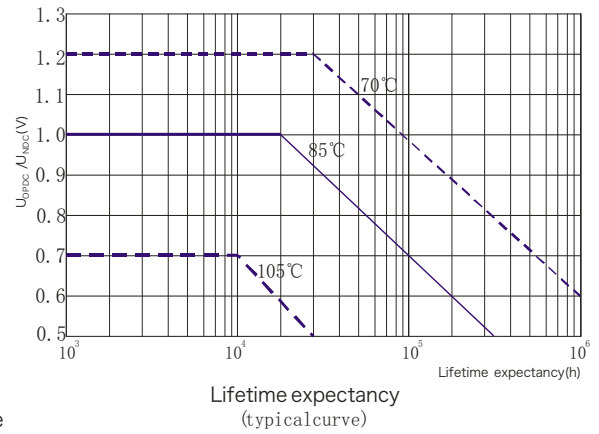
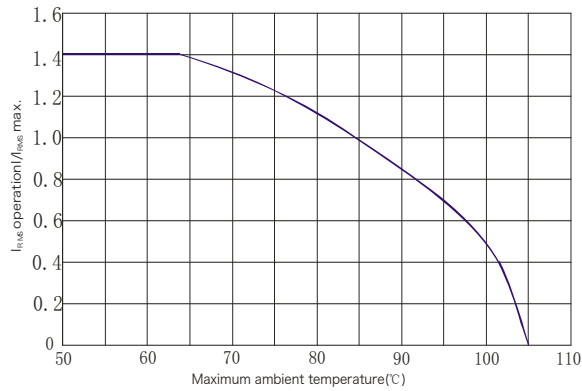
The case temperature is measured in unloaded (T_{amb}) and maximum loaded condition (T_C).

To avoid thermal radiation or convection, the capacitor must be tested in a closed area from air circulation.

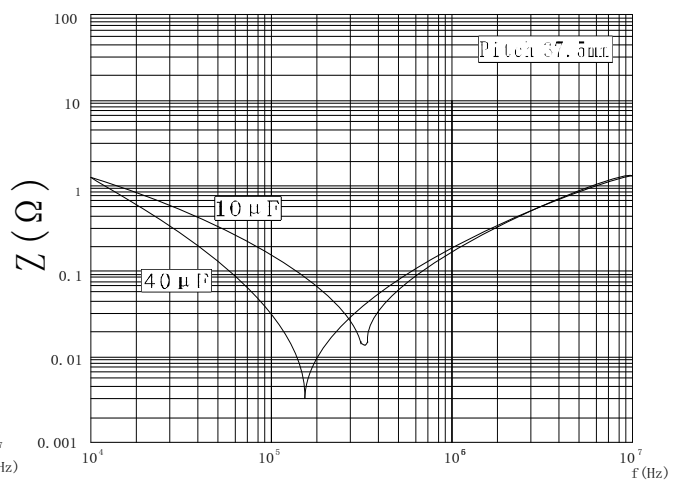
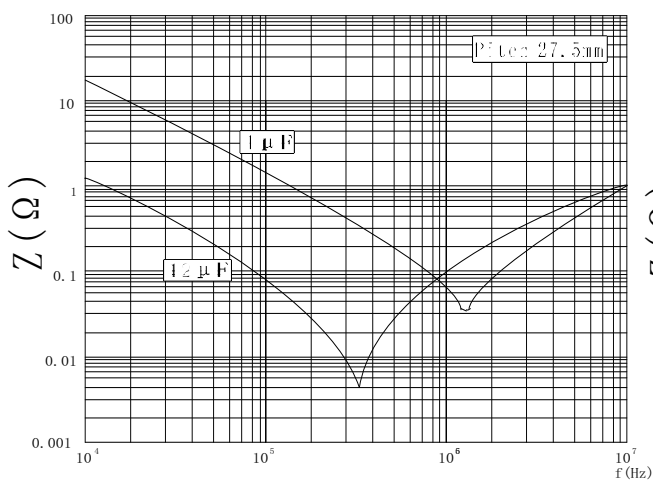
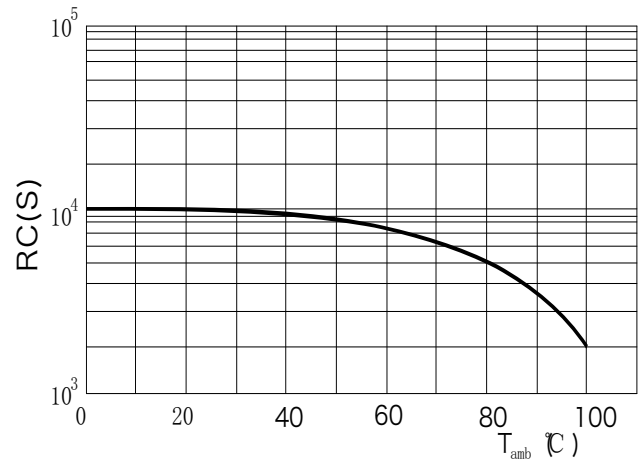
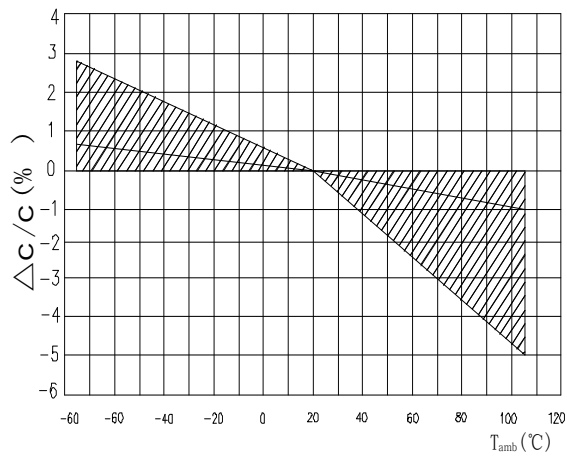
■ CHARACTERISTIC CURVE



■ CHARACTERISTIC CURVE



CHARACTERISTICS



INSPECTION REQUIREMENTS

SUB-CLAUSE NUMBER AND TEST	CONDITIONS	PERFORMANCE REQUIREMENTS
ROUTINE TEST-FINAL INSPECTION		
1. External inspection, visual examination		Legible marking as specified
2. Dimensions		See specification drawing
3. Capacitance	1 kHz at room temperature	See specific reference data
4. $\tan \delta$	1 kHz at room temperature	See specific reference data
	10 kHz at room temperature	
5. Voltage test between terminal	$1.5 \times U_{NDC}$ at T_{amb} Duration 10 s	No visible damage or puncture No flashover
6. Insulation resistance	$U_{NDC} > 100V$ measuring voltage 100V at room temperature Duration 1 min	See specific reference data
TYPE TESTS		
1. External inspection	Check for finish, marking and overall legible dimensions	Legible marking and finish as specified Dimensions: see specific drawing
2. Mechanical tests 2.1 Robustness of terminations 2.1.1 Initial measurements 2.1.2 Robustness of terminations IEC 60068-2-21 2.1.3 Resistance to soldering heat IEC 60068-2-20 2.1.4 Final measurements	Capacitance at 1 kHz $\tan \delta$ at 10 kHz Tensile U_{a1} Wire diameter section load $\leq 0.8 \text{ mm}$ $\leq 0.5 \text{ mm}^2$ 10 N $\leq 1.25 \text{ mm}$ $\leq 1.2 \text{ mm}^2$ 20 N 4 x 90°, Duration 2 s to 3 s/bend No predrying, Method 1A Solder bath: 260°C Duration 10 s ± 1 s Capacitance $\tan \delta$	$ \Delta C/C \leq 0.5\%$ Increase of $\tan \delta \leq 0.0050$ Compared to values measured in 2.1.1
3. Voltage test between terminals 3.1 Initial measurements 3.2 Voltage test between terminal 3.3 Final measurements	Capacitance at 1 kHz $\tan \delta$ at 10 kHz R insulation $1.5 \times U_{NDC}$ at T_{amb} Duration 60 s Capacitance $\tan \delta$ R insulation	$ \Delta C/C \leq 0.5\%$ Increase of $\tan \delta \leq 1.2$ initial $\tan \delta$ + 0.0001 R insulation $\geq 50\%$ of specified values

■ INSPECTION REQUIREMENTS

SUB-CLAUSE NUMBER AND TEST	CONDITIONS	PERFORMANCE REQUIREMENTS
TYPE TESTS		
4 Surgedischarge test 4.1 Initialmeasurements 4.2 Surgedischarge test 4.3 Voltagetest between terminal 4.4 Final measurements	Capacitance at 1 kHz $\tan \delta$ at 10kHz $1.1 \times U_{NDC}$ Number of discharges 5 Time lapse: every 2 min (10 min total) Within 5 min after the surgedischarge test Duration 60s $1.5 \times U_{NDC}$ at T_{amb} Capacitance $\tan \delta$ at 10kHz	$ \Delta C/C \leq 1.0\%$ $\tan \delta \leq 1.2 \times \text{initial} \tan \delta + 0.0001$ Compared to values measured in 4.1
5. Self healing test 5.1 Initialmeasurements 5.2 Selfhealingtest 5.3 Final measurements	Capacitance at 1 kHz $\tan \delta$ at 10kHz $1.5 \times U_{NDC}$ Duration 10s Number of clearings ≤ 5 Clearing = voltage drop of 5 % increase the voltage at 100V/still 5 clearings occur with a max. of $2.5 \times U_{NDC}$ for a duration of 10s Capacitance $\tan \delta$	$ \Delta C/C \leq 0.5\%$ $\tan \delta \leq 1.2 \times \text{initial} \tan \delta + 0.0001$ Compared to values measured in 5.1
6. Environmental testing 6.1 Initialmeasurements 6.2 Change of temperature acc. to IEC 60068-2-14 6.3 Damp heat steady state acc. to IEC 60068-2-78	Capacitance at 1 kHz $\tan \delta$ at 10kHz Test Nb $T_{max} = 85^\circ\text{C}$ $T_{min} = -40^\circ\text{C}$ Transition time: 1 h, equivalent to $1^\circ\text{C}/\text{min}$ Test Ca $T_{max} = 40^\circ\text{C} \pm 2^\circ\text{C}$ $RH = 93\% \pm 3\%$ Duration 56 days	

■ INSPECTION REQUIREMENTS

SUB-CLAUSE NUMBER AND TEST	CONDITIONS	PERFORMANCE REQUIREMENTS
TYPE TESTS		
7. Thermal stability test 7.1 Initial measurements 7.2 Thermal stability test under overload conditions 7.3 Final measurements	Capacitance at 1 kHz tan δ at 1 kHz Natural cooling $T_{amb} \pm 5^{\circ}C$ $1.21 \times P_{max} = (U_2/2) \times W_2 \times C \times \tan \delta =$ $121 \times (I_{max}^2 / W_2 \times C) \times \tan \delta$ 2 with $W_2 = 2 \times p \times f_2$ for I_{max} (see specific reference data) $f_2 = 1$ kHz Duration 48h Measure the temperature every 1.5h during the last 6h Capacitance tan δ at 1 kHz	Temperature rise $< 1^{\circ}C$ $ \Delta C/C \leq 2\%$ Increase of tan $\delta \leq 1.2 \times \text{initial} + 0.0150$
8. Resonance frequency measurement	Impedance analyzer at T_{amb}	< 0.9 times the value as specified in typical curve "Resonant frequency" of this specification
9. Endurance test between terminals 9.1 Initial measurements 9.2 Endurance test between terminals 9.3 Final measurements	Capacitance at 1 kHz tan δ at 1 kHz Sequence $1.3 \times U_{NDC}$ at $T_{max} = 85^{\circ}C$ Duration 500h $1000 \times$ discharge at $1.4 \times I_{peak}$ (maximum repetitive peak current in continuous Operation) $1.3 \times U_{NDC}$ at $T_{max} = 85^{\circ}C$ Duration 500h Capacitance % tan δ	$ \Delta C/C \leq 3\%$ tan δ Increase of tan $\delta \leq 0.0150$ Compared to values measured in 9.1