

EV/HEV母线电容

EV/HEV DC-LINK Capacitor



MKPD-PC Series

应用 / Application

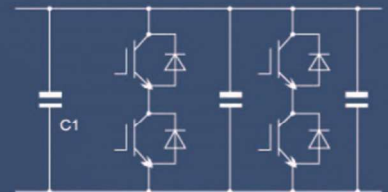
● 针对节能环保新能源汽车配套的HEV/EV电驱控制器，为不同功率等级电驱提供解决方案；

For energy saving and environmental protection of new energy vehicles supporting the HEV/EV electric drive controller for different power levels of electric drive to provide solutions.

● 广泛应用于DC-LINK电路中，作直流滤波储能。

Widely used in DC-LINK circuit for DC filter energy storage.

典型应用电路 / Typical Circuit

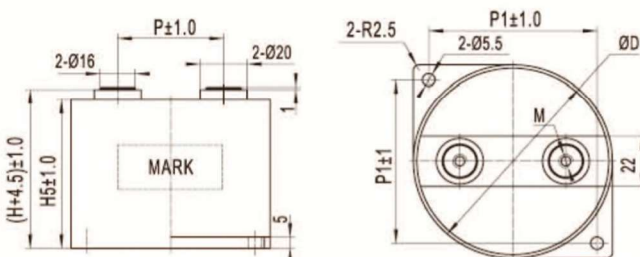


DC-LINK Cap(C1)

特点 / Introduction

- 塑料外壳封装，阻燃环氧树脂注塑；
Mylar tape package, flame retardant epoxy resin injection molding;
- 自愈性好，低损耗角，低等效串联电阻，低杂散电感，低温升；
Self healing, low loss angle, low equivalent series resistance, low equivalent series inductance, low temperature rise;
- 安装灵活方便，引出方式可多样化选择；
The installation is flexible and convenient, and the way of extraction can be varied;
- 在高温高湿复杂的应用环境下，可长期稳定工作。
In the high temperature and high humidity complex application environment, can be a long-term stable work.

外形图 / Outline Drawing



ΦD(mm)	H(mm)	P(mm)	P1(mm)	M(nut/bolt)
83.2	41~76	45	71.4	M5*7-nut
84.5				M8*20-bolt
115	60	94	94	M5*7-nut
				M8*20-bolt

技术参数 / Technical Data

执行标准 Implemented Standard	GB/T 17702、AEC-Q200D
工作温度范围 Operating Temperature Range	-40℃~85℃/105℃
额定电压 (Un) Rated Voltage	350V.DC~2000V.DC
容量范围 (Cn) Capacitance Range	10 μ F~200 μ F
容量偏差 Capacitance Tolerance	± 5%(J)、± 10% (K)
耐电压 Withstand Voltage	
极间 Between Terminals	1.5Un(VDC)/60S
极壳 Between Terminals And Case	4000V.AC/10S(50Hz)
绝缘电阻 Insulation Resistance	≥5000S(100VDC,60S at 20℃)

常用规格 / Dimension

温度 Temperature 85℃

Cn(μ F)	ΦD(mm)	H(mm)	ESR@1kHz(mΩ)	ESL (nH)	DV/DT (V/μ S)	Ip(A)	Irms(A) @40℃
Un 600V.DC Us 900V Ur200V							
170	84.5	41	0.8	25	13	2210	75
380	83.2	65	1.0	35	8	3040	77
600	115	64	1.0	40	7	4200	90
Un 800V.DC Us 1200V Ur250V							
150	84.5	50	1.0	30	15	2250	75
220	84.5	65	1.2	40	10	2200	75
350	115	64	1.2	40	11	3850	85
Un 1100V.DC Us 1650V Ur300V							
100	84.5	50	1.2	30	20	2000	70
140	83.2	65	1.4	35	13	1820	65
230	115	64	1.3	40	15	3450	80
Un 1300V.DC Us 1950V Ur390V							
70	84.5	50	1.4	30	27	1890	65
100	83.2	65	1.5	35	18	1800	60
160	115	64	1.5	40	20	3200	75
Un 1500V.DC Us 2250V Ur450V							
35	84.5	41	1.5	25	35	1225	58
76	84.5	65	1.8	40	22	1672	58
110	115	64	1.6	40	25	2750	70

温度 Temperature 85℃

Cn(μ F)	ΦD(mm)	H(mm)	ESR@1kHz(mΩ)	ESL (nH)	DV/DT (V/μ S)	Ip(A)	Irms(A) @40℃
Un 450V.DC Us 675V Ur150V							
260	84.5	50	0.8	30	9	2340	95
380	83.2	65	0.9	40	6	2280	90
600	115	64	0.9	40	7	4200	100
Un 800V.DC Us 1200V Ur240V							
100	84.5	50	1.0	35	20	2000	85
140	83.2	65	1.2	40	13	1820	80
230	115	64	1.1	40	15	3450	100

直流母线电容

DC-LINK Capacitor

SPGL
STANDARD-POWER

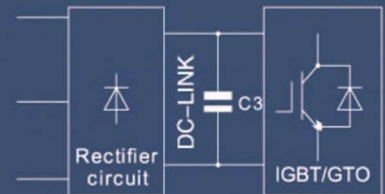


MKPD-MC Series

应用 / Application

- 广泛应用于DC-LINK电路中，作滤波储能用；
Widely used in DC-LINK circuit for filtering energy storage;
- 能替代电解电容，性能更优，寿命更长；
Can replace electrolytic capacitors, better performance and longer life;
- 风能发电，光伏发电用逆变器；各种变频器；电动汽车及混合动力车；SVG、电焊机、电源、感应加热设备。
Wind power ,photovoltaic power inverter,electric vehicles and hybrid vehicles,SVG,welding equipment,power supplies and induction heating equipment,for the DC link filter.

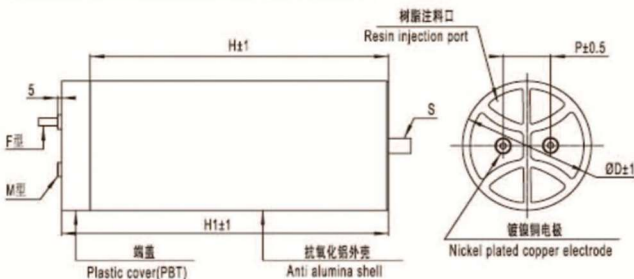
典型应用电路 / Typical Circuit



特点 / Introduction

- 铝外壳封装，高温高导填充料注塑；
Aluminum housing package, high temperature and high conductive filler injection molding;
- 铜螺母、铜螺杆引出，安装简单方便，阻燃定位盖绝缘；
Copper nut, copper screw extraction, installation is simple and convenient, flame retardant positioning cover insulation;
- 容值高，体积小，高耐压水平，自愈性强；
High capacitance, small size, high pressure level, self healing;
- 大纹波电流，DV/DT承受能力。
Large ripple current, DV/DT bearing capacity.

外形图 / Outline Drawing



技术参数 / Technical Data

执行标准 Implemented Standard	GB/T 17702、IEC61071
认证标准 Certification Standards	UL810,Capacitors
气候等级 Climatic Category	40/85/21
额定电压 (Un) Rated Voltage	450V.DC~4000V.DC
容量范围 (Cn) Capacitance Range	10 μ F~8800 μ F
容量偏差 Capacitance Tolerance	± 5%(J)、± 10% (K)
耐电压 Withstand Voltage	
极间 Between Terminals	1.5Un(VDC)/60S
极壳 Between Terminals And Case	1000+2xUn/√2V.AC 60S
绝缘电阻 Insulation Resisitance	≥10000S(100VDC,10S at 50Hz)

常用规格 / Dimension

外形尺寸 Outline Dimension

Unit: mm

ΦD	76	86	86	96	116	136
P	32	32	45	45	50	50
S	M12*16	M12*16	M12*16	M12*16	M12*25	M12*25
M螺母	M6*10	M6*10	M6*10	M6*10	M6*10	M6*10
F螺杆	M8*20	M8*20	M8*20	M8*20	M8*20	M8*20

规格参数 Specification Parameter

Un(V.DC)	Cn(μ F)	ΦD(mm)	H1(mm)	ESR(mΩ)	DV/DT (V/μ S)	Irms(A) @40℃
600	480-5600	76-136	80-350	≤2.5	3-12	50-100
800	290-3200	76-136	80-350	≤3.0	5-15	50-100
1000	220-2500	76-136	80-350	≤3.5	6-15	50-100
1100	180-2200	76-136	80-350	≤4.0	7-16	50-100
1200	140-1700	76-136	80-350	≤4.0	8-16	50-100
1400	100-1300	76-136	80-350	≤5.0	8-17	50-100
1500	90-1100	76-136	80-350	≤5.0	10-17	50-100
2000	90-640	86-136	80-350	≤4.0	12-18	45-100
2200	80-520	86-136	80-350	≤4.0	15-22	45-100
2400	70-500	86-136	80-350	≤4.5	20-35	45-100
2600	60-350	86-136	80-350	≤5.0	25-40	45-100
2800	50-300	86-136	80-350	≤5.0	30-50	45-100
3000	40-240	86-136	80-350	≤5.0	35-55	40-100
3200	40-220	86-136	80-350	≤5.0	35-60	40-100
4000	20-150	86-136	80-350	≤5.0	40-90	45-100

直流母线电容

DC-LINK Capacitor



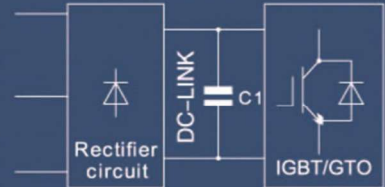
MKPD-DL Series



应用 / Application

- 广泛应用于DC-LINK电路中，作滤波储能用；
Widely used in DC-LINK circuit, for filtering and storage
- 风能发电，光伏发电用逆变器；各种变频器；电动汽车及混合动力车；SVG，APF，电焊机，电源，感应加热设备等直流母线高频滤波场合。

典型应用电路 / Typical Circuit

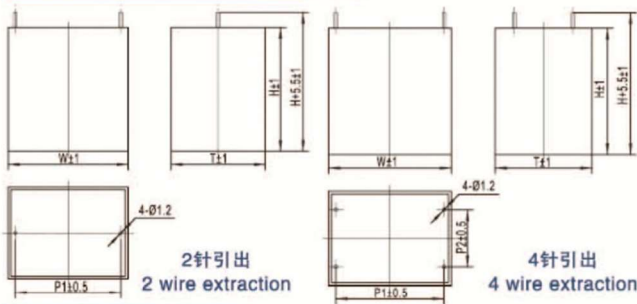


Wind power generation, inverter for photovoltaic power generation; various inverter; electric vehicle and hybrid vehicle; SVG, APF, Electric welding machine, power supply, induction heating equipment, such as DC bus high frequency filter.

特点 / Introduction

- 塑料方壳封装，阻燃环氧树脂注塑；
Plastic package, flame retardant epoxy resin injection molding;
- 镀锡铜线引出，体积小，安装简单方便；
Tin plated copper wire leads, small size, simple and convenient installation;
- 无感式结构，ESL低、ESR小，温升低，寿命长等特点；
Non inductive structure, ESL low, ESR small, low temperature rise, long life and so on;
- 高脉冲电流，高 dv/dt 承受能力。
High pulse current, high dv/dt bearing capacity.

外形图 / Outline Drawing



W(mm)	P1(mm)	P2(mm)
42.5	37.5	20.3
57.5	52.5	20.3

技术参数 / Technical Data

执行标准 Implemented Standard	GB/T 17702、IEC61881
工作温度范围 Operating Temperature Range	-40℃~85℃
额定电压 (Un) Rated Voltage	450V.DC~2000V.DC
容量范围 (Cn) Capacitance Range	8 μ F~150 μ F
容量偏差 Capacitance Tolerance	±5%(J)、±10%(K)
耐电压 Withstand Voltage	
极间 Between Terminals	1.5Un(VDC)/60S
极壳 Between Terminals And Case	3000V.AC/10S(50Hz)
绝缘电阻 Insulation Resistance	≥5000S(100VDC,60S at 20℃)

常用规格 / Dimension

Cn(μ F)	Φ D(mm)	W*T*H (mm)	ESR@ 1kHz(mΩ)	ESL (nH)	DV/DT (V/μ S)	Ipk(A)	Irms(A) @40℃
Un 450V.DC Us 675V Ur150V							
12	1.2	42.5*24.5*27.5	10	10	30	360	10
25	1.2	42.5*33.5*35.5	9.5	10	30	750	13
40	1.2	42.5*33*45	8	15	25	1000	15
50	1.2	57.5*30*45	6	15	20	1000	18
75	1.2	57.5*38*54	4	15	15	1125	22
100	1.2	57.5*42.5*56	3.2	15	15	1500	25
Un 700V.DC Us 1050V Ur200V							
12	1.2	42.5*24.5*27.5	10	10	30	360	10
25	1.2	42.5*33.5*35.5	9.5	10	30	750	13
38	1.2	42.5*33*45	8	15	25	950	13
50	1.2	57.5*30*45	6	15	20	1000	15
60	1.2	57.5*35*50	6	15	20	1200	18
70	1.2	57.5*38*54	5	15	15	1050	20
90	1.2	57.5*42.5*56	3.5	15	15	1800	22
Un 900V.DC Us 1350V Ur 250V							
8	1.2	42.5*24.5*27.5	10	10	40	320	12
15	1.2	42.5*33.5*35.5	9	10	35	525	15
22	1.2	42.5*33*45	8	15	35	770	18
35	1.2	57.5*30*45	6	15	30	1050	18
50	1.2	57.5*35*50	5	15	25	1250	20
55	1.2	57.5*38*54	5	15	22	1210	20
60	1.2	57.5*42.5*56	4	15	20	1200	22
Un 1100V.DC Us 1650V Ur 300V							
8	1.2	42.5*24.5*27.5	10	10	40	320	10
15	1.2	42.5*33.5*35.5	9	10	40	600	12
22	1.2	42.5*33*45	8	15	35	770	13
33	1.2	57.5*30*45	7	15	35	1155	15
40	1.2	57.5*35*50	6	15	30	1200	18
45	1.2	57.5*38*54	4.2	15	25	1125	20
55	1.2	57.5*42.5*56	3.5	15	25	1375	22