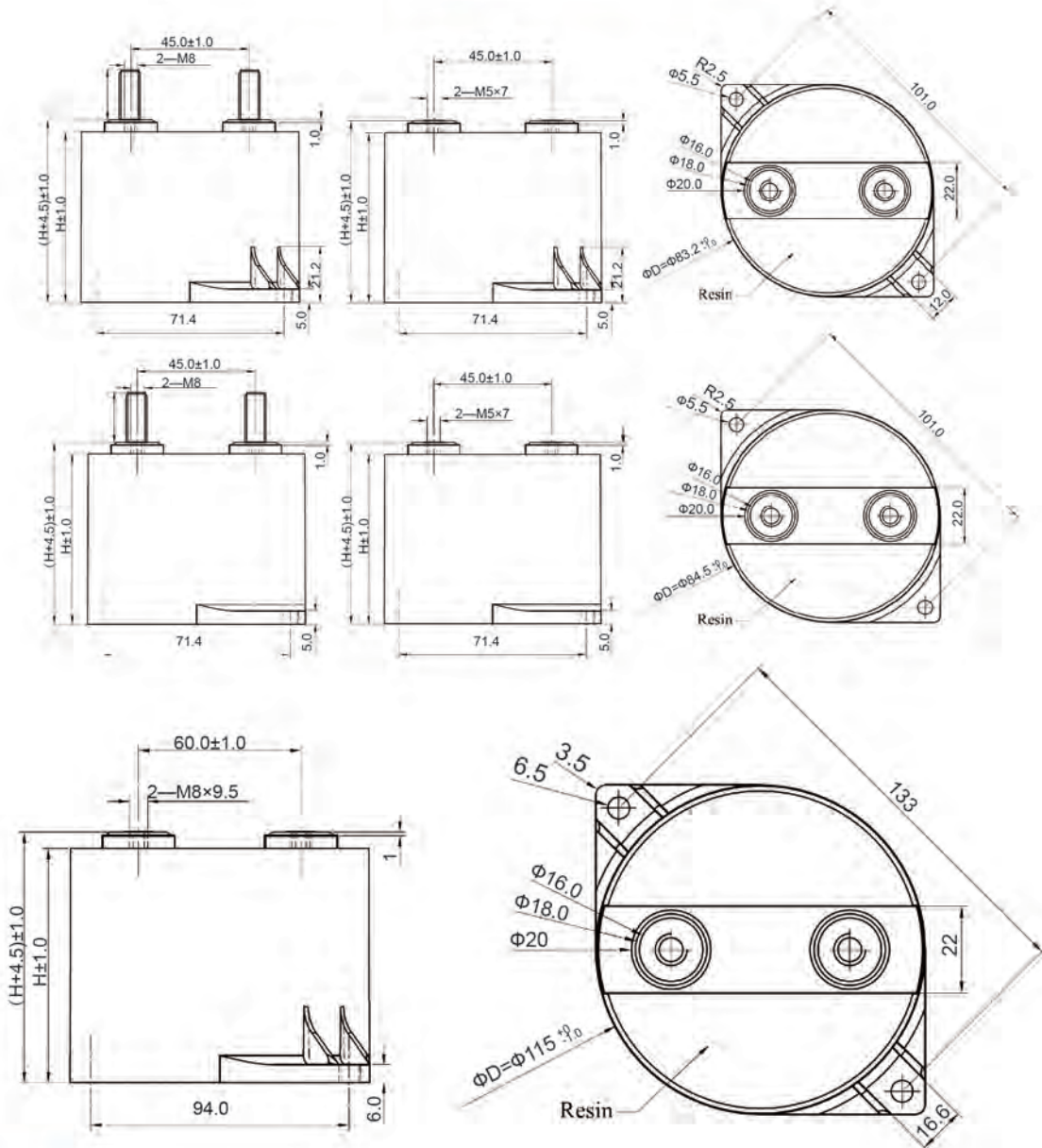


CP

塑料外壳干式直流滤波电容器 (温度105°C)

DC-Link -Capacitor (Dry-Typr, Plastic case, Temperature 105°C)

外形图 Outline Drawing



### ■ 特点

- 应用于直流滤波电路中，可替代电解电容器
- 等效串联电阻小，能承受较大的纹波电流
- 自感小
- 有自愈性
- 寿命长
- 塑料外壳，树脂灌封

### ■ 应用场合

- 交通工具，如：电动车和混合动力车
- 焊接设备，电梯，电机驱动

### ■ 技术要求 Specifications

引用标准 Reference Standard	IEC 61071、AEC Q200D-2010	
气候类别 Climatic Category	40/105/56	
工作温度范围 Operating Temperature Range	-40℃ ~ 105℃ [ $\Theta_{max}(hotspot) \leq 105^\circ C$ ] $\Theta_{hotspot} = 85^\circ C \sim 105^\circ C$ : decreasing factor 1.5% per℃ for $U_{NDC}$	
贮存温度范围 Storage Temperature Range	-40℃ ~ 105℃	
电压范围 Voltage Range	450Vdc ~ 900Vdc	
容量范围 Capacitance Range	47μF ~ 600μF	
电容量允许偏差 Capacitance Tolerance	± 5%(J); ± 10%(K)	
耐电压 Voltage Proof	极间 Between Terminals:	1.5U <sub>N</sub> (10s, 20℃ ± 5℃)
	极壳之间 Between Terminals And Case:	3 000Vac(60s, 50Hz, 20℃ ± 5℃)
介质损耗角正切 tg δ <sub>0</sub>	0.0002	
IR × C <sub>N</sub>	≥ 5 000s (20℃, 100Vdc, 1min)	
过电压 Over Voltage	1.1U <sub>N</sub> (30% of on-load-dur.)	
	1.15U <sub>N</sub> (30min/day)	
	1.2U <sub>N</sub> (5min/day)	
	1.3U <sub>N</sub> (1min/day)	
	1.5U <sub>N</sub> (30ms every time, 1 000 times during the life of the capacitor)	
最高使用海拔 Max. Altitude	2 000m	
最大电极扭矩 Max. Torque of terminals	M5: 2.5Nm	M8: 6.0Nm
	3.0Nm	
最大安装扭矩 Max. Torque of Installation	3.0Nm	
安装 Installation	任意方向 Any Position	
失效率 Failure rate	50FIT	

备注：如果海拔使用高度超过了2 000m，应该考虑海拔对对流冷却和外绝缘的影响。  
The effect of altitude on convection cooling and external insulation should be taken into consideration, if the altitude exceeds 2 000m.

### ■ Features

- Used in DC-Link circuits, Can replace electrolytic capacitor
- Low ESR, high ripple current handling capabilities
- Low Ls
- Self-healing property
- Long lifetime
- Plastic case, Filled with resin

### ■ Applications

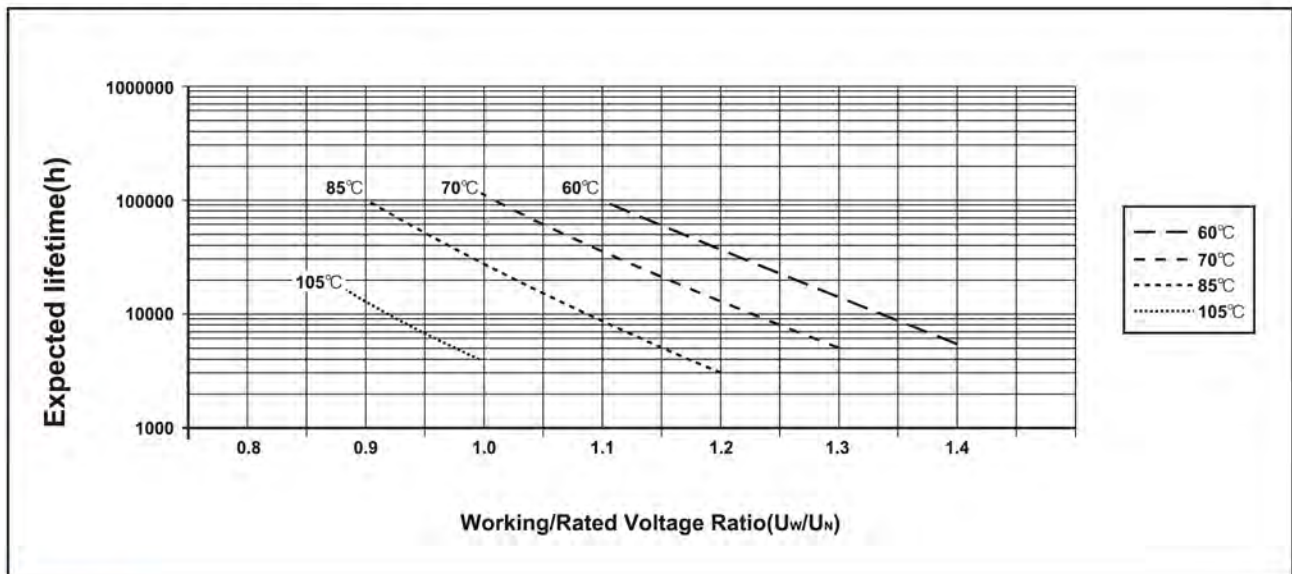
- Transportation: EV or HEV
- Welders, Elevators, Motor Driver systems

■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR (mΩ)	L <sub>s</sub> (nH)	R <sub>th</sub> (K/W)	i (A)	*I <sub>max</sub> (A)		Dimension		Weight (kg)	Part number	Expected lifetime
						60°C	85°C	ΦD	H			
450	170	0.7	25	6.8	2 141	92	65	84.5	41	≈ 0.35	CP451D177-084041xx++	Lifetime curve
	260	0.9	32	5.3	2 240	97	65	84.5	50	≈ 0.40	CP451D267-084050xx++	
	380	1.0	40	5.0	2 195	95	63	84.5	65	≈ 0.48	CP451D387-084065xx++	
	380	1.0	40	5.2	2 195	93	62	83.2	65	≈ 0.47	CP451D387-083065xx++	
	600	1.0	40	3.4	3 955	100	76	115.0	64	≈ 0.90	CP451D607-115064xx++	
600	100	0.8	25	6.8	2 164	88	58	84.5	41	≈ 0.35	CP062D107-084041xx++	
	150	1.0	32	5.3	2 244	89	59	84.5	50	≈ 0.40	CP062D157-084050xx++	
	220	1.1	40	5.0	2 169	89	59	84.5	65	≈ 0.48	CP062D227-084065xx++	
	220	1.1	40	5.2	2 169	87	58	83.2	65	≈ 0.47	CP062D227-083065xx++	
	350	1.0	40	3.4	3 879	100	76	115.0	64	≈ 0.90	CP062D357-115064xx++	
800	66	0.8	25	6.8	1 907	91	61	84.5	41	≈ 0.35	CP082D666-084041xx++	
	100	1.1	32	5.3	1 998	88	59	84.5	50	≈ 0.40	CP082D107-084050xx++	
	140	1.3	40	5.0	1 843	83	55	84.5	65	≈ 0.48	CP082D147-084065xx++	
	140	1.3	40	5.2	1 843	82	54	83.2	65	≈ 0.47	CP082D147-083065xx++	
	230	1.1	40	3.4	3 404	100	73	115.0	64	≈ 0.90	CP082D237-115064xx++	
900	47	1.0	25	6.8	1 620	78	52	84.5	41	≈ 0.35	CP092D476-084041xx++	
	70	1.2	32	5.3	1 688	84	56	84.5	50	≈ 0.40	CP092D706-084050xx++	
	100	1.3	40	5.0	1 570	83	55	84.5	65	≈ 0.48	CP092D107-084065xx++	
	100	1.3	40	5.2	1 570	81	54	83.2	65	≈ 0.47	CP092D107-083065xx++	
	160	1.2	40	3.4	2 824	99	70	115.0	64	≈ 0.90	CP092D167-115064xx++	

- 备注: 1. “-”表示容量偏差。 “-”=capacitance tolerance code, J=±5%,K=±10%。  
 2. “xx”表示引出端代码,引出端子可以选用螺栓式或螺孔式。  
 “xx”=terminals code(refer to table1),terminals can be male or female.  
 3. “++”表示内部特征码。“++”=Internal use.  
 4. ESR的测试频率为10 kHz. The testing frequency of ESR is 10 kHz.  
 5. “\*I<sub>max</sub>”是指在环境温度下的最大电流有效值。在这种条件下,热点温度将达到最大值。  
 “\*I<sub>max</sub>”=Maxium r.m.s current at Θ<sub>ambient</sub>. Θ<sub>hotspot</sub> will reach the maximum value on this condition.  
 6. “R<sub>th</sub>”是指在自然冷却条件下,电容器热点到环境的热阻。  
 “R<sub>th</sub>”=R<sub>th</sub> between hotspot and ambient on natural cooling condition.  
 7.引出端子长度H1可按客户需要商定。The length of terminals H1 available on request (refer to table1).  
 8.其它容量、尺寸系列可按用户需要商定。Other capacitance and dimensions are available on request.  
 9. \*Θ<sub>hotspot</sub> = Θ<sub>ambient</sub> + I<sub>rms</sub><sup>2</sup> × ESR × R<sub>th</sub>.

■ 预期寿命曲线 Lifetime curve



# CA

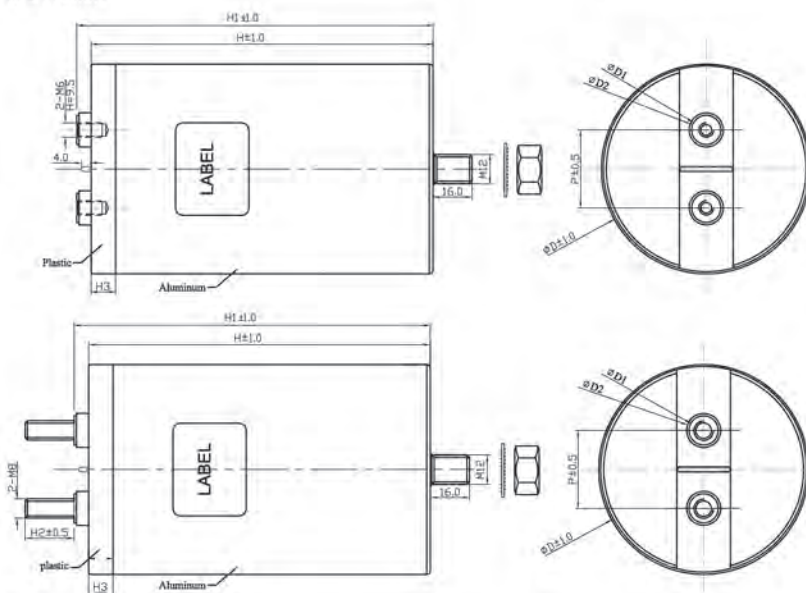
## 铝壳干式直流滤波电容器

DC-Link -Capacitor ( Dry-Typr,Aluminum case )

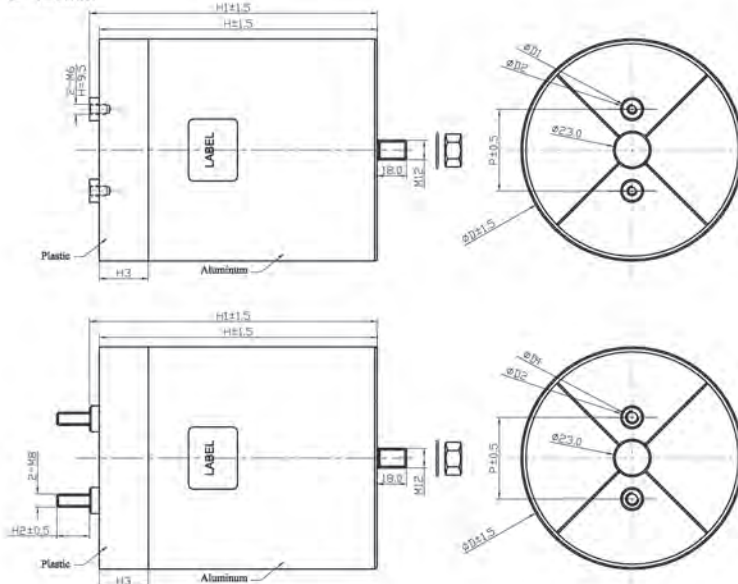
### 外形图 Outline Drawing



D=116mm



D=136mm



尺寸附加说明 Additional remark of dimensions

D=76mm	P=32mm; D1=12mm; D2=14mm; H3=10mm	
D=86mm	P=32mm; D1=12mm; D2=14mm; H3=10mm or 45mm	
	P=45mm;	Female terminals: D1=14mm; D2=16mm; H3=10mm or 45mm
		Male terminals: D1=16mm; D2=20mm; H3=10mm or 45mm
D=100mm	P=50mm; D1=14mm; D2=16mm;	H3=45mm
D=116mm	P=50mm; D1=14mm; D2=16mm;	H ≤ 100mm, H3=10mm
		H > 100mm, H3=45mm
D=136mm	P=50mm; D1=14mm; D2=16mm; H3=45mm	

H3 can be changed in pursuance of customer' s request.

■ 特点

- 应用于直流滤波电路中，可替代电解电容
- 等效串联电阻小，能承受较大的纹波电流
- 自感小
- 有自愈性
- 寿命长
- 铝壳，树脂灌封

■ 应用场合

- 风能发电、太阳能发电用变频器上
- 交通工具，如：电动车和混合动力车
- 焊接设备，电梯，电机驱动

■ Features

- Used in DC-Link circuits, Can replace electrolytic capacitor
- Low ESR, high ripple current handling capabilities
- Low Ls
- Self-healing property
- Long lifetime
- Aluminum case, Filled with resin

■ Applications

- Used in inverters of wind power and solar power
- Transportation: EV or HEV
- Welders, Elevators, Motor Driver systems

■ 技术要求 Specifications

引用标准 Reference Standard	GB/T 17702, IEC 61071	
气候类别 Climatic Category	D ≤ 116mm: 40/85/56 D = 136mm: 40/80/56	
工作温度范围 Operating Temperature Range	D ≤ 116mm: -40℃ ~ 85℃ ( Θ <sub>hs</sub> ≤ 85℃ ) D = 136mm: -40℃ ~ 80℃ ( Θ <sub>hs</sub> ≤ 80℃ )	
贮存温度范围 Storage temperature range	-40℃ ~ 85℃	
电压范围 Voltage Range	600Vdc ~ 4 000Vdc	
容量范围 Capacitance Range	24μF ~ 5 600μF	
电容量允许偏差 Capacitance Tolerance	±5%(J); ±10%(K)	
耐电压 ( 两极之间 ) Test Voltage Between Terminals	1.5U <sub>N</sub> (10s, 20℃ ± 5℃ )	
耐电压 ( 极壳之间 ) Test Voltage Between Terminals And Case	U <sub>N</sub> < 1 500Vdc, 3 000Vac(10s, 50Hz, 20℃ ± 5℃ ) U <sub>N</sub> ≥ 1 500Vdc, (√2 U <sub>N</sub> +1 000)Vac(10s, 50Hz, 20℃ ± 5℃ )	
介质损耗角正切 tg δ <sub>o</sub>	0.0002	
IR × C <sub>N</sub>	≥ 5 000s (20℃ ,100Vdc,1min)	
过电压 Over Voltage	1.1U <sub>N</sub> (30% of on-load-dur.)	
	1.15U <sub>N</sub> (30min/day)	
	1.2U <sub>N</sub> (5min/day)	
	1.3U <sub>N</sub> (1min/day)	
	1.5U <sub>N</sub> (30ms every time, 1 000times during the life of the capacitor)	
最高使用海拔 Max. Altitude	2 000m	
最大电极扭矩 Max. Torque of terminals	M6: 5Nm	M8: 6Nm
最大安装扭矩 Max. Torque of Installation	10Nm	
安装 Installation	任意方向 Any Position	
预期寿命 Lifetime Expectancy	100 000 hours (U <sub>N</sub> , Θ <sub>hs</sub> =70℃ )	
失效率 Failure rate	50FIT	

\*如果海拔使用高度超过了2 000m，应该考虑海拔对对流冷却和外绝缘的影响。

\*The effect of altitude on convection cooling and external insulation should be taken into consideration, if the altitude exceeds 2 000m.

■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR (mΩ)	L <sub>s</sub> (nH)	R <sub>th</sub> (K/W)	Î (A)	*I <sub>max</sub> (A)			Dimension			Weight (kg)	Part number
						40°C	50°C	60°C	ΦD	H	H1		
600	480	1.5	45	5.6	1 560	70	65	55	76	95	101	0.60	CA062D487-076095xx++
	650	1.9	50	4.7	1 560	70	63	53	76	120	126	0.70	CA062D657-076120xx++
	780	2.2	55	4.6	1 550	67	59	50	76	140	146	0.75	CA062D787-076140xx++
	820	1.5	40	4.3	3 060	70	70	62	76	155	161	0.90	CA062D827-076161xx++
	950	1.5	45	4.2	3 090	70	70	63	76	174	180	1.00	CA062D957-076174xx++
	650	1.2	45	5.1	2 120	70	70	64	86	95	101	0.72	CA062D657-086095xx++
	880	1.5	50	4.7	2 110	70	70	60	86	120	126	1.00	CA062D887-086120xx++
	1 000	1.8	55	4.6	2 070	70	65	55	86	136	142	1.10	CA062D108-086136xx++
	1 100	1.7	55	4.6	2 180	70	67	57	86	140	146	1.15	CA062D118-086140xx++
	1 100	1.4	40	4.4	4 110	70	70	64	86	155	161	1.25	CA062D118-086155xx++
	1 300	1.4	45	4.3	4 230	70	70	64	86	174	180	1.30	CA062D138-086174xx++
	2 000	1.1	55	3.0	6 510	70	70	70	86	252	258	1.80	CA062D208-086252xx++
	900	1.3	45	4.7	2 900	70	70	58	100	95	100	1.20	CA062D907-100095xx++
	1 200	1.4	50	4.1	2 850	70	70	58	100	120	125	1.48	CA062D128-100120xx++
	1 400	1.5	55	3.9	2 870	70	70	58	100	136	141	1.66	CA062D148-100136xx++
	1 500	1.6	55	3.8	2 740	70	70	58	100	140	145	1.72	CA062D158-100140xx++
	1 600	1.0	40	3.5	5 920	70	70	70	100	155	160	1.99	CA062D168-100155xx++
	1 800	1.0	45	3.2	5 800	70	70	70	100	174	179	2.28	CA062D188-100174xx++
	1 200	0.7	45	5.4	3 900	80	80	80	116	95	100	1.95	CA062D128-116095xx++
	1 600	1.0	50	5.0	3 830	80	80	70	116	120	125	1.50	CA062D168-116120xx++
2 000	1.1	55	4.9	3 960	80	80	67	116	140	145	1.75	CA062D208-116140xx++	
2 100	0.8	40	3.6	7 840	100	100	92	116	158	163	2.00	CA062D218-116158xx++	
2 400	0.9	45	3.4	7 810	100	100	90	116	174	179	2.20	CA062D248-116174xx++	
3 000	0.8	50	2.7	11 200	100	100	100	116	230	235	2.80	CA062D308-116230xx++	
5 600	0.8	60	2.0	15 940	100	100	100	136	295	300	4.90	CA062D568-136295xx++	
700	360	1.6	45	5.6	1 560	70	63	53	76	95	101	0.60	CA072D367-076095xx++
	480	2.1	50	4.7	1 530	68	60	50	76	120	126	0.70	CA072D487-076120xx++
	580	2.4	55	4.6	1 530	64	56	48	76	140	146	0.75	CA072D587-076140xx++
	620	1.5	40	4.3	3 090	70	70	62	76	155	161	0.90	CA072D627-076155xx++
	720	1.6	45	4.2	3 120	70	70	61	76	174	180	1.00	CA072D727-076174xx++
	480	1.3	45	5.1	2 080	70	70	61	86	95	101	0.72	CA072D487-086095xx++
	650	1.7	50	4.7	2 080	70	66	56	86	120	126	1.00	CA072D657-086120xx++
	750	2.0	55	4.6	2 070	70	62	52	86	136	142	1.10	CA072D757-086136xx++
	780	1.9	55	4.6	2 060	70	63	53	86	140	146	1.15	CA072D787-086140xx++
	820	1.4	40	4.4	4 080	70	70	64	86	155	161	1.25	CA072D827-086155xx++
	950	1.5	45	4.3	4 120	70	70	62	86	174	180	1.30	CA072D957-086174xx++
	1 500	1.1	55	3.0	6 500	70	70	70	86	252	258	1.80	CA072D158-086252xx++
	650	1.4	45	4.7	2 710	70	69	56	100	95	100	1.20	CA072D657-100095xx++
	900	1.5	50	4.1	2 760	70	69	56	100	120	125	1.47	CA072D907-100120xx++
	1 000	1.7	55	3.9	2 650	70	67	55	100	136	141	1.67	CA072D108-100136xx++
	1 100	1.7	55	3.8	2 790	70	68	56	100	140	145	1.69	CA072D118-100140xx++
	1 100	1.0	40	3.5	5 260	70	70	70	100	155	160	2.01	CA072D118-100155xx++
	1 300	1.1	45	3.2	5 420	70	70	70	100	174	179	2.28	CA072D138-100174xx++
	920	0.7	45	5.4	3 990	80	80	80	116	95	100	1.95	CA072D927-116095xx++
	1 200	1.0	50	5.0	3 830	80	80	70	116	120	125	1.50	CA072D128-116120xx++
1 500	1.1	55	4.9	3 950	80	80	68	116	140	145	1.75	CA072D158-116140xx++	
1 500	0.8	40	3.6	7 460	100	100	93	116	158	163	2.00	CA072D158-116158xx++	
1 800	1.0	45	3.4	7 800	100	100	85	116	174	179	2.20	CA072D188-116174xx++	
2 300	0.8	50	2.7	11 440	100	100	100	116	230	235	2.80	CA072D238-116230xx++	
4 200	0.8	60	2.0	15 920	100	100	100	136	295	300	4.90	CA072D428-136295xx++	

■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR (mΩ)	L <sub>s</sub> (nH)	R <sub>in</sub> (K/W)	İ (A)	*I <sub>max</sub> (A)			Dimension			Weight (kg)	Part number
						40℃	50℃	60℃	ΦD	H	H1		
800	290	1.7	45	5.6	1 530	69	61	51	76	95	101	0.60	CA082D297-076095xx++
	400	2.2	50	4.7	1 530	66	58	49	76	120	126	0.70	CA082D407-076120xx++
	480	2.5	55	4.6	1 560	63	55	47	76	140	146	0.75	CA082D487-076140xx++
	480	1.6	40	4.3	1 540	70	70	60	76	155	161	0.90	CA082D487-076155xx++
	560	1.7	45	4.2	2 910	70	70	59	76	174	180	1.00	CA082D567-076174xx++
	380	1.4	45	5.1	2 960	70	70	59	86	95	101	0.72	CA082D387-086095xx++
	520	1.8	50	4.7	2 010	70	64	54	86	120	126	1.00	CA082D527-086120xx++
	580	2.0	55	4.6	2 020	70	62	52	86	136	142	1.10	CA082D587-086136xx++
	630	2.1	55	4.6	1 950	68	60	51	86	140	146	1.15	CA082D637-086140xx++
	650	1.5	40	4.4	2 030	70	70	62	86	155	161	1.25	CA082D657-086155xx++
	750	1.6	45	4.3	3 940	70	70	60	86	174	180	1.30	CA082D757-086174xx++
	1 100	1.2	55	3.0	3 960	70	70	70	86	252	258	1.80	CA082D118-086252xx++
	500	1.4	45	4.7	2 620	70	67	55	100	95	100	1.20	CA082D507-100095xx++
	700	1.6	50	4.1	2 700	70	67	55	100	120	125	1.47	CA082D707-100120xx++
	800	1.8	55	3.9	2 660	70	66	54	100	136	141	1.65	CA082D807-100136xx++
	850	1.8	55	3.8	2 700	70	66	54	100	140	145	1.68	CA082D857-100140xx++
	900	1.1	40	3.5	5 400	70	70	70	100	155	160	1.98	CA082D907-100155xx++
	1 000	1.1	45	3.2	5 230	70	70	70	100	174	179	2.28	CA082D108-100174xx++
	720	0.8	45	5.4	3 800	80	80	76	116	95	100	1.95	CA082D727-116095xx++
	980	1.1	50	5.0	3 810	80	79	67	116	120	125	1.50	CA082D987-116120xx++
1 200	1.2	55	4.9	3 860	80	77	65	116	140	145	1.75	CA082D128-116140xx++	
1 200	0.85	40	3.6	7 280	100	100	90	116	158	163	2.00	CA082D128-116158xx++	
1 500	1.0	45	3.4	7 920	100	100	85	116	174	179	2.20	CA082D158-116174xx++	
1 800	0.8	50	2.7	10 910	100	100	100	116	230	235	2.80	CA082D188-116230xx++	
3 200	0.8	60	2.0	14 780	100	100	100	136	295	300	4.90	CA082D328-136295xx++	
900	290	2.0	45	5.6	1 530	63	56	47	76	95	101	0.60	CA092D297-076095xx++
	400	2.6	50	4.7	1 560	61	54	45	76	120	126	0.70	CA092D407-076120xx++
	480	2.9	55	4.6	1 540	58	51	43	76	140	146	0.75	CA092D487-076140xx++
	480	1.7	40	4.3	2 910	70	69	58	76	155	161	0.90	CA092D487-076155xx++
	560	1.8	45	4.2	2 960	70	68	58	76	174	180	1.00	CA092D567-076174xx++
	380	1.6	45	5.1	2 010	70	65	55	86	95	101	0.72	CA092D387-086095xx++
	520	2.1	50	4.7	2 020	68	60	50	86	120	126	1.00	CA092D527-086120xx++
	580	2.2	55	4.6	1 950	67	59	50	86	136	142	1.10	CA092D587-086136xx++
	630	2.4	55	4.6	2 030	64	56	48	86	140	146	1.15	CA092D637-086140xx++
	650	1.5	40	4.4	3 940	70	70	62	86	155	161	1.25	CA092D657-086155xx++
	750	1.6	45	4.3	3 960	70	70	60	86	174	180	1.30	CA092D757-086174xx++
	1 100	1.3	55	3.0	5 810	70	70	70	86	252	258	1.80	CA092D118-086252xx++
	500	1.4	45	4.7	2 620	70	67	55	100	95	100	1.20	CA092D507-100095xx++
	700	1.6	50	4.1	2 700	70	67	55	100	120	125	1.47	CA092D707-100120xx++
	800	1.8	55	3.9	2 660	70	66	54	100	136	141	1.65	CA092D807-100136xx++
	850	1.8	55	3.8	2 700	70	66	54	100	140	145	1.68	CA092D857-100140xx++
	900	1.1	40	3.5	5 400	70	70	70	100	155	160	1.98	CA092D907-100155xx++
	1 000	1.1	45	3.2	5 230	70	70	70	100	174	179	2.28	CA092D108-100174xx++
	720	0.9	45	5.4	3 800	80	80	71	116	95	100	1.95	CA092D727-116095xx++
	980	1.2	50	5.0	3 810	80	76	64	116	120	125	1.50	CA092D987-116120xx++
1 200	1.4	55	4.9	3 860	80	71	60	116	140	145	1.75	CA092D128-116140xx++	
1 200	0.9	40	3.6	7 280	100	100	87	116	158	163	2.00	CA092D128-116158xx++	
1 500	1.1	45	3.4	7 920	100	96	81	116	174	179	2.20	CA092D158-116174xx++	
1 800	0.8	50	2.7	10 910	100	100	100	116	230	235	2.80	CA092D188-116230xx++	
3 200	0.8	60	2.0	14 780	100	100	100	136	295	300	4.90	CA092D328-136295xx++	

■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR ( mΩ )	L <sub>s</sub> (nH)	R <sub>th</sub> (K/W)	İ (A)	*I <sub>max</sub> (A)			Dimension			Weight (kg)	Part number
						40°C	50°C	60°C	ΦD	H	H1		
1 000	220	2.2	45	5.6	1 460	60	53	45	76	95	101	0.60	CA102D227-076095xx++
	300	2.9	50	4.7	1 460	57	51	43	76	120	126	0.70	CA102D307-076120xx++
	360	3.3	55	4.6	1 450	54	48	41	76	140	146	0.75	CA102D367-076140xx++
	360	1.9	40	4.3	2 740	70	65	55	76	155	161	0.90	CA102D367-076155xx++
	420	2.0	45	4.2	2 780	70	65	55	76	174	180	1.00	CA102D427-076174xx++
	290	1.8	45	5.1	1 920	70	62	52	86	95	101	0.72	CA102D297-086096xx++
	400	2.3	50	4.7	1 950	65	57	48	86	120	126	1.00	CA102D407-086120xx++
	470	2.2	55	4.6	1 980	67	59	50	86	136	142	1.10	CA102D477-086136xx++
	480	2.6	55	4.6	1 930	61	54	46	86	140	146	1.15	CA102D487-086140xx++
	500	1.6	40	4.4	3 800	70	70	60	86	155	161	1.25	CA102D507-086155xx++
	560	1.7	45	4.3	3 710	70	69	58	86	174	180	1.30	CA102D567-086174xx++
	900	1.3	55	3.0	5 960	70	70	70	86	252	258	1.80	CA102D907-086252xx++
	380	1.5	45	4.7	2 490	70	65	53	100	95	100	1.18	CA102D387-100095xx++
	500	1.8	50	4.1	2 410	70	64	52	100	120	125	1.47	CA102D507-100120xx++
	600	1.9	55	3.9	2 500	70	63	52	100	136	141	1.63	CA102D607-100136xx++
	650	1.9	55	3.8	2 590	70	64	52	100	140	145	1.66	CA102D657-100140xx++
	650	1.1	40	3.5	4 890	70	70	70	100	155	160	1.97	CA102D657-100155xx++
	780	1.1	45	3.2	5 110	70	70	70	100	174	179	2.24	CA102D787-100174xx++
	540	1.0	45	5.4	3 570	80	80	68	116	95	100	1.95	CA102D547-116095xx++
	740	1.4	50	5.0	3 610	80	70	59	116	120	125	1.50	CA102D747-116120xx++
900	1.5	55	4.9	3 620	78	69	58	116	140	145	1.75	CA102D907-116140xx++	
900	0.95	40	3.6	6 840	100	100	85	116	158	163	2.00	CA102D907-116158xx++	
1 100	1.2	45	3.4	7 280	100	92	78	116	174	179	2.20	CA102D118-116174xx++	
1 400	0.9	50	2.7	10 630	100	100	100	116	230	235	2.80	CA102D148-116230xx++	
2 500	0.9	60	2.0	14 470	100	100	100	136	295	300	4.90	CA102D258-136295xx++	
1 100	180	2.3	45	5.6	1 400	59	52	44	76	95	101	0.60	CA112D187-076095xx++
	250	3.0	50	4.7	1 430	56	50	42	76	120	126	0.70	CA112D257-076120xx++
	300	3.5	55	4.6	1 420	53	47	39	76	140	146	0.75	CA112D307-076140xx++
	310	1.9	40	4.3	2 770	70	65	55	76	155	161	0.90	CA112D317-076155xx++
	360	2.0	45	4.2	2 800	70	65	55	76	174	180	1.00	CA112D367-076174xx++
	240	1.9	45	5.1	1 870	68	60	51	86	95	101	0.72	CA112D247-086095xx++
	330	2.4	50	4.7	1 890	63	56	47	86	120	126	1.00	CA112D337-086120xx++
	420	2.3	55	4.6	2 080	65	58	49	86	136	142	1.10	CA112D427-086136xx++
	420	1.7	40	4.4	3 750	70	63	52	86	155	161	1.25	CA112D427-086155xx++
	500	1.8	45	4.3	3 730	70	67	57	86	174	180	1.30	CA112D507-086174xx++
	750	1.3	55	3.0	5 840	70	70	70	86	252	258	1.80	CA112D757-086252xx++
	350	1.5	45	4.7	2 640	70	65	53	100	95	100	1.19	CA112D357-100095xx++
	450	1.8	50	4.1	2 500	70	63	51	100	120	125	1.49	CA112D457-100120xx++
	520	2.0	55	3.9	2 500	70	62	50	100	136	141	1.67	CA112D527-100136xx++
	550	2.1	55	3.8	2 520	70	62	51	100	140	145	1.71	CA112D557-100140xx++
	580	1.1	40	3.5	5 020	70	70	70	100	155	160	2.00	CA112D587-100155xx++
	650	1.2	45	3.2	4 900	70	70	70	100	174	179	2.30	CA112D657-100174xx++
	450	1.0	45	5.4	3 500	80	80	68	116	95	100	1.95	CA112D457-116095xx++
	620	1.4	50	5.0	3 550	80	70	59	116	120	125	1.50	CA112D627-116120xx++
	750	1.6	55	4.9	3 550	75	66	56	116	140	145	1.75	CA112D757-116140xx++
780	0.9	40	3.6	6 960	100	100	85	116	158	163	2.00	CA112D787-116158xx++	
920	1.1	45	3.4	7 150	100	96	81	116	174	179	2.20	CA112D927-116174xx++	
1 200	0.9	50	2.7	10 710	100	100	100	116	230	235	2.80	CA112D128-116230xx++	
2 200	0.9	60	2.0	14 960	100	100	100	136	295	300	4.90	CA112D228-136295xx++	



■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR (mΩ)	L <sub>s</sub> (nH)	R <sub>in</sub> (K/W)	I <sub>h</sub> (A)	*I <sub>max</sub> (A)			Dimension			Weight (kg)	Part number
						40℃	50℃	60℃	ΦD	H	H1		
1 200	140	2.7	45	5.6	1 330	55	48	41	76	95	101	0.60	CA122D147-076095xx++
	200	3.4	50	4.7	1 400	53	47	40	76	120	126	0.70	CA122D207-076120xx++
	240	3.9	55	4.6	1 380	50	44	37	76	140	146	0.75	CA122D247-076140xx++
	240	2.0	40	4.3	2 630	70	64	54	76	155	161	0.90	CA122D247-076155xx++
	280	2.1	45	4.2	2 670	70	63	53	76	174	180	1.00	CA122D287-076174xx++
	190	2.1	45	5.1	1 810	65	57	48	86	95	101	0.72	CA122D197-086095xx++
	260	2.7	50	4.7	1 810	60	53	44	86	120	126	1.00	CA122D267-086120xx++
	320	2.5	55	4.6	1 930	63	55	47	86	136	142	1.10	CA122D327-086136xx++
	330	3.0	55	4.6	1 900	57	50	43	86	140	146	1.15	CA122D337-086140xx++
	330	1.8	40	4.4	3 610	70	66	56	86	155	161	1.25	CA122D337-086155xx++
	380	1.9	45	4.3	3 610	70	65	55	86	174	180	1.30	CA122D387-086174xx++
	580	1.5	55	3.0	5 520	70	70	70	86	252	258	1.80	CA122D587-086252xx++
	250	1.7	45	4.7	2 320	70	61	50	100	95	100	1.19	CA122D257-100095xx++
	350	2.0	50	4.1	2 390	70	61	50	100	120	125	1.45	CA122D357-100120xx++
	400	2.2	55	3.9	2 360	69	59	49	100	136	141	1.63	CA122D407-100136xx++
	420	2.2	55	3.8	2 370	69	59	49	100	140	145	1.67	CA122D427-100140xx++
	450	1.2	40	3.5	4 790	70	70	70	100	155	160	1.96	CA122D457-100155xx++
	500	1.2	45	3.2	4 640	70	70	70	100	174	179	2.26	CA122D507-100174xx++
	360	1.1	45	5.4	3 420	80	76	64	116	95	100	1.95	CA122D367-116095xx++
	500	1.6	50	5.0	3 490	75	66	55	116	120	125	1.50	CA122D507-116120xx++
600	1.8	55	4.9	3 450	71	63	53	116	140	145	1.75	CA122D607-116140xx++	
620	1.0	40	3.6	6 780	100	98	83	116	158	163	2.00	CA122D627-116158xx++	
720	1.2	45	3.4	6 740	100	92	78	116	174	179	2.20	CA122D727-116174xx++	
950	0.9	50	2.7	10 210	100	100	100	116	230	235	2.80	CA122D957-116230xx++	
1 700	0.9	60	2.0	13 920	100	100	100	136	295	300	4.90	CA122D178-136295xx++	
1 300	120	2.9	45	5.6	1 310	53	46	39	76	95	101	0.60	CA132D127-076095xx++
	170	3.7	50	4.7	1 360	51	45	38	76	120	126	0.70	CA132D177-076120xx++
	210	4.1	55	4.6	1 390	49	43	36	76	140	146	0.75	CA132D217-076140xx++
	210	2.1	40	4.3	2 640	70	62	53	76	155	161	0.90	CA132D217-076155xx++
	240	2.3	45	4.2	2 620	68	60	51	76	174	180	1.00	CA132D247-076174xx++
	170	2.2	45	5.1	1 850	63	56	47	86	95	101	0.72	CA132D177-086095xx++
	230	2.8	50	4.7	1 840	58	52	44	86	120	126	1.00	CA132D237-086120xx++
	270	2.8	55	4.6	1 860	59	52	44	86	136	142	1.10	CA132D277-086136xx++
	270	3.3	55	4.6	1 780	54	48	41	86	140	146	1.15	CA132D277-086140xx++
	280	1.8	40	4.4	3 510	70	66	56	86	155	161	1.25	CA132D287-086155xx++
	320	1.9	45	4.3	3 490	70	65	55	86	174	180	1.30	CA132D327-086174xx++
	520	1.5	55	3.0	5 670	70	70	67	86	252	258	1.80	CA132D527-086252xx++
	210	1.8	45	4.7	2 270	69	60	49	100	95	100	1.19	CA132D217-100095xx++
	280	2.1	50	4.1	2 230	67	58	48	100	120	125	1.47	CA132D287-100120xx++
	330	2.3	55	3.9	2 270	66	57	47	100	136	141	1.64	CA132D337-100136xx++
	360	2.3	55	3.8	2 370	67	58	47	100	140	145	1.67	CA132D367-100140xx++
	380	1.2	40	3.5	4 720	70	70	69	100	155	160	1.96	CA132D387-100155xx++
	420	1.3	45	3.2	4 540	70	70	70	100	174	179	2.26	CA132D427-100174xx++
	320	1.2	45	5.4	3 490	80	73	62	116	95	100	1.95	CA132D327-116095xx++
	430	1.6	50	5.0	3 440	75	66	55	116	120	125	1.50	CA132D437-116120xx++
	520	1.8	55	4.9	3 430	71	63	53	116	140	145	1.75	CA132D527-116140xx++
	540	1.0	40	3.6	6 770	100	98	83	116	158	163	2.00	CA132D547-116158xx++
	630	1.2	45	3.4	6 760	100	92	78	116	174	179	2.20	CA132D637-116174xx++
820	0.9	50	2.7	10 100	100	100	100	116	230	235	2.80	CA132D827-116230xx++	
1 500	1.0	60	2.0	14 080	100	100	100	136	295	300	4.90	CA132D158-136295xx++	

■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR ( mΩ )	L <sub>s</sub> (nH)	R <sub>th</sub> (K/W)	Î (A)	I <sub>max</sub> (A)			Dimension			Weight (kg)	Part number
						40°C	50°C	60°C	ΦD	H	H1		
1 400	100	3.1	45	5.6	1 260	51	45	38	76	95	101	0.60	CA142D107-076095xx++
	140	4.0	50	4.7	1 290	49	43	36	76	120	126	0.70	CA142D147-076120xx++
	170	4.6	55	4.6	1 290	46	41	34	76	140	146	0.75	CA142D177-076140xx++
	170	2.3	40	4.3	2 460	67	59	50	76	155	161	0.90	CA142D177-076155xx++
	200	2.4	45	4.2	2 520	67	59	50	76	174	180	1.00	CA142D207-076174xx++
	140	2.4	45	5.1	1 760	61	53	45	86	95	101	0.72	CA142D147-086095xx++
	190	3.1	50	4.7	1 750	56	49	41	86	120	126	1.00	CA142D197-086120xx++
	230	2.9	55	4.6	1 800	58	51	43	86	136	142	1.10	CA142D237-086136xx++
	240	1.9	40	4.4	3 470	70	65	55	86	155	161	1.25	CA142D247-086155xx++
	270	2.1	45	4.3	3 400	70	62	53	86	174	180	1.30	CA142D277-086174xx++
	420	1.5	55	3.0	5 210	70	70	70	86	252	258	1.80	CA142D427-086252xx++
	180	1.8	45	4.7	2 240	68	59	48	100	95	100	1.19	CA142D187-100095xx++
	250	2.2	50	4.1	2 300	67	58	47	100	120	125	1.45	CA142D257-100120xx++
	290	2.4	55	3.9	2 300	65	57	46	100	136	141	1.63	CA142D297-100136xx++
	320	1.2	40	3.5	4 580	70	70	68	100	155	160	1.96	CA142D327-100155xx++
	360	1.3	45	3.2	4 490	70	70	69	100	174	179	2.26	CA142D367-100174xx++
	260	1.3	45	5.4	3 220	80	70	59	116	95	100	1.95	CA142D267-116095xx++
	360	1.8	50	5.0	3 280	70	62	52	116	120	125	1.50	CA142D367-116120xx++
	450	2.0	55	4.9	3 390	67	59	50	116	140	145	1.75	CA142D457-116140xx++
	460	1.1	40	3.6	6 540	100	94	79	116	158	163	2.00	CA142D467-116158xx++
540	1.3	45	3.4	6 690	89	79	66	116	174	179	2.20	CA142D547-116174xx++	
700	0.9	50	2.7	9 950	100	94	79	116	230	235	2.80	CA142D707-116230xx++	
1 300	1.05	60	2.0	14 080	100	100	97	136	295	300	4.90	CA142D178-136295xx++	
1 500	90	3.3	45	5.6	1 220	49	44	37	76	95	101	0.60	CA152D097-076095xx++
	120	4.4	50	4.7	1 200	47	41	35	76	120	126	0.70	CA152D127-076120xx++
	150	4.9	55	4.6	1 230	45	39	33	76	140	146	0.75	CA152D157-076140xx++
	150	2.4	40	4.3	2 340	66	58	49	76	155	161	0.90	CA152D157-076155xx++
	170	2.5	45	4.2	2 310	65	58	49	76	174	180	1.00	CA152D177-076174xx++
	120	2.6	45	5.1	1 630	58	51	43	86	95	101	0.72	CA152D127-086095xx++
	170	3.3	50	4.7	1 690	54	48	40	86	120	126	1.00	CA152D177-086120xx++
	200	3.0	55	4.6	1 720	57	50	43	86	136	142	1.10	CA152D207-086136xx++
	210	2.0	40	4.4	3 280	70	63	53	86	155	161	1.25	CA152D217-086155xx++
	240	2.1	45	4.3	3 260	70	62	53	86	174	180	1.30	CA152D247-086174xx++
	380	1.5	55	3.0	5 080	70	70	70	86	252	258	1.80	CA152D387-086252xx++
	160	1.9	45	4.7	2 150	67	58	47	100	95	100	1.18	CA152D167-100095xx++
	210	2.3	50	4.1	2 080	65	56	46	100	120	125	1.46	CA152D217-100120xx++
	250	2.5	55	3.9	2 140	64	55	45	100	136	141	1.63	CA152D257-100136xx++
	280	1.3	40	3.5	4 320	70	70	67	100	155	160	1.96	CA152D287-100155xx++
	320	1.3	45	3.2	4 300	70	70	68	100	174	179	2.24	CA152D327-100174xx++
	230	1.4	45	5.4	3 120	77	68	57	116	95	100	1.95	CA152D237-116095xx++
	320	1.9	50	5.0	3 180	68	60	51	116	120	125	1.50	CA152D327-116120xx++
	390	2.1	55	4.9	3 200	66	58	49	116	140	145	1.75	CA152D397-116140xx++
	420	1.1	40	3.6	6 550	100	94	79	116	158	163	2.00	CA152D427-116158xx++
	470	1.3	45	3.4	6 280	89	79	66	116	174	179	2.20	CA152D477-116174xx++
	600	1.0	50	2.7	9 200	100	89	75	116	230	235	2.80	CA152D607-116230xx++
	1 100	1.1	60	2.0	12 850	100	100	95	136	295	300	4.90	CA152D117-136295xx++

■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR (mΩ)	L <sub>s</sub> (nH)	R <sub>th</sub> (K/W)	İ (A)	I <sub>max</sub> <sup>*</sup> (A)			Dimension			Weight (kg)	Part number
						40℃	50℃	60℃	ΦD	H	H1		
2000	110	3.5	65	4.5	1830	48	42	35	86	140	146	1.05	CA202D117-086140xx++
	180	1.8	60	3.2	3660	78	69	58	86	225	231	1.65	CA202D187-086225xx++
	180	2.1	60	3.5	3660	70	61	52	116	120	125	1.60	CA202D187-116120xx++
	220	2.3	65	3.3	3660	69	60	51	116	140	145	1.85	CA202D227-116140xx++
	260	1.1	55	2.9	7360	100	93	79	116	174	179	2.30	CA202D267-116174xx++
	360	1.3	60	2.4	7330	100	93	79	116	225	230	2.85	CA202D367-116225xx++
	250	1.8	60	2.9	5090	78	67	55	136	120	125	2.15	CA202D257-136120xx++
	310	2.0	65	2.7	5150	77	66	54	136	140	145	2.45	CA202D317-136140xx++
	360	1.0	55	2.4	10200	100	99	81	136	175	180	3.15	CA202D367-136175xx++
	500	1.2	60	2.1	10100	100	98	80	136	225	230	3.90	CA202D507-136225xx++
610	1.3	60	1.9	10100	100	98	80	136	265	270	4.50	CA202D617-136265xx++	
2200	90	3.7	65	4.5	1790	46	41	34	86	140	146	1.05	CA222D906-086140xx++
	150	1.9	60	3.2	3670	77	68	57	86	225	231	1.65	CA222D157-086225xx++
	140	2.2	60	3.6	3420	67	59	50	116	120	125	1.60	CA222D147-116120xx++
	170	2.5	65	3.3	3390	66	58	49	116	140	145	1.85	CA222D177-116140xx++
	210	1.1	55	2.9	7150	100	91	77	116	174	179	2.30	CA222D217-116174xx++
	290	1.4	60	2.4	7100	100	91	77	116	225	230	2.90	CA222D297-116225xx++
	200	1.9	60	2.9	4890	76	66	54	136	120	125	2.15	CA222D207-136120xx++
	250	2.1	65	2.7	4990	75	65	53	136	140	145	2.45	CA222D257-136140xx++
	290	1.0	55	2.4	9870	100	97	79	136	175	180	3.15	CA222D297-136175xx++
	400	1.2	60	2.1	9790	100	96	79	136	225	230	3.90	CA222D407-136225xx++
500	1.4	60	1.9	9990	100	97	79	136	265	270	4.50	CA222D507-136265xx++	
2400	75	3.9	65	4.5	1770	45	40	33	86	140	146	1.05	CA242D756-086140xx++
	120	2.0	60	3.2	3470	74	65	55	86	225	231	1.65	CA242D127-086225xx++
	120	2.3	60	3.6	3470	66	58	49	116	120	125	1.60	CA242D127-116120xx++
	140	2.6	65	3.3	3310	64	56	47	116	140	145	1.85	CA242D147-116140xx++
	170	1.2	55	2.9	6840	100	89	75	116	174	179	2.30	CA242D177-115174xx++
	240	1.4	60	2.5	6940	100	89	75	116	225	230	2.85	CA242D247-116225xx++
	160	2.0	60	3.0	4630	73	63	52	136	120	125	2.20	CA242D167-136120xx++
	200	2.2	65	2.8	4720	72	63	51	136	140	145	2.50	CA242D207-136140xx++
	240	1.1	55	2.5	9660	100	95	78	136	175	180	3.15	CA242D247-136175xx++
	330	1.3	60	2.1	9550	100	94	77	136	225	230	3.90	CA242D337-136225xx++
410	1.4	60	1.9	9690	100	95	77	136	265	270	4.50	CA242D417-136265xx++	
2600	63	4.1	65	4.5	1730	43	38	32	86	140	146	1.05	CA262D636-086140xx++
	100	2.1	60	3.2	3370	72	63	53	86	225	231	1.65	CA262D107-086225xx++
	100	2.4	60	3.6	3370	64	57	48	116	120	125	1.60	CA262D107-116120xx++
	120	2.7	65	3.3	3310	63	55	47	116	140	145	1.85	CA262D127-116140xx++
	140	1.2	55	2.9	6570	98	87	73	116	174	179	2.30	CA262D147-116174xx++
	200	1.5	60	2.5	6750	99	87	73	116	225	230	2.85	CA262D207-116225xx++
	140	2.0	60	3.0	4730	73	63	51	136	120	125	2.15	CA262D147-136120xx++
	170	2.3	65	2.8	4690	71	62	50	136	140	145	2.45	CA262D177-136140xx++
	200	1.1	55	2.5	9390	100	94	76	136	175	180	3.15	CA262D207-136175xx++
	284	1.3	60	2.1	9590	100	93	76	136	225	230	3.90	CA262D287-136225xx++
340	1.5	60	1.9	9380	100	92	76	136	265	270	4.50	CA262D347-136265xx++	
2800	54	4.3	65	4.5	1710	42	37	32	86	140	146	1.05	CA282D546-086140xx++
	88	2.2	60	3.2	3430	71	62	53	86	225	231	1.65	CA282D886-086225xx++
	86	2.5	60	3.6	3350	63	56	47	116	120	125	1.60	CA282D866-116120xx++
	100	2.9	65	3.4	3180	61	53	45	116	140	145	1.85	CA282D107-116140xx++
	120	1.3	55	2.9	6500	97	85	72	116	174	179	2.30	CA282D127-116174xx++
	170	1.5	60	2.5	6620	96	85	72	116	225	230	2.85	CA282D177-116225xx++
	120	2.1	60	3.0	4680	71	62	51	136	120	125	2.15	CA282D127-136120xx++
	140	2.4	65	2.8	4450	69	59	49	136	140	145	2.50	CA282D147-136140xx++
	170	1.1	55	2.5	9210	100	92	75	136	175	180	3.15	CA282D177-136175xx++
	240	1.3	60	2.1	9350	100	92	75	136	225	230	3.90	CA282D247-136225xx++
290	1.5	60	1.9	9230	100	91	74	136	265	270	4.50	CA282D297-136265xx++	

### ■ 技术参数 Technical data ( mm )

U <sub>N</sub> (Vdc)	C <sub>N</sub> (μF)	ESR (mΩ)	L <sub>s</sub> (nH)	R <sub>th</sub> (K/W)	I <sub>h</sub> (A)	*I <sub>max</sub> (A)			Dimension			Weight (kg)	Part number
						40℃	50℃	60℃	ΦD	H	H1		
3000	46	4.6	65	4.6	1570	41	36	30	86	140	146	1.05	CA302D466-086140xx++
	75	2.3	60	3.2	3150	69	61	51	86	225	231	1.65	CA302D756-086225xx++
	74	2.6	60	3.6	3110	62	54	46	116	120	125	1.60	CA302D746-116120xx++
	90	2.9	65	3.3	3090	60	53	45	116	140	145	1.80	CA302D906-116140xx++
	100	1.3	55	3.0	5840	94	83	70	116	174	179	2.35	CA302D107-116174xx++
	140	1.6	60	2.5	5880	93	82	69	116	225	230	2.90	CA302D147-116174xx++
	100	2.2	60	3.0	4200	69	60	49	136	120	125	2.15	CA302D107-136120xx++
	120	2.5	65	2.8	4120	67	58	47	136	140	145	2.50	CA302D127-136140xx++
	140	1.2	55	2.5	8180	100	89	73	136	175	180	3.15	CA302D147-136175xx++
	200	1.4	60	2.2	8400	100	89	73	136	225	230	3.90	CA302D207-136225xx++
250	1.6	60	1.9	8580	100	89	73	136	265	270	4.50	CA302D257-136265xx++	
3200	40	4.9	65	4.6	1470	40	35	30	86	140	146	1.05	CA322D406-086140xx++
	65	2.4	60	3.2	2930	67	59	50	86	225	231	1.65	CA322D656-086225xx++
	64	2.7	60	3.6	2880	60	53	45	116	120	125	1.60	CA322D646-116120xx++
	78	3.1	65	3.4	2870	59	52	44	116	140	145	1.80	CA322D786-116140xx++
	92	1.3	55	3.0	5760	94	83	70	116	174	179	2.30	CA322D926-116174xx++
	120	1.7	60	2.5	5410	91	80	68	116	225	230	2.90	CA322D127-116225xx++
	90	2.2	60	3.0	4050	69	59	49	136	120	125	2.15	CA322D906-136120xx++
	110	2.5	65	2.8	4050	67	58	47	136	140	145	2.45	CA322D117-136140xx++
	120	1.2	55	2.6	7520	100	87	71	136	175	180	3.20	CA322D127-136175xx++
	180	1.4	60	2.2	8110	100	89	72	136	225	230	3.85	CA322D187-136225xx++
220	1.6	60	1.9	8100	100	88	72	136	265	270	4.45	CA322D227-136265xx++	
3600	28	4.0	65	4.6	1650	43	38	32	86	140	146	1.10	CA362D286-086140xx++
	45	2.0	60	3.3	3290	72	64	54	86	225	231	1.70	CA362D456-086225xx++
	44	2.3	60	3.7	3220	64	57	48	116	120	125	1.65	CA362D446-116120xx++
	54	2.7	65	3.4	3190	63	55	47	116	140	145	1.90	CA362D546-116140xx++
	88	1.4	60	2.5	6440	98	87	73	116	225	230	3.00	CA362D886-116225xx++
	110	1.6	60	2.3	6510	97	85	72	116	265	270	3.45	CA362D117-116265xx++
	61	2.0	60	3.0	4460	72	63	51	136	120	125	2.25	CA362D616-136120xx++
	75	2.3	65	2.8	4440	71	61	50	136	140	145	2.55	CA362D756-136140xx++
	120	1.3	60	2.2	8780	100	92	75	136	225	230	4.05	CA362D127-136225xx++
	150	1.5	60	2.0	8880	100	92	75	136	265	270	4.70	CA363D157-136265xx++
4000	24	4.2	65	4.6	1650	42	37	32	86	140	146	1.10	CA402D246-086140xx++
	38	2.1	60	3.3	3230	70	62	53	86	225	231	1.70	CA402D386-086225xx++
	37	2.4	60	3.7	3140	63	55	47	116	120	125	1.65	CA402D376-116120xx++
	46	2.8	65	3.4	3160	61	54	46	116	140	145	1.90	CA402D466-116140xx++
	74	1.5	60	2.5	6290	96	85	72	116	225	230	3.00	CA402D746-116225xx++
	92	1.7	60	2.3	6330	94	83	70	116	265	270	3.45	CA402D926-116265xx++
	52	2.1	60	3.0	4420	71	62	50	136	120	125	2.25	CA402D526-136120xx++
	64	2.3	65	2.8	4400	69	60	49	136	140	145	2.55	CA402D646-136140xx++
	100	1.3	60	2.2	8500	100	90	73	136	225	230	4.05	CA402D107-136225xx++
	130	1.5	60	2.0	8940	100	91	37	136	265	270	4.65	CA402D137-136265xx++

备注: 1. " - " 表示容量偏差。 " - " =capacitance tolerance code, J=±5.0%,K=±10%.

2. " xx " 表示引出端代码,引出端子可以选用螺栓式或螺孔式。

" xx " =terminals code(refer to table1),terminals can be male or female.

3. " ++ " 表示内部特征码。 " ++ " =Internal use.

4. ESR的测试频率为1 kHz。The testing frequency of ESR is 1 kHz.

5. "\*I<sub>max</sub>" 是指在环境温度 (40℃, 50℃, 60℃) 下的最大允许电流有效值。在这种条件下, 热点温度将达到最大值。

"\*I<sub>max</sub>" = Maxium allowable r.m.s current at  $\Theta_{ambient}$ (40℃, 50℃, 60℃).  $\Theta_{hotspot}$  will reach the maximum value on this condition.

6. "R<sub>th</sub>" 是指在自然冷却条件下, 电容器热点到环境的热阻。

"R<sub>th</sub>" = R<sub>th</sub> between hotspot and ambient on natural cooling condition.

7. 上表中所列的尺寸为本产品系列中的常用壳号尺寸, 其它规格尺寸也可以生产。引出端子尺寸参照国家标准。

Sizes above are normally used dimension, other dimension can be produced in pursuance of customer's request.

Sizes of terminals please refer to corresponding national standard.

8. 顾客还可以选用带底部螺栓或者不带底部螺栓M12的电容器。

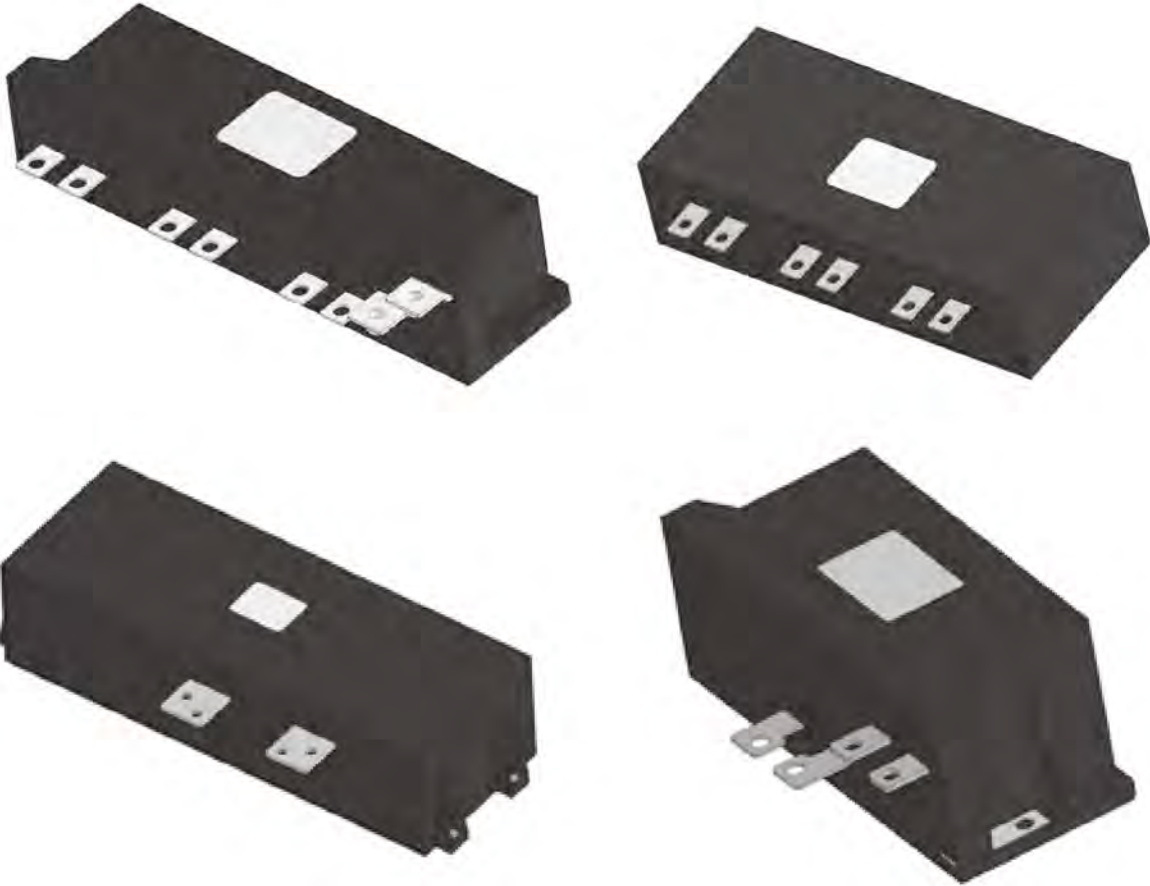
Customers also can choose the capacitor with or without the bottom bolt M12.

9 \*  $\Theta_{hs} = \Theta_{amb} + I_{rms}^2 \times ESR \times R_{th}$

# CR 干式直流滤波电容器 (定制品)

DC-Link -Capacitor ( Customized Products )

## 外形图 Outline Drawing



### ■ 特点

- 应用于直流滤波电路中，可替代电解电容
- 等效串联电阻小，能承受大的纹波电流
- 自感小
- 有自愈性
- 寿命长
- 树脂灌封

### ■ 应用场合

- 风能发电、太阳能发电用变频器上
- 交通工具，如：电动车和混合动力车
- 焊接设备，电梯，电机驱动

### ■ Features

- Used in DC-Link circuits, Can replace electrolytic capacitor
- Low ESR, high ripple current handling capabilities
- Low ESL
- Self-healing property
- Long lifetime
- Filled with resin

### ■ Applications

- Used in inverters of wind power and solar power
- Transportation: EV or HEV
- Welders, Elevators, Motor Driver systems

### ■ 产品代码 Part number

CR451D557K230062S++

### ■ 技术参数 Technical data

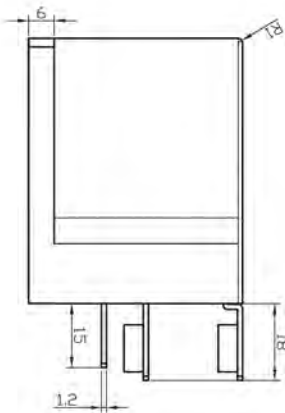
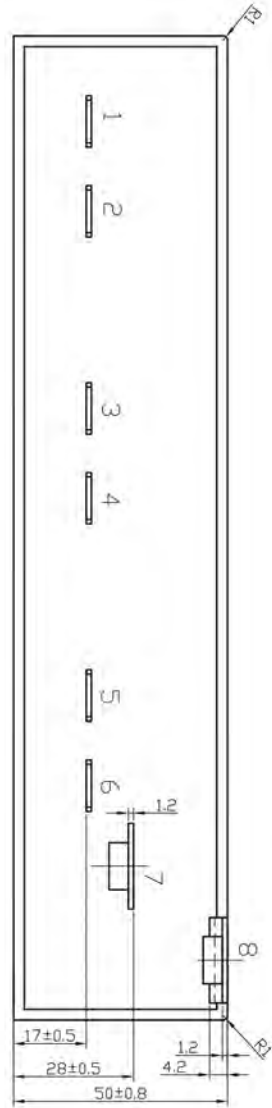
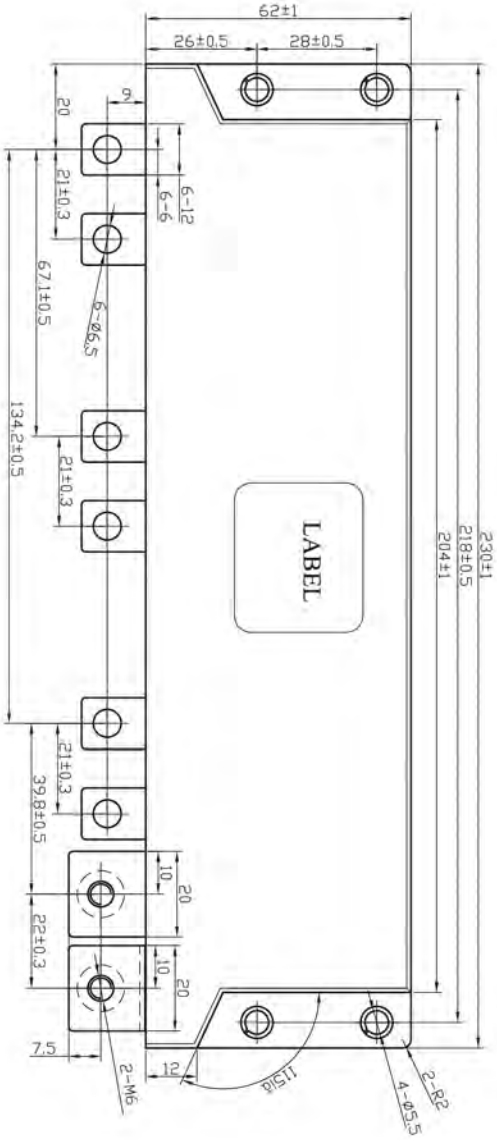
引用标准 Reference Standard	IEC 61071、AEC Q200D-2010	
气候类别 Climatic Category	40/105/56	
工作温度范围 Operating Temperature Range	-40℃ ~ 105℃ $\Theta_{hs} \leq 105^\circ\text{C}$	
贮存温度范围 Storage Temperature Range	-40℃ ~ 105℃	
额定电压 (UN) Rated Voltage	450Vdc	
额定容量 (CN) Rated capacitance	550 $\mu$ F	
电容量允许偏差 Capacitance Tolerance	$\pm 10\%$ (K)	
耐电压 Voltage Proof	极间 Between Terminals:	1.5UN (10s, 20℃ $\pm 5^\circ\text{C}$ )
	极壳之间 Between Terminals And Case:	3 000Vac(10s, 50Hz, 20℃ $\pm 5^\circ\text{C}$ )
介质损耗 $\text{tg } \delta_0$	0.0002	
IR $\times$ CN	$\geq 10\ 000\text{s}$ (20℃, 100Vdc, 1min)	
等效串联电阻 ESR (10kHz)	0.4m $\Omega$	
自感 Ls	15nH	
热阻 (热点到外壳) R <sub>thhc</sub> ( $\Theta_{hs}$ to $\Theta_{case}$ )	1.0K/W	
最大直流侧电流 Max. I <sub>rms</sub> for DC	200A	
最大纹波电流值 Max. ripple I <sub>rms</sub>	130A	
$\hat{I}$	2 200A	
$\hat{I}_s$	8 800A	
Us	600Vdc	
爬电距离 Creepage distance	9mm	
电气距离 Clearance	9mm	
最大电极扭矩 Max Torque of terminals	5Nm	
预期寿命 Expected Lifetime	50 000hours ( UN, $\Theta_{hs} = 85^\circ\text{C}$ )	15 000hours ( UN, $\Theta_{hs} = 105^\circ\text{C}$ )
失效率 Failure rate	50FIT	
尺寸 Dimension(l $\times$ w $\times$ h)	230mm $\times$ 62mm $\times$ 50mm	
重量 Weight	$\approx 1.0\text{kg}$	

\*  $\Theta_{case}$ : 外壳温度;\*  $\Theta_{case}$ : Temperature of case.

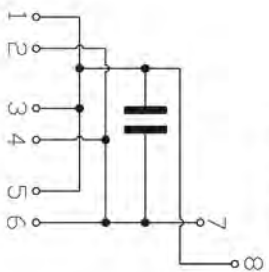
\* ESR: 电容器内部串联电阻总和;

\* ESR: The sum of all ohmic resistances occurring inside the capacitor.

\*  $\Theta_{hs} = \Theta_{case} + I_{rms}^2 \times ESR \times R_{thhc}$ .



内部连接图



### ■ 产品代码 Part number

CR451D607K170072S++

### ■ 技术参数 Technical data

引用标准 Reference Standard	IEC 61071、AEC Q200D-2010	
气候类别 Climatic Category	40/105/56	
工作温度范围 Operating Temperature Range	-40°C ~ 105°C $\Theta_{hs} \leq 105^\circ\text{C}$	
存储温度范围 Storage Temperature Range	-40°C ~ 105°C	
额定电压 (UN) Rated Voltage	450Vdc	
额定容量 (CN) Rated capacitance	600 $\mu$ F	
电容量允许偏差 Capacitance Tolerance	$\pm 10\%$ (K)	
耐电压 Voltage Proof	极间 Between Terminals:	1.5UN (10s, 20°C $\pm 5^\circ\text{C}$ )
	极壳之间 Between Terminals And Case:	3 000Vac(10s, 50Hz, 20°C $\pm 5^\circ\text{C}$ )
介质损耗 tg $\delta_o$	0.0002	
IR $\times$ CN	$\geq 10\ 000\text{s}$ (20°C, 100Vdc, 1min)	
等效串联电阻 ESR (10kHz)	0.8m $\Omega$	
自感 L <sub>s</sub>	25nH	
热阻 (热点到外壳) R <sub>thhc</sub> ( $\Theta_{hs}$ to $\Theta_{case}$ )	2.0K/W	
最大纹波电流值 Max. ripple I <sub>rms</sub>	130A	
$\hat{I}$	1 800A	
$\hat{I}_s$	5 400A	
U <sub>s</sub>	600Vdc	
爬电距离 Creepage distance	12mm	
电气距离 Clearance	10mm	
预期寿命 Expected Lifetime	50 000hours ( U <sub>N</sub> , $\Theta_{hs} = 85^\circ\text{C}$ )	15 000hours ( U <sub>N</sub> , $\Theta_{hs} = 105^\circ\text{C}$ )
失效率 Failure rate	50FIT	
尺寸 Dimension(l $\times$ w $\times$ h)	170mm $\times$ 72mm $\times$ 65mm	
重量 Weight	$\approx 1.2\text{kg}$	
Y 电容 Class Y1	C47S1562K90C000(26.5 $\times$ 15.0 $\times$ 6.0---P22.5)	

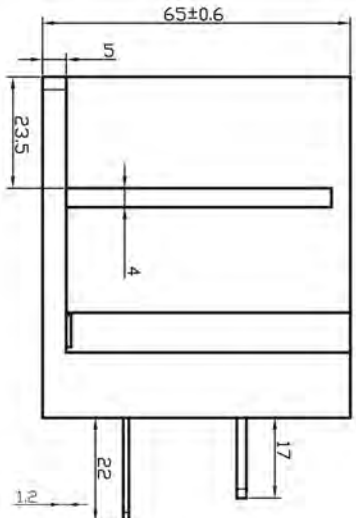
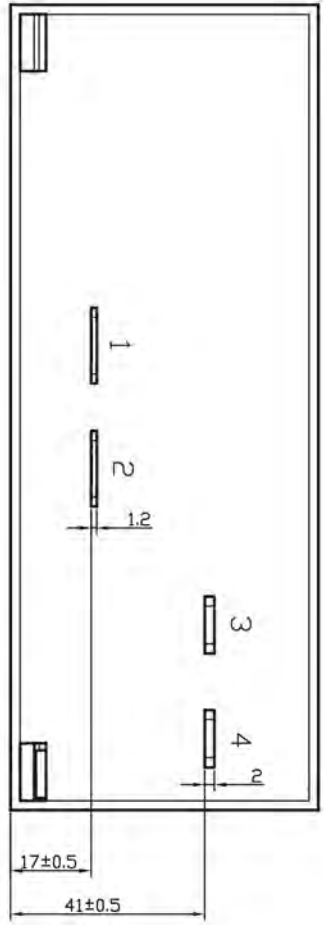
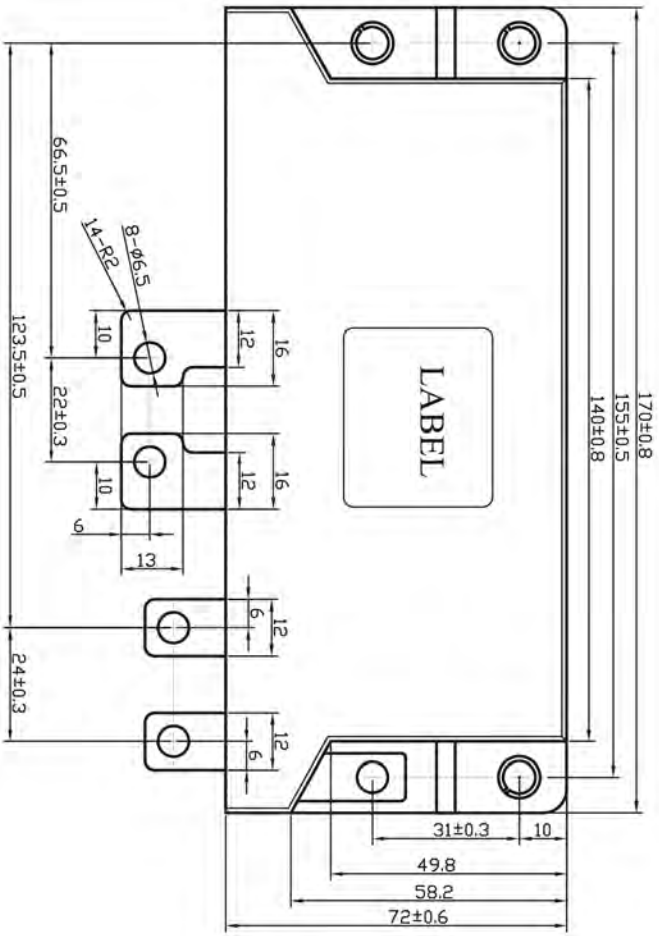
\*  $\Theta_{case}$ : 外壳温度;\*  $\Theta_{case}$ : Temperature of case.

\* ESR: 电容器内部串联电阻总和;

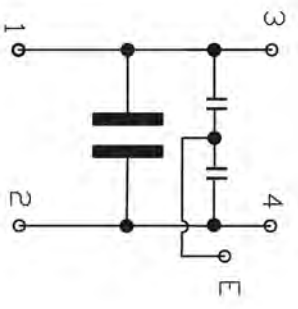
\* ESR: The sum of all ohmic resistances occurring inside the capacitor.

\*  $\Theta_{hs} = \Theta_{case} + I_{rms}^2 \times ESR \times R_{thhc}$ .





内部连接图



## ■ 产品代码 Part number

CR501D757K224102S++

## ■ 技术参数 Technical data

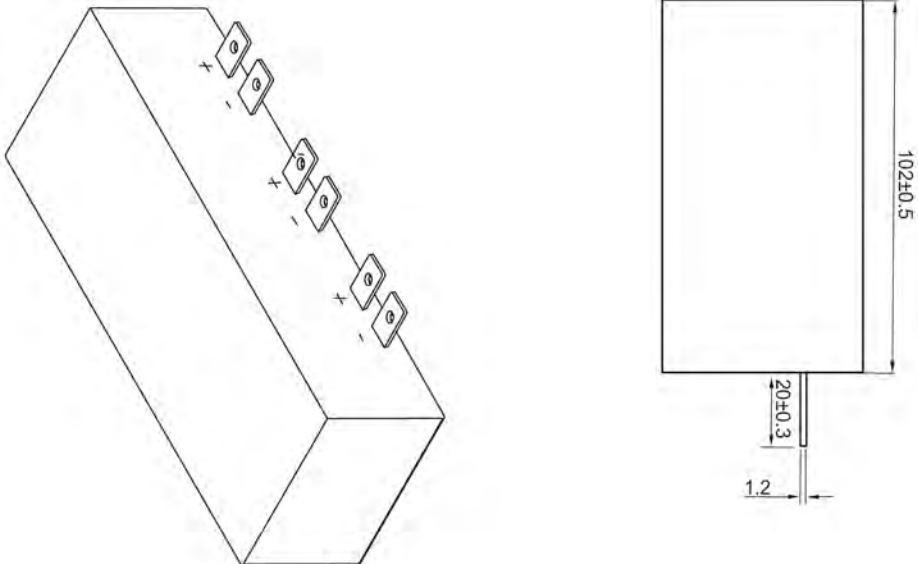
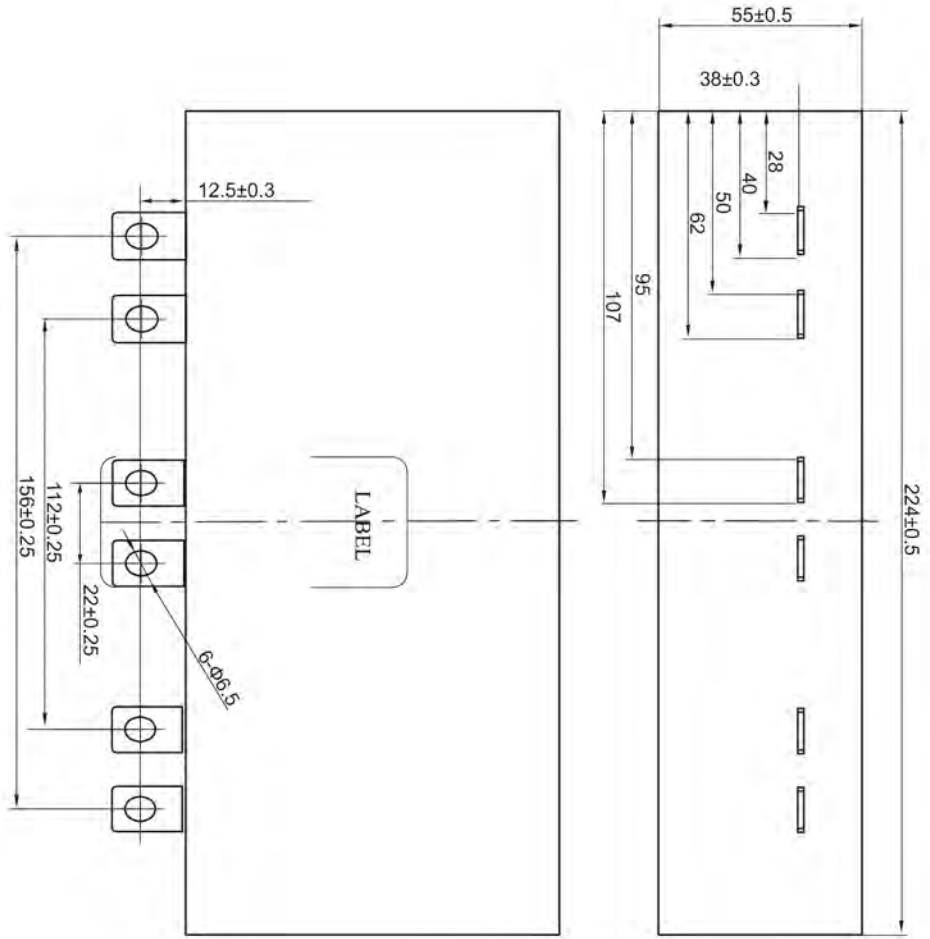
引用标准 Reference Standard	IEC 61071、AEC Q200D-2010	
气候类别 Climatic Category	40/105/56	
工作温度范围 Operating Temperature Range	-40℃ ~ 105℃ $\Theta_{hs} \leq 105^\circ\text{C}$	
存储温度范围 Storage Temperature Range	-40℃ ~ 105℃	
额定电压 ( $U_N$ ) Rated Voltage	500Vdc	
额定容量 ( $C_N$ ) Rated capacitance	750 $\mu$ F	
电容量允许偏差 Capacitance Tolerance	$\pm 10\%$ (K)	
耐电压 Voltage Proof	极间 Between Terminals:	1.5 $U_N$ (10s, 20℃ $\pm 5^\circ\text{C}$ )
	极壳之间 Between Terminals And Case:	3 000Vac(10s, 50Hz, 20℃ $\pm 5^\circ\text{C}$ )
介质损耗 $\text{tg } \delta_0$	0.0002	
IR $\times C_N$	$\geq 10\ 000\text{s}$ (20℃, 100Vdc, 1min)	
等效串联电阻 ESR (10kHz)	0.4m $\Omega$	
自感 $L_s$	20nH	
热阻 (热点到外壳) $R_{thhc}(\Theta_{hs} \text{ to } \Theta_{case})$	1.5K/W	
最大纹波电流值 Max. ripple $I_{rms}$	250A	
$\hat{I}$	3 000A	
$\hat{I}_s$	9 000A	
$U_s$	650Vdc	
爬电距离 Creepage distance	10mm	
电气距离 Clearance	10mm	
预期寿命 Expected Lifetime	50 000hours ( $U_N, \Theta_{hs} = 85^\circ\text{C}$ )	15 000hours ( $U_N, \Theta_{hs} = 105^\circ\text{C}$ )
失效率 Failure rate	50FIT	
尺寸 Dimension(l $\times$ w $\times$ h)	224mm $\times$ 102mm $\times$ 55mm	
重量 Weight	$\approx 2.0\text{kg}$	

\*  $\Theta_{case}$ : 外壳温度;\*  $\Theta_{case}$ : Temperature of case.

\* ESR: 电容器内部串联电阻总和;

\* ESR: The sum of all ohmic resistances occurring inside the capacitor.

\*  $\Theta_{hs} = \Theta_{case} + I_{rms}^2 \times \text{ESR} \times R_{thhc}$ .



## ■ 产品代码 Part number

CR901D158K361130S++

## ■ 技术参数 Technical data

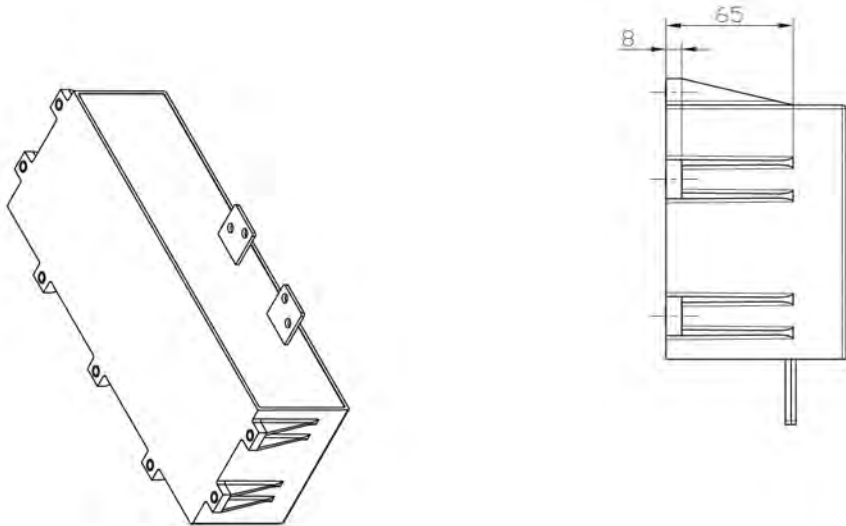
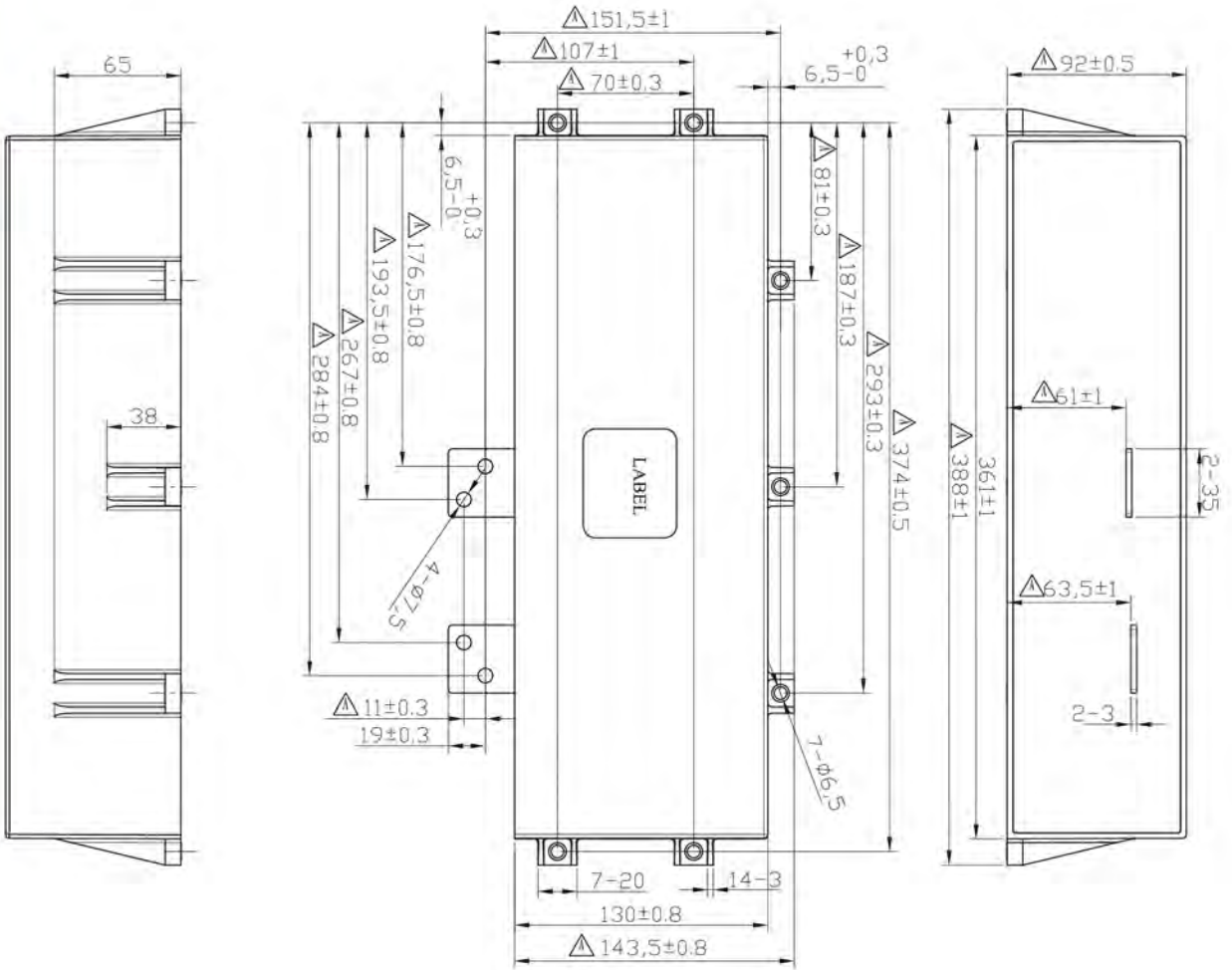
引用标准 Reference Standard	IEC 61071、AEC Q200D-2010	
气候类别 Climatic Category	40/105/56	
工作温度范围 Operating Temperature Range	-40°C ~ 105°C $\Theta_{hs} \leq 105^\circ\text{C}$	
存储温度范围 Storage Temperature Range	-40°C ~ 105°C	
额定电压 (U <sub>N</sub> ) Rated Voltage	900Vdc	
额定容量 (C <sub>N</sub> ) Rated capacitance	1 500 $\mu\text{F}$	
电容量允许偏差 Capacitance Tolerance	$\pm 10\%$ (K)	
耐压 Voltage Proof	极间 Between Terminals:	1.5U <sub>N</sub> (10s, 20°C $\pm 5^\circ\text{C}$ )
	极壳之间 Between Terminals And Case:	3 000Vac(10s, 50Hz, 20°C $\pm 5^\circ\text{C}$ )
介质损耗 tg $\delta_o$	0.0002	
IR $\times$ C <sub>N</sub>	$\geq 10\,000\text{s}$ (20°C, 100Vdc, 1min)	
等效串联电阻 ESR (10kHz)	0.4m $\Omega$	
自感 L <sub>s</sub>	55nH	
热阻 (热点到外壳) R <sub>thhc</sub> ( $\Theta_{hs}$ to $\Theta_{case}$ )	1.3K/W	
最大纹波电流值 Max. ripple I <sub>rms</sub>	250A	
$\bar{I}$	3 000A	
$\bar{I}_s$	9 000A	
U <sub>s</sub>	1 200Vdc	
爬电距离 Creepage distance	55mm	
电气距离 Clearance	55mm	
预期寿命 Expected Lifetime	50 000hours ( U <sub>N</sub> , $\Theta_{hs} = 85^\circ\text{C}$ )	15 000hours ( U <sub>N</sub> , $\Theta_{hs} = 105^\circ\text{C}$ )
失效率 Failure rate	50FIT	
尺寸 Dimension(l $\times$ w $\times$ h)	361mm $\times$ 130mm $\times$ 92mm	

\*  $\Theta_{case}$ : 外壳温度;\*  $\Theta_{case}$ : Temperature of case.

\* ESR: 电容器内部串联电阻总和;

\* ESR: The sum of all ohmic resistances occurring inside the capacitor.

\*  $\Theta_{hs} = \Theta_{case} + I_{rms}^2 \times ESR \times R_{thhc}$ .



# CM

## IGBT吸收电容器(接线片)

Snubber Capacitor for IGBT (Lug terminals)

### 外形图 Outline Drawing

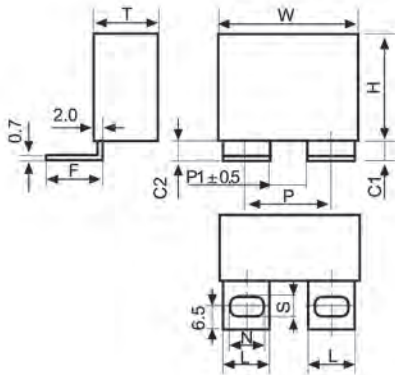


图1 (Style 1)

$L \times F \times N \times S = 14.0 \times 16.0 \times 10.2 \times 6.2$

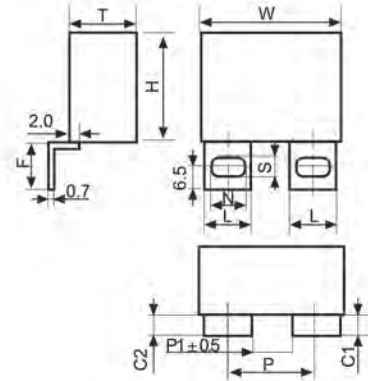
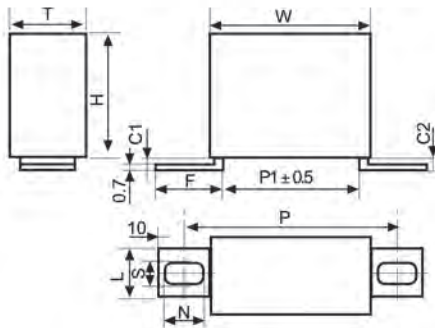


图2 (Style 2)



$L \times F \times N \times S = 14.0 \times 22.0 \times 11.2 \times 6.2$   
or  
 $L \times F \times N \times S = 12.0 \times 22.0 \times 11.2 \times 6.2$

图3 (Style 3)

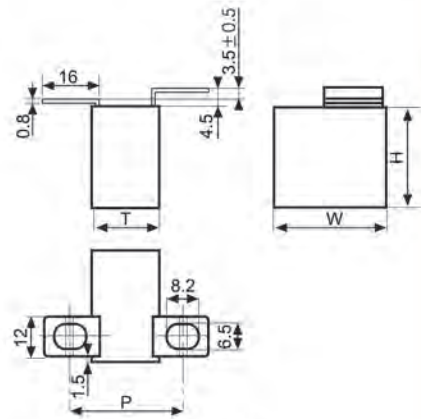


图4 (Style 4)

#### ■ 特点

- 广泛应用于高压高频脉冲电路中
- 损耗小，内部温升小
- 优异的阻燃性能
- 适合作为IGBT的吸收电容

#### ■ Features

- Widely used in high voltage, high frequency circuit
- Low loss and small inherent temperature rise
- Excellent active and passive flame resistant circuit
- Especially designed as snubber capacitor for IGBT

### ■ 技术要求 Specifications

引用标准 Reference Standard	GB/T 17702, IEC 61071	
气候类别 Climatic Category	40/85/56	
工作温度范围 (外壳最高温度点) Operating temperature range (Max. temperature of case surface)	-40°C ~ 85°C	
额定电压 Rated Voltage	630Vdc ~ 3 000Vdc	
电容量范围 Capacitance Range	0.047μF ~ 9.0μF	
电容量偏差 Capacitance Tolerance	J(±5%), K(±10%)	
耐电压 Voltage Proof	1.6U <sub>N</sub> (10s)	
损耗角正切 Dissipation Factor	≤ 0.0005 (1kHz, 20°C)	
绝缘电阻 Insulation Resistance	≥ 100 000MΩ, C <sub>N</sub> ≤ 0.33μF	(20°C, 100Vdc, 1min)
	≥ 30 000s C <sub>N</sub> > 0.33μF	
工作寿命 Operation life time	≥ 100 000 hours at U <sub>N</sub> , T <sub>amb</sub> =70°C	

### ■ 技术参数 Technical data ( mm )

630Vdc /700Vdc ( 420Vac ) *									
C <sub>N</sub> (μF)	W±1.0	H±1.0	T±1.0	dV/dt (V/μs)	I (A)	ESR MAX@100kHz (mΩ)	L <sub>s</sub> (nH)	I <sub>rms</sub> 100kHz@70°C (A)	Part number
0.68	37.0	25.0	15.0	900	612	5.0	23	13	CM072D684-037025xx++
1.0	37.0	30.0	16.0	900	900	5.0	23	14	CM072D105-037030xx++
1.2	37.0	30.0	16.0	900	1 080	4.5	23	16	CM072D125-037030xx++
1.5	37.0	34.0	20.0	900	1 350	4.5	23	17	CM072D155-037034xx++
1.8	37.0	34.0	20.0	900	1 620	4.5	23	18	CM072D185-037034xx++
2.0	42.0	40.0	20.0	600	1 200	4.0	29	18	CM072D205-042040xx++
2.2	42.0	40.0	20.0	600	1 320	4.0	29	18.5	CM072D225-042040xx++
2.5	42.0	40.0	20.0	600	1 500	4.0	29	19	CM072D255-042040xx++
3.0	42.0	44.0	24.0	600	1 800	4.0	29	20	CM072D305-042044xx++
3.3	42.0	44.0	24.0	600	1 980	3.5	29	20	CM072D335-042044xx++
4.0	42.0	44.0	24.0	600	2 400	3.5	29	21	CM072D405-042044xx++
4.7	42.0	45.0	30.0	600	2 820	3.5	29	23	CM072D475-042045xx++
5.0	42.0	45.0	30.0	600	3 000	3.0	29	23.5	CM072D505-042045xx++
6.0	42.0	43.0	42.0	600	3 600	3.0	29	25	CM072D605-042043xx++
6.5	42.0	43.0	42.0	600	3 900	3.0	29	26	CM072D655-042043xx++
6.5	57.0	45.0	30.0	360	2 340	2.5	33	24	CM072D655-057045xx++
7.0	57.0	45.0	30.0	360	2 520	2.5	33	25	CM072D705-057045xx++
8.0	57.0	50.0	35.0	360	2 880	2.5	33	27	CM072D805-057050xx++
9.0	57.0	50.0	35.0	360	3 240	2.5	33	29	CM072D905-057050xx++

**■ 技术参数 Technical data ( mm )**

850Vdc ( 450Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	dV/dt (V/ $\mu$ s)	$\hat{i}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_S$ (nH)	$I_{rms}$ 100kHz@70°C (A)	Part number
0.47	37.0	25.0	15.0	1 200	564	5.0	23	15	CM851D474-037025xx++
0.68	37.0	30.0	16.0	1 200	816	5.0	23	16	CM851D684-037030xx++
1.0	37.0	34.0	20.0	1 200	1 200	5.0	23	17	CM851D105-037034xx++
1.2	37.0	34.0	20.0	1 200	1 440	5.0	23	17.5	CM851D125-037034xx++
1.5	37.0	34.0	20.0	1 200	1 800	5.0	23	18	CM851D155-037034xx++
1.5	42.0	40.0	20.0	750	1 125	4.5	29	18.5	CM851D155-042040xx++
2.0	42.0	40.0	20.0	750	1 500	4.5	29	19	CM851D205-042040xx++
2.2	42.0	40.0	20.0	750	1 650	4.5	29	19.5	CM851D225-042040xx++
2.5	42.0	44.0	24.0	750	1 875	4.5	29	20	CM851D255-042044xx++
3.0	42.0	44.0	24.0	750	2 250	4.5	29	21	CM851D305-042044xx++
3.3	42.0	45.0	30.0	750	2 475	4.5	29	21.5	CM851D335-042045xx++
4.0	42.0	43.0	42.0	750	3 000	4.5	29	22	CM851D405-042043xx++
4.0	57.0	45.0	30.0	450	1 800	4.0	33	23	CM851D405-057045xx++
4.7	57.0	45.0	30.0	450	2 115	4.0	33	24.5	CM851D475-057045xx++
5.0	57.0	45.0	30.0	450	2 250	4.0	33	25	CM851D505-057045xx++
6.0	57.0	50.0	35.0	450	2 700	4.0	33	26	CM851D605-057050xx++
6.5	57.0	50.0	35.0	450	2 925	4.0	33	27	CM851D650-057050xx++

1 000Vdc ( 500Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	dV/dt (V/ $\mu$ s)	$\hat{i}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_S$ (nH)	$I_{rms}$ 100kHz@70°C (A)	Part number
0.47	37.0	25.0	15.0	1 300	611	5.0	23	14	CM102D474-037025xx++
0.47	32.0	29.0	19.0	2 200	1 034	4.0	15	21	CM102D474-032029xx++
0.68	37.0	30.0	16.0	1 300	884	5.0	23	15	CM102D684-037030xx++
0.82	37.0	30.0	16.0	1 300	1 066	5.0	23	16	CM102D824-037030xx++
1.0	37.0	34.0	20.0	1 300	1 300	4.5	23	17	CM102D105-037034xx++
1.2	37.0	34.0	20.0	1 300	1 560	4.5	23	17	CM102D125-037034xx++
1.2	42.0	40.0	20.0	850	1 020	4.5	29	16	CM102D125-042040xx++
1.5	42.0	40.0	20.0	850	1 275	4.5	29	16	CM102D155-042040xx++
2	42.0	44.0	24.0	850	1 700	4.5	29	17	CM102D205-042044xx++
2.2	42.0	44.0	24.0	850	1 870	4.0	29	20	CM102D225-042044xx++
2.5	42.0	45.0	30.0	850	2 125	4.0	29	21	CM102D255-042045xx++
3.0	42.0	45.0	30.0	850	2 550	4.0	29	21.5	CM102D305-042045xx++
3.3	42.0	43.0	42.0	850	2 805	4.0	29	22	CM102D335-042043xx++
3.3	57.0	45.0	30.0	500	1 650	4.0	33	20	CM102D335-057045xx++
4.0	57.0	45.0	30.0	500	2 000	4.0	33	21	CM102D405-057045xx++
4.7	57.0	50.0	35.0	500	2 350	4.0	33	22	CM102D475-057050xx++
5.0	57.0	50.0	35.0	500	2 500	4.0	33	23	CM102D505-057050xx++



■ 技术参数 Technical data ( mm )

1 200Vdc ( 600Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	dV/dt (V/ $\mu$ s)	$\hat{I}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_s$ (nH)	$I_{rms}$ 100kHz@70 $^{\circ}$ C (A)	Part number
0.33	37.0	25.0	15.0	1 500	495	4.5	23	15	CM122D334-037029xx++
0.47	37.0	30.0	16.0	1 500	705	4.5	23	16	CM122D474-037030xx++
0.68	37.0	34.0	20.0	1 500	1 020	4.5	23	17	CM122D684-037034xx++
0.75	37.0	34.0	20.0	1 500	1 125	4.5	23	18	CM122D754-037034xx++
0.82	42.0	40.0	20.0	950	779	4.0	29	18	CM122D824-042040xx++
1.0	42.0	40.0	20.0	950	950	4.0	29	19	CM122D105-042040xx++
1.2	42.0	44.0	24.0	950	1 140	4.0	29	19	CM122D125-042044xx++
1.5	42.0	44.0	24.0	950	1 425	4.0	29	19.5	CM122D155-042044xx++
2.0	42.0	45.0	30.0	950	1 900	4.0	29	20	CM122D205-042045xx++
2.2	42.0	43.0	42.0	950	2 090	4.0	29	21	CM122D225-042043xx++
2.5	42.0	43.0	42.0	950	2 375	4.0	29	22	CM122D255-042043xx++
2.2	57.0	45.0	30.0	600	1 320	3.8	33	20	CM122D225-057045xx++
2.5	57.0	45.0	30.0	600	1 500	3.8	33	21	CM122D255-057045xx++
3.0	57.0	45.0	30.0	600	1 800	3.8	33	22	CM122D305-057045xx++
3.3	57.0	50.0	35.0	600	1 980	3.8	33	23	CM122D335-057050xx++
4.0	57.0	50.0	35.0	600	2 400	3.8	33	24	CM122D405-057050xx++

1 600Vdc ( 650Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	dV/dt (V/ $\mu$ s)	$\hat{I}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_s$ (nH)	$I_{rms}$ 100kHz@70 $^{\circ}$ C (A)	Part number
0.22	37.0	25.0	15.0	1 900	418	6.0	23	15	CM162D224-037025xx++
0.33	37.0	30.0	16.0	1 900	627	6.0	23	15.5	CM162D334-037030xx++
0.39	37.0	34.0	20.0	1 900	741	5.5	23	16	CM162D394-037034xx++
0.47	37.0	34.0	20.0	1 900	893	5.5	23	17	CM162D474-037034xx++
0.68	42.0	40.0	20.0	1 250	850	4.0	29	18	CM162D684-042040xx++
0.82	42.0	44.0	24.0	1 250	1 025	4.0	29	19	CM162D824-042044xx++
1.0	42.0	45.0	30.0	1 250	1 250	4.0	29	19.5	CM162D105-042045xx++
1.2	42.0	45.0	30.0	1 250	1 500	4.0	29	20	CM162D125-042045xx++
1.5	42.0	43.0	42.0	1 250	1 875	4.0	29	21	CM162D155-042043xx++
1.5	57.0	45.0	30.0	750	1 125	3.5	33	22	CM162D155-057045xx++
2.0	57.0	50.0	35.0	750	1 500	3.5	33	24	CM162D205-057050xx++

**■ 技术参数 Technical data ( mm )**

1 700Vdc ( 675Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	$dV/dt$ (V/ $\mu$ s)	$\hat{I}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_S$ (nH)	$I_{rms}$ 100kHz@70 $^{\circ}$ C (A)	Part number
0.15	37.0	25.0	15.0	2 000	300	7.0	23	14	CM172D154-037025xx++
0.22	37.0	30.0	16.0	2 000	440	6.0	23	15	CM172D224-037030xx++
0.33	37.0	34.0	20.0	2 000	660	5.5	23	15.5	CM172D334-037034xx++
0.39	37.0	34.0	20.0	2 000	780	5.5	23	16	CM172D394-037034xx++
0.47	42.0	36.0	24.0	1 260	592	4.0	29	16	CM172D474-042036xx++
0.56	42.0	36.0	24.0	1 260	706	4.0	29	17	CM172D564-042036xx++
0.68	42.0	44.0	24.0	1 260	857	3.5	29	18	CM172D684-042044xx++
0.82	42.0	44.0	24.0	1 260	1 033	3.5	29	19	CM172D824-042044xx++
1.0	42.0	45.0	30.0	1 260	1 260	3.5	29	20	CM172D105-042045xx++
1.2	42.0	43.0	42.0	1 260	1 512	3.5	29	21	CM172D125-042043xx++
1.0	57.0	45.0	25.0	780	780	3.5	33	18	CM172D105-057045xx++
1.2	57.0	43.5	29.5	780	936	3.5	33	19	CM172D125-057044xx++
1.5	57.0	50.0	35.0	780	1 170	3.0	33	22	CM172D155-057050xx++
2.0	57.0	50.0	35.0	780	1 560	3.0	33	24	CM172D205-057050xx++
3.0	57.0	55.0	45.0	780	2 340	3.0	33	28	CM172D305-057055xx++

2 000Vdc ( 700Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	$dV/dt$ (V/ $\mu$ s)	$\hat{I}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_S$ (nH)	$I_{rms}$ 100kHz@70 $^{\circ}$ C (A)	Part number
0.10	37.0	25.0	15.0	2 241	224	8.0	23	14	CM202D104-037025xx++
0.15	37.0	25.0	15.0	2 241	336	8.0	23	15	CM202D154-037025xx++
0.22	37.0	30.0	16.0	2 241	493	6.0	23	15.5	CM202D224-037030xx++
0.33	37.0	34.0	20.0	2 241	740	6.0	23	16	CM202D334-037034xx++
0.47	42.0	40.0	20.0	1 300	611	4.0	29	17	CM202D474-042040xx++
0.56	42.0	44.0	24.0	1 300	728	4.0	29	18	CM202D564-042044xx++
0.68	42.0	44.0	24.0	1 300	884	3.5	29	18.5	CM202D684-042044xx++
0.82	42.0	45.0	30.0	1 300	1 066	3.5	29	19	CM202D824-042045xx++
1.0	42.0	43.0	42.0	1 300	1 300	3.5	29	21	CM202D105-042043xx++
1.0	57.0	45.0	30.0	850	850	4.0	33	24	CM202D105-057045xx++
1.2	57.0	45.0	30.0	850	1 020	4.0	33	23	CM202D125-057045xx++
1.5	57.0	50.0	35.0	850	1 275	4.0	33	24	CM202D155-057050xx++

### ■ 技术参数 Technical data ( mm )

2 500Vdc ( 725Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	dV/dt (V/ $\mu$ s)	$\hat{I}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_s$ (nH)	$I_{rms}$ 100kHz@70 $^{\circ}$ C (A)	Part number
0.068	37.0	25.0	15.0	3 230	220	8.5	23	14	CM252D683-037025xx++
0.10	37.0	30.0	16.0	3 230	323	8.5	23	15	CM252D104-037030xx++
0.15	37.0	34.0	20.0	3 230	485	8.0	23	16	CM252D154-037034xx++
0.18	37.0	34.0	20.0	3 230	581	7.5	23	17	CM252D184-037034xx++
0.22	42.0	40.0	20.0	2 100	462	4.0	29	17	CM252D224-042040xx++
0.33	42.0	44.0	24.0	2 100	693	4.0	29	17.5	CM252D334-042044xx++
0.47	42.0	45.0	30.0	2 100	987	3.5	29	18	CM252D474-042045xx++
0.68	42.0	43.0	42.0	2 100	1 428	3.5	29	18.5	CM252D684-042043xx++
0.68	57.0	45.0	30.0	1 200	816	3.5	33	19	CM252D684-057045xx++
1.0	57.0	50.0	35.0	1 200	1 200	3.5	33	19.5	CM252D105-057050xx++

3 000Vdc ( 750Vac )									
$C_N$ ( $\mu$ F)	$W \pm 1.0$	$H \pm 1.0$	$T \pm 1.0$	dV/dt (V/ $\mu$ s)	$\hat{I}$ (A)	ESR MAX@100kHz (m $\Omega$ )	$L_s$ (nH)	$I_{rms}$ 100kHz@70 $^{\circ}$ C (A)	Part number
0.047	37.0	25.0	15.0	3 361	158	8.5	23	13	CM302D473-037025xx++
0.068	37.0	30.0	16.0	3 361	229	8.0	23	14	CM302D683-037030xx++
0.10	37.0	34.0	20.0	3 361	336	7.5	23	15	CM302D104-037034xx++
0.15	37.0	34.0	20.0	3 361	504	7.0	23	15.5	CM302D154-037034xx++
0.22	42.0	40.0	20.0	2 050	451	5.0	29	16	CM302D224-042040xx++
0.33	42.0	45.0	30.0	2 050	677	4.5	29	16.5	CM302D334-042045xx++
0.47	42.0	43.0	42.0	2 050	964	4.0	29	18	CM302D474-042043xx++
0.47	57.0	45.0	30.0	1 200	564	4.0	33	18.5	CM302D474-057045xx++
0.68	57.0	50.0	35.0	1 200	816	4.0	33	19	CM302D684-057050xx++
0.82	57.0	50.0	35.0	1 200	984	3.5	33	20	CM302D824-057050xx++

- 备注Note: 1. “-”表示容量偏差。 “-”=capacitance tolerance code, J=  $\pm 5.0\%$ , K=  $\pm 10\%$ .  
 2. “xx”表示引出端代码,引出端子可以选用螺栓式或螺孔式。  
 “xx”=terminals code(refer to table1),terminals can be male or female.  
 3. “++”表示内部特征码。 “++”=Internal use.  
 4. “ $I_{rms}$ ”测试条件:环境温度70 $^{\circ}$ C,频率100kHz,外壳温度达到85 $^{\circ}$ C下的有效值。  
 “ $I_{rms}$ ” at 100kHz,+70 $^{\circ}$ C for case operating T=+85 $^{\circ}$ C.  
 5. “ESR”、“ $L_s$ ”均为典型值。 “ESR”、“ $L_s$ ” are typical values.

# CD

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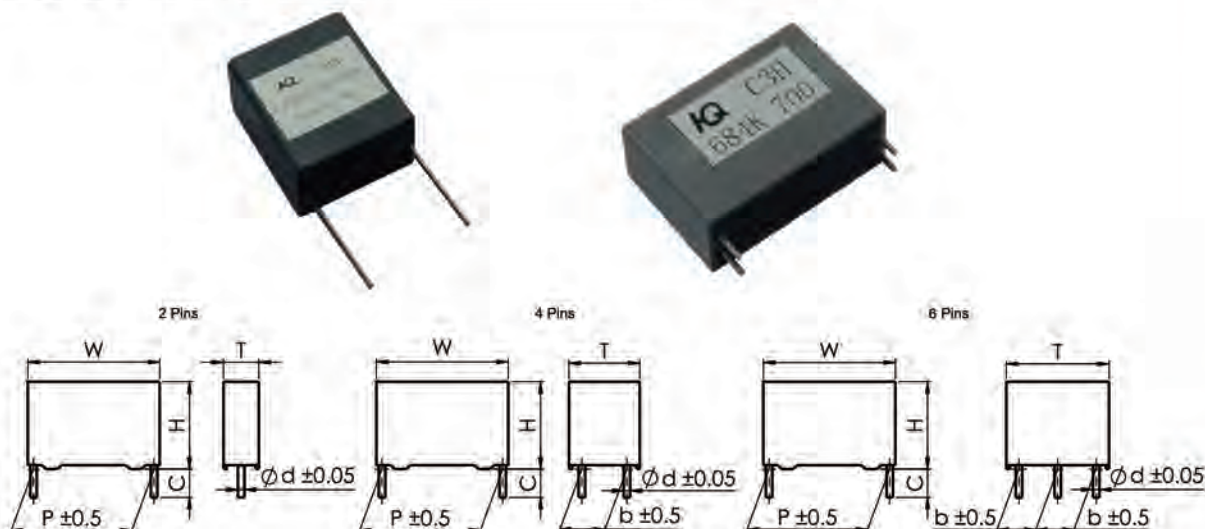
DC-Link Capacitor for PCB

PCB用DC-Link电容器

CD

DC-Link Capacitor for PCB

### 外形图 Outline Drawing



#### ■ 特点和应用场合

- 超薄型, 低高度, 安全膜设计
- 高耐纹波电流, 低ESR、L<sub>s</sub>
- 塑料外壳封装, 树脂填充
- 良好的自愈特性
- 高性能直流滤波应用场合  
(如: 变频器、光伏逆变器、LED路灯照明、工业和高端电源、车载充电器等)

#### ■ Features and Applications

- Slim line, low building height, segmented metallized-film design
- High ripple current capability, low ESR, low L<sub>s</sub>
- Plastic case, filled with resin
- Self-healing property
- High performance DC filtering applications  
(Frequency converters, PV micro inverters, LED street lighting, Industrial and high-end power supplies, On board chargers (EV/HEV))

#### ■ 技术要求 Specifications

引用标准 Reference Standard	GB/T 17702 ( IEC 61071 )			
气候类别 Climatic Category	40/85/56			
工作温度范围 Operating Temperature Range	-40℃ ~ 105℃ ( $\Theta_{hs} \leq 105^\circ\text{C}$ ) $\Theta_{hs} = 85^\circ\text{C} \sim 105^\circ\text{C}$ :decreasing factor 1.5% per℃ for U <sub>N</sub> (dc)			
额定电压 Voltage Range U <sub>N,85℃</sub>	500V	700V	1 000V	1 200V
工作电压 Operating Voltage U <sub>OPDC, 105℃</sub>	350V	490V	700V	840V
容量偏差 Capacitance Tolerance	J ( ± 5% ), K ( ± 10% )			
容量范围 Capacitance Range	1.5μF ~ 100μF			
耐电压 Voltage Proof	1.5U <sub>N</sub> (10s, 20℃ ± 5℃)			
绝缘电阻 Insulation Resistance ( IR × C <sub>N</sub> )	≥ 10 000s ( 20℃ ,100Vdc,1min)			
自感 (L <sub>s</sub> ) Self Inductance(L <sub>s</sub> )	< 1nH per mm of lead spacing			
最大峰值电流 $\hat{I}$ (A) Maximum peak current $\hat{I}$ (A)	$\hat{I} = C_N \cdot dV/dt$			
预期寿命 Expected lifetime	100 000hrs @ U <sub>N</sub> , $\Theta_{hs} = 70^\circ\text{C}$			

■ 技术参数 Technical data ( mm )

U <sub>N,85°C</sub> : 500Vdc													
HEIGHT (mm)	C <sub>N</sub> (μF)	W ±1.0	H ±1.0	T ±1.0	P ±0.5	b ±0.5	d ±0.05	dV/dt (V/μs)	tg δ × (10 <sup>-4</sup> )		ESR @10kHz (mΩ)	I <sub>max</sub> (A)	Part number
									1kHz	10kHz			
12	5	32	12	24	27.5	-	0.8	20	10	85	20.0	3.8	CD501D505-032012xx++
15	7	32	15	27	27.5	-	0.8	20	10	85	14.5	4.8	CD501D705-032015xx++
	10	42	15	27	37.5	10.2	1.0	15	20	150	16.2	5.1	CD501D106-042015xx++
	15	42	15	33	37.5	10.2	1.0	15	20	150	11.0	6.7	CD501D156-042015xx++
	20	57	15	33	52.5	20.3	1.2	10	33	300	15.4	6.4	CD501D206-057015xx++
	30	57	15	45	52.5	20.3	1.2	10	33	300	10.5	8.8	CD501D306-057015xx++
	50 <sup>®</sup>	57	15	62	52.5	20.3	1.2	10	33	300	6.6	12.8	CD501D506-057015xx++
18	10	42	18	24	37.5	10.2	1.0	15	20	150	16.2	5.1	CD501D106-042018xx++
	15	42	18	27	37.5	10.2	1.0	15	20	150	11.0	6.4	CD501D156-042018xx++
	20	42	18	39	37.5	10.2	1.0	15	20	150	8.4	8.4	CD501D206-042018xx++
	30	57	18	35	52.5	20.3	1.2	11	33	300	20.8	5.8	CD501D306-057018xx++
	50	57	18	50	52.5	20.3	1.2	11	33	300	12.8	8.5	CD501D506-057018xx++
24	20	42	24	30	37.5	10.2	1.0	15	20	150	8.4	8.2	CD501D206-042024xx++
	30	42	24	39	37.5	10.2	1.0	15	20	150	5.8	10.8	CD501D306-042024xx++
	50	57	24	39	52.5	20.3	1.2	11	33	300	12.8	8.2	CD501D506-057024xx++
	100 <sup>®</sup>	57	24	70	52.5	20.3	1.2	11	33	300	6.7	14.2	CD501D107-057024xx++

U <sub>N,85°C</sub> : 700Vdc													
HEIGHT (mm)	C <sub>N</sub> (μF)	W ±1.0	H ±1.0	T ±1.0	P ±0.5	b ±0.5	d ±0.05	dV/dt (V/μs)	tg δ × (10 <sup>-4</sup> )		ESR @10kHz (mΩ)	I <sub>max</sub> (A)	Part number
									1kHz	10kHz			
12	3	32	12	24	27.5	-	0.8	25	10	65	25.1	3.3	CD701D305-032012xx++
15	5	32	15	27	27.5	-	0.8	25	10	65	15.4	4.7	CD701D505-032015xx++
	7	42	15	27	37.5	10.2	1.0	19	20	120	17.7	4.9	CD701D705-042015xx++
	10	42	15	33	37.5	10.2	1.0	19	20	120	12.6	6.2	CD701D106-042015xx++
	15	57	15	33	52.5	20.3	1.2	13	33	270	9.9	8.0	CD701D156-057015xx++
	20	57	15	45	52.5	20.3	1.2	13	33	270	7.6	10.3	CD701D206-057015xx++
	30 <sup>®</sup>	57	15	62	52.5	20.3	1.2	13	33	270	5.3	14.2	CD701D306-057015xx++
18	7	42	18	24	37.5	10.2	1.0	19	20	120	17.7	4.8	CD701D705-042018xx++
	10	42	18	27	37.5	10.2	1.0	19	20	120	12.6	6.0	CD701D106-042018xx++
	15	42	18	39	37.5	10.2	1.0	19	20	120	8.6	8.3	CD701D156-042018xx++
	20	57	18	35	52.5	20.3	1.2	13	33	270	10.1	8.3	CD701D206-057018xx++
	30	57	18	50	52.5	20.3	1.2	13	33	270	7.0	11.6	CD701D306-057018xx++
24	15	42	24	30	37.5	10.2	1.0	19	20	120	8.6	8.1	CD701D156-042024xx++
	20	42	24	39	37.5	10.2	1.0	19	20	120	6.6	10.1	CD701D206-042024xx++
	30	57	24	39	52.5	20.3	1.2	13	33	270	7.0	11.0	CD701D306-057024xx++
	50 <sup>®</sup>	57	24	70	52.5	20.3	1.2	13	33	270	4.5	17.3	CD701D506-057024xx++

■ 技术参数 Technical data ( mm )

U <sub>N,85°C</sub> : 1 000Vdc													
HEIGHT (mm)	C <sub>N</sub> (μF)	W ±1.0	H ±1.0	T ±1.0	P ±0.5	b ±0.5	d ±0.05	dV/dt (V/μs)	tg δ × (10 <sup>-4</sup> )		ESR @10kHz (mΩ)	I <sub>max</sub> (A)	Part number
									1kHz	10kHz			
12	2	32	12	24	27.5	-	0.8	33	10	65	27.2	3.2	CD102D205-032012xx++
15	5	42	15	27	37.5	10.2	1.0	25	10	65	18.1	4.8	CD102D505-042015xx++
	7	42	15	33	37.5	10.2	1.0	25	20	120	13.1	6.1	CD102D705-042015xx++
	10	57	15	33	52.5	20.3	1.2	17	20	120	17.5	6.0	CD102D106-057015xx++
	15	57	15	45	52.5	20.3	1.2	17	33	270	11.8	8.3	CD102D156-057015xx++
	20 <sup>⑥</sup>	57	15	62	52.5	20.3	1.2	17	33	270	9.0	10.8	CD102D206-057015xx++
18	3	42	18	24	37.5	10.2	1.0	25	20	120	29.6	3.7	CD102D305-042018xx++
	5	42	18	27	37.5	10.2	1.0	25	20	120	18.1	5.0	CD102D505-042018xx++
	7	42	18	39	37.5	10.2	1.0	25	20	120	13.1	6.8	CD102D705-042018xx++
	10	42	18	39	37.5	10.2	1.0	25	20	120	9.3	8.0	CD102D106-042018xx++
	15	57	18	50	52.5	20.3	1.2	17	33	270	9.9	9.7	CD102D156-057018xx++
	20	57	18	50	52.5	20.3	1.2	17	33	270	7.6	11.1	CD102D206-057018xx++
24	7	42	24	30	37.5	10.2	1.0	25	20	120	13.1	6.5	CD102D705-042024xx++
	10	42	24	39	37.5	10.2	1.0	25	20	120	9.3	8.4	CD102D106-042024xx++
	15	57	24	39	52.5	20.3	1.2	17	33	270	11.8	8.4	CD102D156-057024xx++
	20	57	24	39	52.5	20.3	1.2	17	33	270	7.6	10.5	CD102D206-057024xx++
	30 <sup>⑥</sup>	57	24	70	52.5	20.3	1.2	17	33	270	5.3	15.9	CD102D306-057024xx++

U <sub>N,85°C</sub> : 1 200Vdc													
HEIGHT (mm)	C <sub>N</sub> (μF)	W ±1.0	H ±1.0	T ±1.0	P ±0.5	b ±0.5	d ±0.05	dV/dt (V/μs)	tg δ × (10 <sup>-4</sup> )		ESR @10kHz (mΩ)	I <sub>max</sub> (A)	Part number
									1kHz	10kHz			
12	1.5	32	12	24	27.5	-	0.8	40	7	55	28.9	3.1	CD122D155-032012xx++
15	3	42	15	27	37.5	10.2	1.0	31	7	55	23.9	4.2	CD122D305-042015xx++
	4	42	15	33	37.5	10.2	1.0	31	13	100	18.1	5.2	CD122D405-042015xx++
	6	57	15	33	52.5	20.3	1.2	20	13	100	23.2	5.2	CD122D605-057015xx++
	9	57	15	45	52.5	20.3	1.2	20	24	200	15.7	7.2	CD122D905-057015xx++
	12 <sup>⑥</sup>	57	15	62	52.5	20.3	1.2	20	24	200	11.9	9.4	CD122D126-057015xx++
18	3	42	18	24	37.5	10.2	1.0	31	13	100	23.9	4.2	CD122D305-042018xx++
	4	42	18	27	37.5	10.2	1.0	31	13	100	18.1	5.0	CD122D405-042018xx++
	7	42	18	39	37.5	10.2	1.0	31	13	100	10.6	7.5	CD122D705-042018xx++
	13	57	18	50	52.5	20.3	1.2	20	24	200	9.2	10.0	CD122D136-057018xx++
24	6	42	24	30	37.5	10.2	1.0	31	13	100	12.3	6.7	CD122D605-042024xx++
	15	57	24	39	52.5	20.3	1.2	20	24	200	8.1	10.2	CD122D155-057024xx++
	25 <sup>⑥</sup>	57	24	70	52.5	20.3	1.2	20	24	200	5.1	16.1	CD122D256-057024xx++

备注: 1. "-" 表示容量偏差。 "-" =capacitance tolerance code, J= ± 5.0%,K= ± 10%。  
 2. "xx" 表示引出端代码,引出端子可以选用螺栓式或螺孔式。  
 "xx" =terminals code(refer to table1),terminals can be male or female.  
 3. "++" 表示内部特征码 "++" =Internal use  
 4. "I<sub>max</sub>" 是在f=10kHz, Θ<sub>amb</sub>=70°C, ΔΘ<sub>case</sub>=15.0°C的最大电流有效值。"I<sub>max</sub>" = Maximum rms current at 10kHz, Θ<sub>amb</sub>=70°C, ΔΘ<sub>case</sub>=15.0°C。  
 5. "⑥" 表示6引线。 "⑥" means 6 pins.

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CD

DC-Link Capacitor for PCB