

C52

DC-Link Capacitor

## 直流支撑电容器

C52



## 产品特点.Characteristics

- 聚丙烯膜介质
- 塑壳封装, 干式树脂灌注
- 镀锡铜线引出, 体积小安装方便
- 高脉冲电流, 高dv/dt承受能力
- 自感 (ESL) 小, 等效串联电阻 (ESR) 小
- Polypropylene film dielectric
- Plastic shell, encapsulation, dry resin infusion
- Leads with Tinned copper wire, small size, Easy installation.
- High pulse current and high dv/dt.
- Low ESL, low ESR,

## 产品应用.Application

- 广泛应用于DC-Link电路中, 作滤波储能用。
- 能代替电解电容, 性能更优, 寿命更长。
- 光伏逆变器, 风电变流器; 各种变频器及逆变电源; 纯电动及混合动力汽车; 充电桩, UPS等设备。
- Widely used in of DC-link circuit for energy storage.
- Can replace electrolytic capacitors, better performance and longer life.
- Pvinverter, wind power converter, all kinds of frequency converter and inverter power supply; Pure electric and hybrid cars; charging pile, UPS, etc.

## 性能参数.Technical Data

● 引用标准 Reference Standards	GB/T 17702 IEC 61071
● 工作温度范围 Operating Temperature Range	-40°C~+70°C TMax 105°C
● 容量范围 Capacitance Range	5.0µF~90µF
● 额定电压 Rated Voltage	500VDC~1200VDC
● 容量偏差 Capacity Tolerance	±5%(J); ±10%(K)
● 极间耐电压 Test voltage between electrodes	1.5U <sub>N</sub> (DC) 60S 25°C±5°C
● 极壳耐电压 Test voltage between electrode and case	1000+2×U <sub>N</sub> /√2 (VAC) 50Hz 60S (min 3000VAC)
● 损耗角正切 Dissipation Factor	tgδ≤1.5×10 <sup>-3</sup> at 25°C±5°C, 100Hz
● 绝缘电阻 Insulation Resistance	C•R≥5000S, at 100VDC, 25°C±5°C, 60S
● 阻燃性/Flame retardation	UL94V-0
● 预期寿命 Life Expectancy	100000h at U <sub>N</sub> and ≤70°C

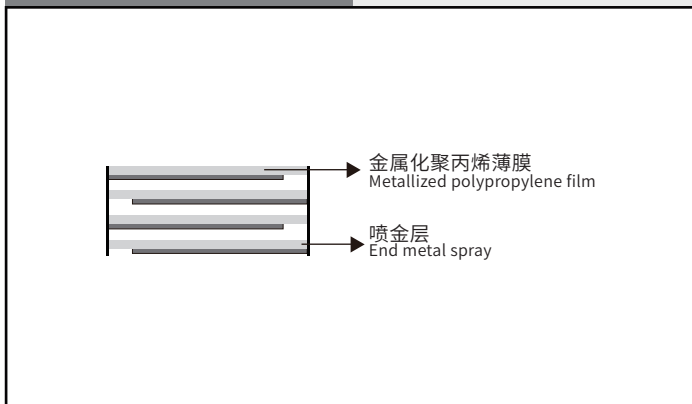
## 过压运行.Overtoltage Operation

1.1×U <sub>N</sub>	30% of on-load-dur.
1.15×U <sub>N</sub>	30 min/day
1.2×U <sub>N</sub>	5 min/day
1.3×U <sub>N</sub>	1 min/day
1.5×U <sub>N</sub>	100ms every time, no more than 1000 times during the lifetime

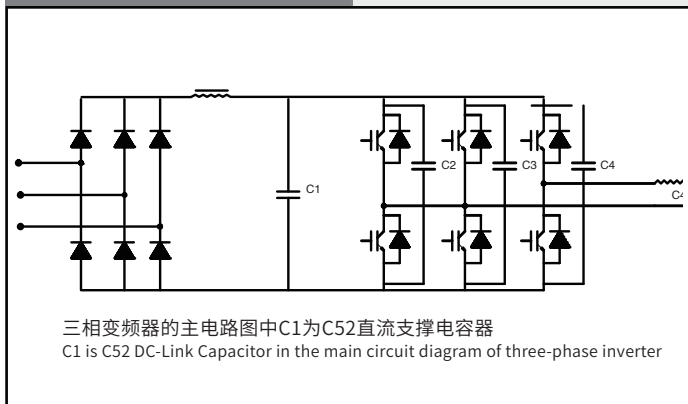
## C52

## DC-Link Capacitor

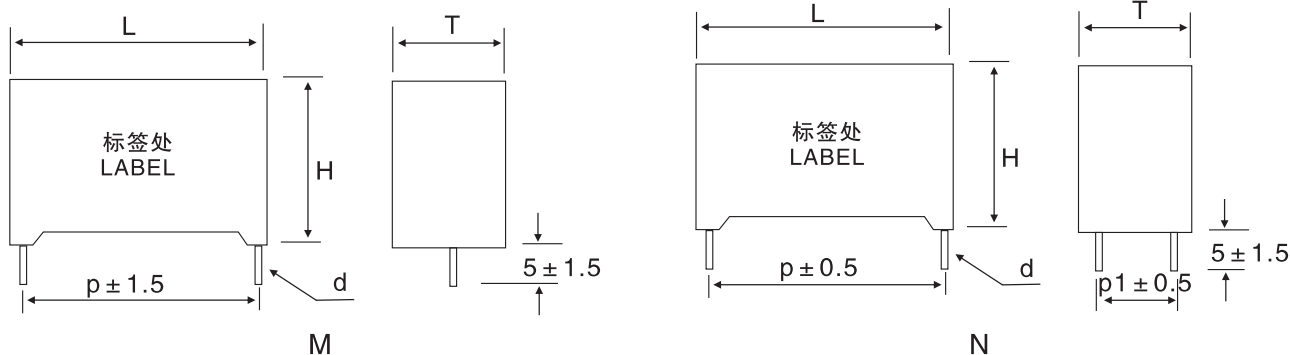
结构图.Construction Diagram



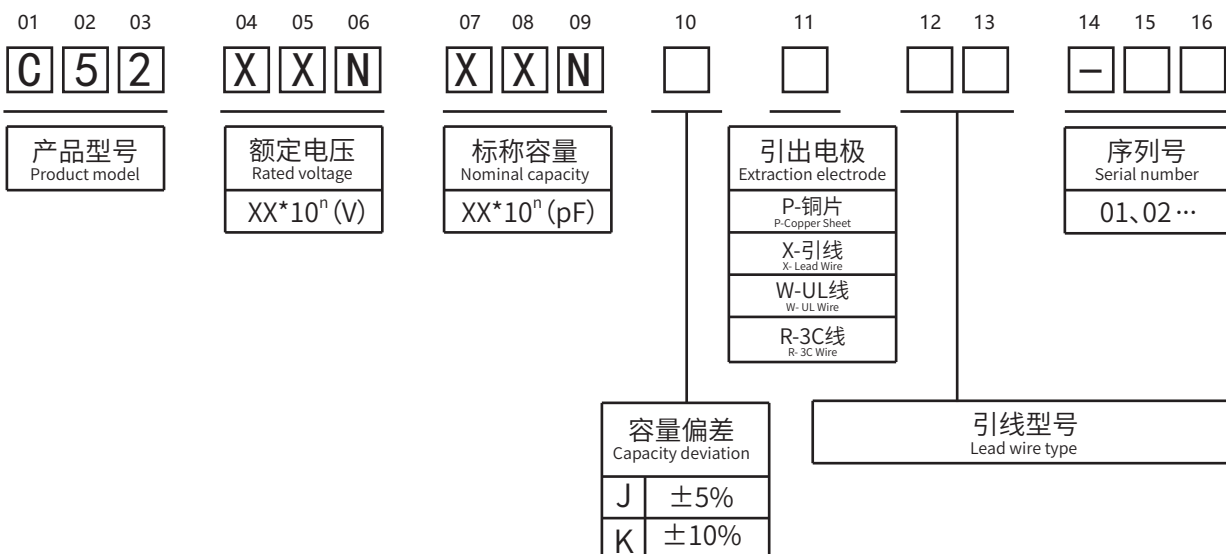
典型线路图.Typical Circuit



产品外形.Product Shape



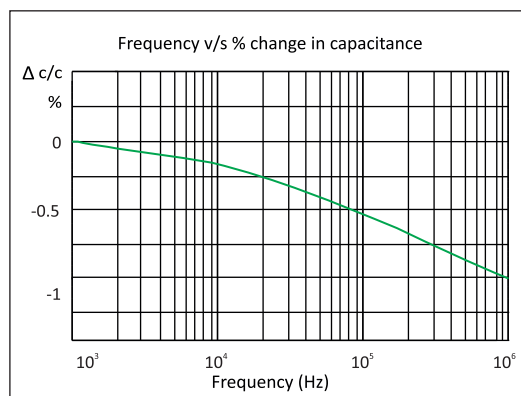
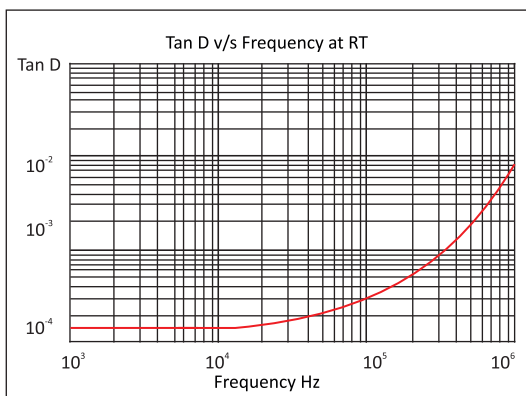
产品编码.Product Coding



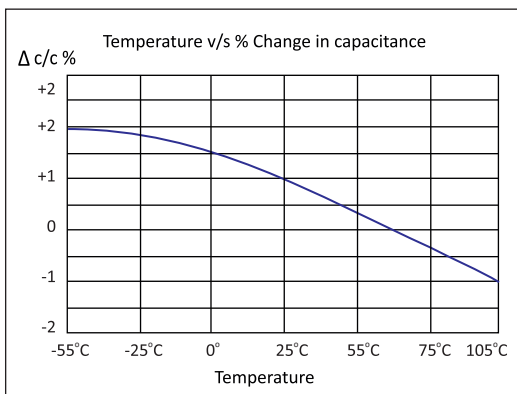
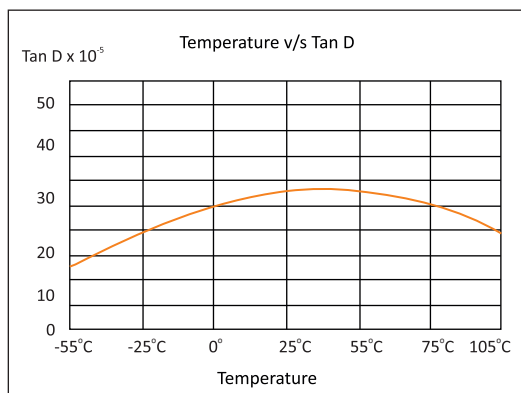
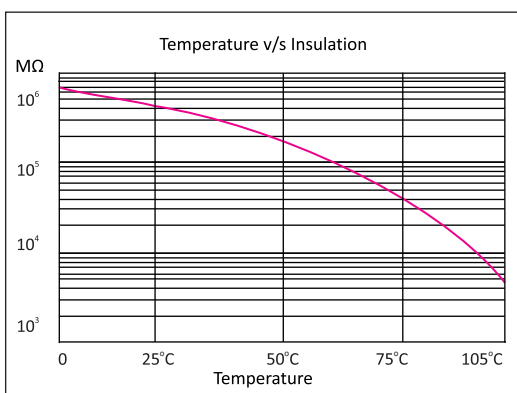
## C52

## DC-Link Capacitor

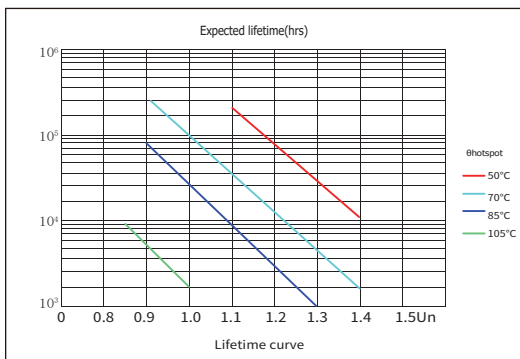
### 频率特性.Temperature Characteristics



### 温度特性.Frequency Characteristics



### 预期寿命 Life Expectancy



## C52

## DC-Link Capacitor

参数表.Article Table

Part Number	CAP μF	Dimension (mm)						dv/dt V/μs	I <sub>rms</sub> max @10KHz A	ESR @10KHz (mΩ)
		L	T	H	P	P1	d			
Un 500Vdc										
C52501166KX#-**	16	42.5	24.5	27.5	37.5		1.2	20	10.0	7.0
C52501256KX#-**	25	42.5	28.0	37.0	37.5		1.2	20	12.0	4.2
C52501256KX#-**	25	42.5	28.0	37.0	37.5	10.0	1.2	20	14.0	4.2
C52501526KX#-**	35	42.5	30.0	45.0	37.5		1.2	20	12.0	3.0
C52501526KX#-**	35	42.5	30.0	45.0	37.5	20.0	1.2	20	17.0	2.5
C52501406KX#-**	40	42.5	33.0	45.0	37.5		1.2	20	12.0	2.8
C52501406KX#-**	40	42.5	33.0	45.0	37.5	20.0	1.2	20	19.0	2.4
C52501506KX#-**	50	57.5	30.0	45.0	52.5		1.2	13	12.0	4.0
C52501506KX#-**	50	57.5	30.0	45.0	52.5	20.0	1.2	13	17.0	3.5
C52501656KX#-**	65	57.5	35.0	50.0	52.5		1.2	13	12.0	3.3
C52501656KX#-**	65	57.5	35.0	50.0	52.5	20.0	1.2	13	20.0	2.7
C52501906KX#-**	90	57.5	42.5	56.0	52.5	20.0	1.2	13	22.0	2.5
U <sub>N</sub> 700VDC										
C52701156KX#-**	15	42.5	24.5	27.5	37.5		1.2	22	10.0	8.0
C52701226KX#-**	22	42.5	28.0	37.0	37.5		1.2	22	12.0	5.5
C52701226KX#-**	22	42.5	28.0	37.0	37.5	10.0	1.2	22	12.0	5.2
C52701306KX#-**	30	42.5	30.0	45.0	37.5		1.2	22	12.0	4.0
C52701306KX#-**	30	42.5	30.0	45.0	37.5	20.0	1.2	22	15.0	3.5
C52701526KX#-**	35	42.5	33.0	45.0	37.5		1.2	22	12.0	3.5
C52701526KX#-**	35	42.5	33.0	45.0	37.5	20.0	1.2	20	18.0	3.1
C52701456KX#-**	45	57.5	30.0	45.0	52.5		1.2	15	12.0	5.3
C52701456KX#-**	45	57.5	30.0	45.0	52.5	20.0	1.2	15	20.0	3.5
C52701556KX#-**	55	57.5	35.0	50.0	52.5		1.2	15	12.0	4.3
C52701556KX#-**	55	57.5	35.0	50.0	52.5	20.0	1.2	15	22.0	2.8

以上表格/图形仅供参考, 以实物为准, (单位:mm)

The above table / graphics are for reference only, subject to the actual product (unit: mm)

Part Number	CAP μF	Dimension (mm)						dv/dt V/μs	I <sub>rms</sub> max @10KHz A	ESR @10KHz (mΩ)
		L	T	H	P	P1	d			
U <sub>N</sub> 800VDC										
C52801104KX#-**	0.1	18	7.5	13.5	15	--	0.6	350	10.0	70
C52801124 KX#-**	0.12	18	7.5	13.5	15	--	0.8	350	11.0	68
C52801154 KX#-**	0.15	18	7.5	13.5	15	--	0.8	350	12.0	65
C52801224 KX#-**	0.22	18	8.4	16.5	15	--	0.8	350	13.0	60
C52801304 KX#-**	0.30	18	10.8	19.0	15	--	0.8	350	14.0	55
C52801334 KX#-**	0.33	18	10.8	19.0	15	--	0.8	350	14.0	55
U <sub>N</sub> 900VDC										
C52901106KX#-**	10	42.5	24.5	27.5	37.5		1.2	30	8.0	9.5
C52901156KX#-**	15	42.5	28.0	37.0	37.5		1.2	30	11.0	6.5
C52901156KX#-**	15	42.5	28.0	37.0	37.5	10.0	1.2	30	11.0	6.0
C52901206KX#-**	20	42.5	30.0	45.0	37.5		1.2	30	12.0	5.0
C52901206KX#-**	20	42.5	30.0	45.0	37.5	20.0	1.2	30	13.0	4.5
C52901306KX#-**	30	57.5	30.0	45.0	52.5		1.2	20	12.0	6.3
C52901306KX#-**	30	57.5	30.0	45.0	52.5	20.0	1.2	20	16.0	5.9
C52901406KX#-**	40	57.5	35.0	50.0	52.5		1.2	20	12.0	4.9
C52901406KX#-**	40	57.5	35.0	50.0	52.5	20.0	1.2	20	20.0	4.5
C52901556KX#-**	55	57.5	42.5	56.0	52.5	20.0	1.2	20	22.0	3.1
U <sub>N</sub> 1200VDC										
C52122505KX#-**	5	42.5	24.5	27.5	37.5		1.2	40	6.0	13.0
C52122106KX#-**	10	42.5	28.0	37.0	37.5		1.2	40	10.0	8.0
C52122106KX#-**	10	42.5	28.0	37.0	37.5	10.0	1.2	40	10.0	7.5
C52122156KX#-**	15	42.5	33.0	45.0	37.5		1.2	40	12.0	5.5
C52122156KX#-**	15	42.5	33.0	45.0	37.5	20.0	1.2	40	13.0	5.0
C52122226KX#-**	22	57.5	30.0	45.0	52.5		1.2	27	12.0	7.0
C52122226KX#-**	22	57.5	30.0	45.0	52.5	20.0	1.2	27	14.0	6.5
C52122256KX#-**	25	57.5	35.0	50.0	52.5		1.2	27	12.0	6.3
C52122256KX#-**	25	57.5	35.0	50.0	52.5	20.0	1.2	27	16.0	6.0
C52122406KX#-**	40	57.5	42.5	56.0	52.5	20.0	1.2	27	20.0	3.5

以上表格/图形仅供参考, 以实物为准, (单位:mm)

The above table / graphics are for reference only, subject to the actual product (unit: mm)

备注:最大电流I<sub>rms</sub>为f=10kHz,T<sub>amb</sub>=70°C ΔT≤15°C的值。

Note: Maximum I<sub>rms</sub> current at 10kHz, T<sub>amb</sub>= T<sub>amb</sub>=70°C ΔT≤15°C.