



CRC NEW ENERGY

High Performance Capacitor



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CRC NEW ENERGY

High Performance Capacitor



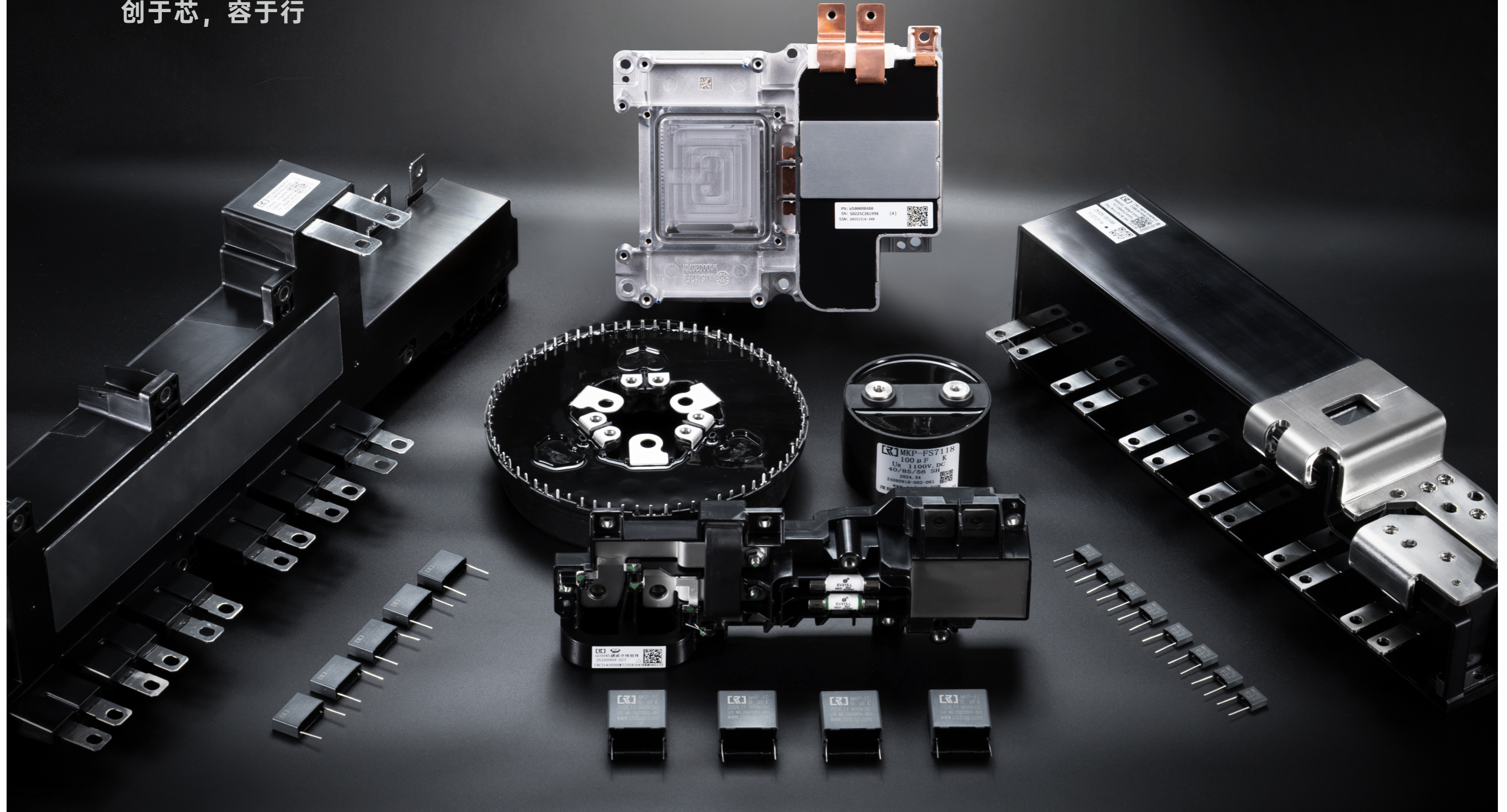
Professional Film Capacitor Manufacturer 薄膜电容器专业制造商

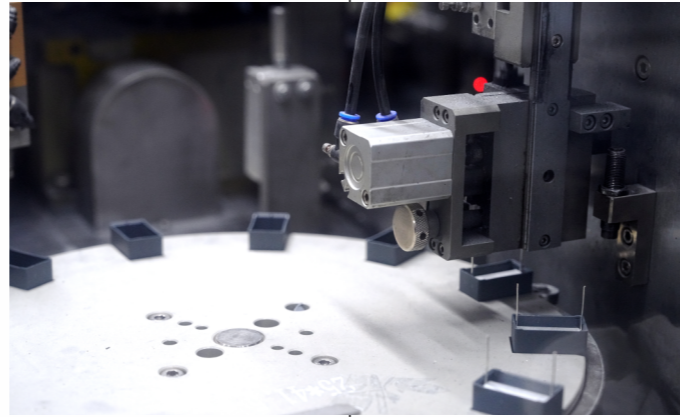
- ◆ Automotive Capacitor 汽车电容器 / Automotive filters 车载滤波器 / DC-Link Capacitor 直流支撑电容器
- ◆ Snubber Capacitor 吸收电容器 / AC-Filter Capacitor 交流滤波电容器
- ◆ Resonant Capacitor 谐振电容器 / X1、X2/Y2 Capacitor 安规电容器
- ◆ CBB21 Capacitor 聚丙烯电容器 / CL21 Capacitor 聚酯电容器

深圳市创容新能源有限公司
广东创容电子科技有限公司

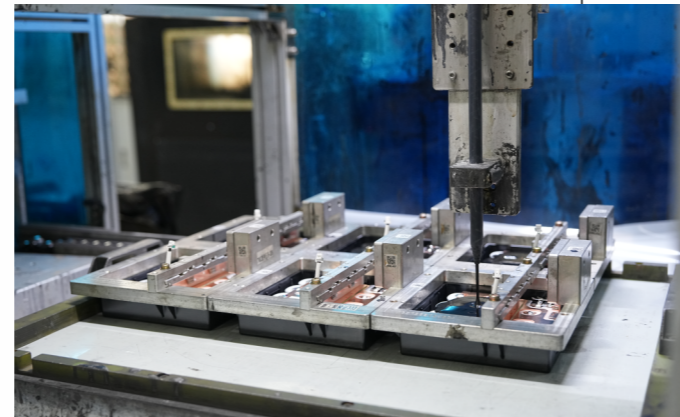
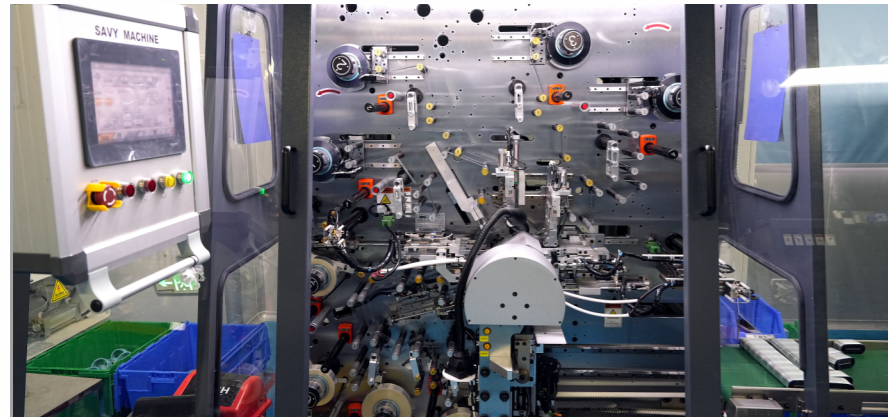
INNOVATE FOR CORE PERFORM FOR MOTION

创于芯，容于行





高效率的团队
可靠性的产品
专业化的服务



公司简介 COMPANY PROFILE

生产实力 Production strength

作为国家级高新技术企业，公司固定资产超2亿元，拥有超20000平方米的全自动化生产基地，深耕薄膜电容的研发与制造25年，为您提供稳定高效的产能支持。

As a national high-tech enterprise with fixed assets exceeding 200 million RMB and a fully automated production base of over 20,000 sq.m., we have been dedicated to R&D and manufacturing of film capacitors for 25 years, providing you with stable and efficient production capacity support.

科研实力 Scientific Research Sstrength

与国内高校及国际一流材料供应商深度合作，掌握从核心材料到成品的全链条技术，产品性能与品质达到国际领先水平。

We partner with top domestic universities and world-class material suppliers, mastering the full-chain technology from core materials to finished products, with globally leading product performance and quality.

25 years

25年 薄膜电容生产经验
Experience in the production of film capacitors

20000+ sq.m.

20000+平方米 智能化生产基地
Intelligentized base

FULLY AUTOMATIC EQUIPMENT

全自动化设备 制程自动化
process automation

权威认证 Authoritative certification

通过ISO9001、ISO14001、ISO45001、IATF16949体系认证，产品获得UL、VDE、ENEC、CQC、CB、AEC-Q200等全球安全认证，直接满足国际高端市场的准入要求。

It has passed the certification of ISO9001/ISO14001/ISO45001/IATF16949 systems, and its products have obtained global safety certifications such as UL/VDE/ENEC/CQC/CB/AEC-Q200, directly meeting the access requirements of the international high-end market.

市场地位 Market position

在新能源汽车、智能电表、光伏储能、轨道交通等战略新兴领域占据领先市场份额，与多家世界500强企业建立长期合作关系。

It holds a leading market share in strategic emerging fields such as new energy vehicles, smart electricity meters, photovoltaic energy storage, and rail transit, and has established long-term cooperation with multiple Fortune Global 500 companies.

自动化制造车间

AUTOMATED MANUFACTURING WORKSHOP



全自动卷绕机
Fully automatic winding machine



全自动焊接线
Fully automatic welding line



全自动成品检测线
Fully automatic finished product inspection line



全自动灌胶线
Fully automatic glue pouring line

- Fully automated equipment
- Product precise traceability
- Process video recording

创容的优势

OUR STRENGTHS



国家授权专利 National Patent

国家专利
59项
59 national patents

发明专利
10项
10 invention patents

01 质量稳定
Stable quality
(良品率99.5%)
25年制造经验
(Yield rate 99.5%) 25 years of manufacturing experience

02 高性价比
High cost performance
获BYD/中车等优秀供应商称号
Excellent Supplier by BYD/CRRC, etc.

03 供货稳定
Stable supply
交货及时率100%二期厂房扩产中
100% On-time delivery
The second-phase factory expansion is in progress

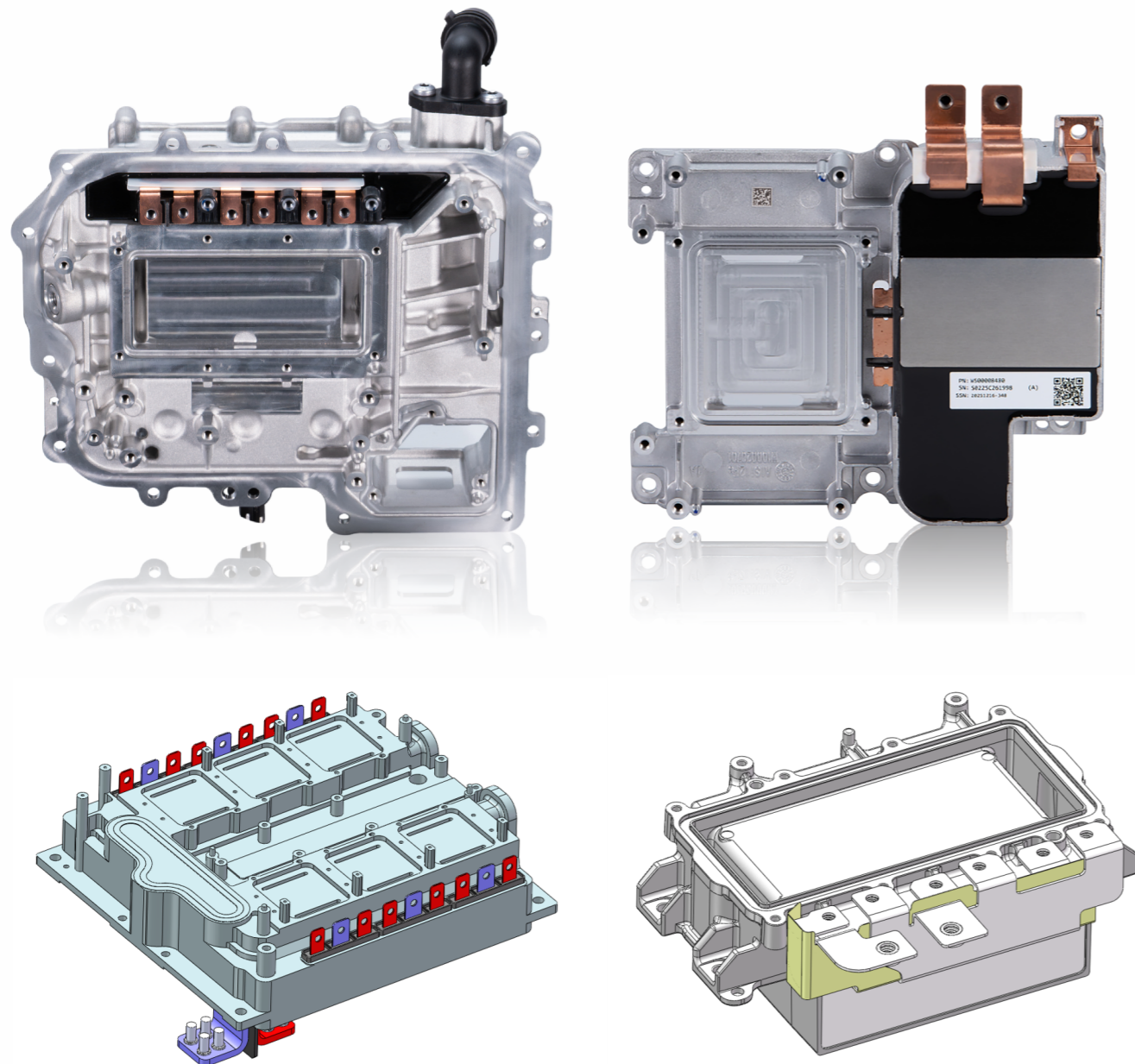
04 服务周到
Thoughtful service
响应速度快
样品LIT2~4W
新品开发周期6个月
Fast response speed
Sample L/T: 2-4 weeks
New product development cycle: 6 months

05 技术成熟
Mature technology
安全膜/
高可靠性耐高温/
高湿/高压小型/
大电流/长寿命
Safety film / high reliability
High temperature resistance / high humidity resistance / high pressure resistance
Small size / large current / long service life

06 产品品类丰富
Abundant category
汽车电容
安规/吸收/谐振电容
EMC滤波器
可实现高集成设计
Automotive capacitors
Safety/absorption/resonant capacitors
EMC filters
Enabling highly integrated design

汽车电容高度集成化案例

Case Study on High Integration of Automotive Capacitors

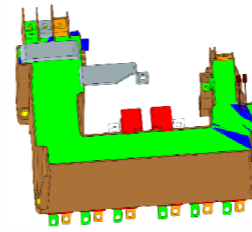


核心竞争力

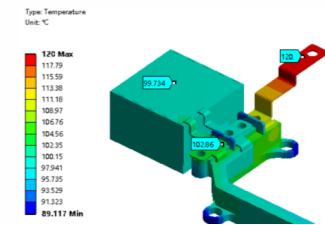
Core Competitiveness

设计能力
Design Capability

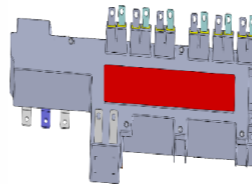
仿真能力
Simulation capability



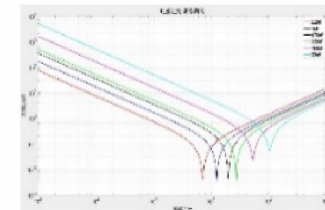
结构设计
Structural design



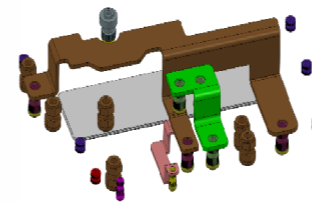
热仿真
Thermal simulation



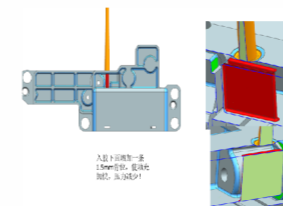
散热设计
Heat dissipation design



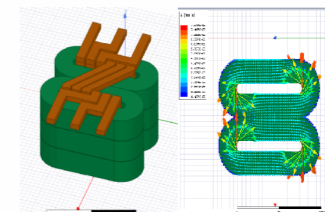
阻抗仿真
Impedance simulation



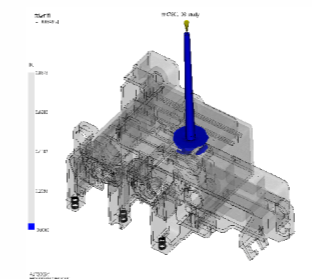
五金件设计
Hardware parts design



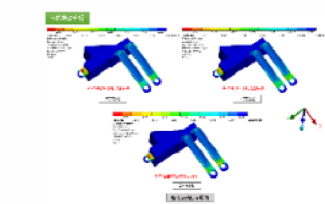
注塑件设计
Injection molded part design



电磁仿真
Electromagnetic simulation



包塑工艺
Plastic coating process



机械仿真
Mechanical simulation

产品应用

Product Application



新能源汽车领域 New Energy Vehicle Field



轨道交通领域 Rail Transit Field



风电、光伏及储能领域 Wind, Solar, and Energy Storage Field



家电领域 Home Appliance Field



医疗器械领域 Medical Equipment Field

智能电表领域 Smart Meter Field



公司荣誉
CORPORATE HONORS



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MKP-QB Series 系列

汽车电容器 Automotive Capacitors



▶ 性能 Electrical Parameters

- $I_{max}=120A(10kHz)$
- AEC-Q200
- $LS \leq 8nH(10MHz)$
- IEC61071:2017
- $-40\sim 105^{\circ}C$
- $550V/350\mu F$

▶ 特性 Features

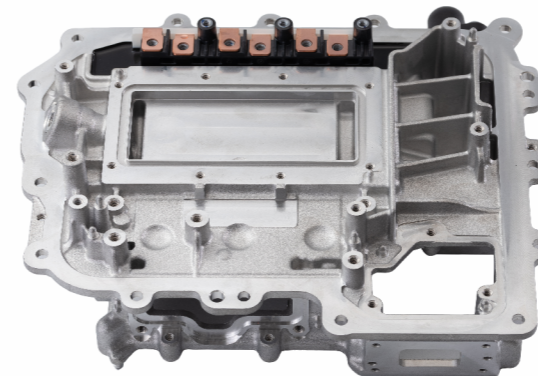
- 高纹波、高耐压;
High ripple current capability high withstanding voltage capability;
- 体积小、低电感;
Compact size, low ESL;
- 安全膜设计, 有自愈特性。
Safety film design with self-healing properties.

▶ 用途 Applications

- DC-Link 直流滤波电路;
DC filter circuits;
- 新能源乘用车和混合动力汽车。
Electric and hybrid passenger vehicles.

MKP-QB Series 系列

汽车电容器 Automotive Capacitors



▶ 性能 Electrical Parameters

- $I_{max}=120A(10kHz)$
- AEC-Q200
- $LS \leq 13nH(1MHz)$
- IEC61071:2017
- $-40^{\circ}C \sim 105^{\circ}C$
- $500V/350\mu F$

▶ 特性 Features

- 高纹波、高耐压;
High ripple current capability high withstanding voltage capability;
- 体积小、低电感;
Compact size, low ESL;
- 安全膜设计, 有自愈特性。
Safety film design with self-healing properties.

▶ 用途 Applications

- DC-Link 直流滤波电路;
DC filter circuits;
- 新能源乘用车和混合动力汽车。
Electric and hybrid passenger vehicles.

MKP-QB Series 系列

汽车电容器 Automotive Capacitors

▶ 性能 Electrical Parameters

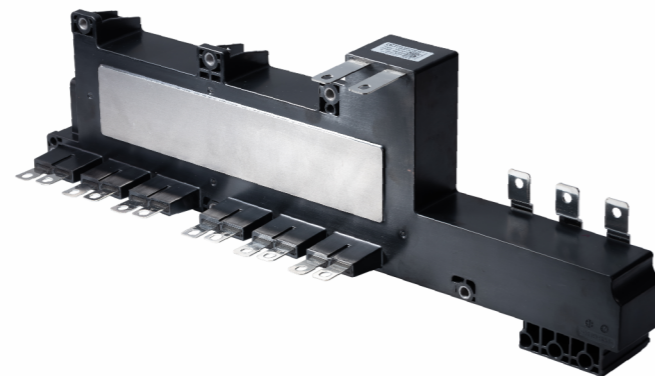
- $I_{max}=150A(10kHz)$
- AEC-Q200
- $LS \leq 12nH(1MHz)$
- IEC61071:2017
- $-40^{\circ}C \sim 105^{\circ}C$
- $750V/1200\mu F$

▶ 特性 Features

- 高纹波、高耐压;
High ripple current capability high withstanding voltage capability;
- 体积小、低电感;
Compact size, low ESL;
- 安全膜设计, 有自愈特性。
Safety film design with self-healing properties.

▶ 用途 Applications

- DC-Link 直流滤波电路;
DC filter circuits;
- 新能源乘用车和混合动力汽车。
Electric and hybrid passenger vehicles.



MKP-QB Series 系列

汽车电容器 Automotive Capacitors

▶ 性能 Electrical Parameters

- $I_{max}=960A(10kHz)$
- AEC-Q200
- $LS \leq 15nH(1MHz)$
- IEC61071:2017
- $-40^{\circ}C \sim 105^{\circ}C$
- $800V/1600\mu F$

▶ 特性 Features

- 高纹波、高耐压;
High ripple current capability high withstanding voltage capability;
- 体积小、低电感;
Compact size, low ESL;
- 安全膜设计, 有自愈特性。
Safety film design with self-healing properties.

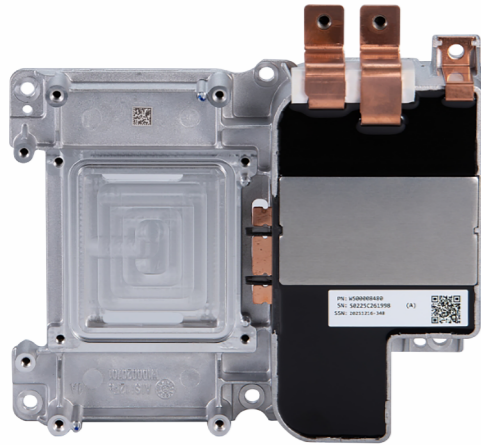
▶ 用途 Applications

- DC-Link 直流滤波电路;
DC filter circuits;
- 新能源乘用车和混合动力汽车。
Electric and hybrid passenger vehicles.



MKP-QB Series 系列

汽车电容 Automotive Capacitors



▶ 性能 Electrical Parameters

- I_{max}=196A(10kHz)
- AEC-Q200
- LS ≤ 12nH(1MHz)
- IEC61071:2017
- -40°C~105°C
- 500V/360μF

▶ 特性 Features

- 高纹波、高耐压;
High ripple current capability high withstanding voltage capability;
- 体积小、低电感;
Compact size, low ESL;
- 安全膜设计, 有自愈特性。
Safety film design with self-healing properties.

▶ 用途 Applications

- DC-Link 直流滤波电路;
DC filter circuits;
- 新能源乘用车和混合动力汽车。
Electric and hybrid passenger vehicles.

MKP-HS Series 系列

吸收电容器 Snubber Capacitors



▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 630~3000V.DC
- -40~105°C
- 0.1~5μF

▶ 特性 Features

- 安装简单快捷;
Easy mounting;
- 高 dv/dt 承受能力;
High dv/dt strength;
- 耐压高, 损耗小, 温升低。
High withstanding voltage capability, low dissipation, low temperature rise.

▶ 用途 Applications

- IGBT 缓冲吸收;
IGBT snubbing;
- 电力电子设备中尖峰电压、尖峰电流吸收保护。
Used in power electronics equipment to absorb and protect from peak voltage and peak current when the switching device is turned off.

MKP-HA Series 系列

吸收电容器 Snubber Capacitors

▶ 性能 Electrical Parameters

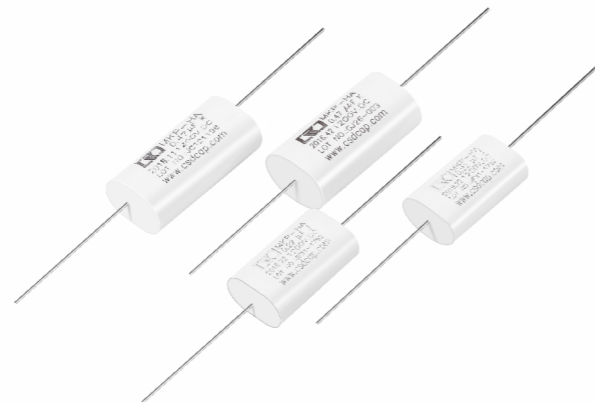
- GB/T 17702-2013
- IEC61071-2017
- 630~3000V.DC
- -40~105°C
- 0.1~5μF

▶ 特性 Features

- 安装简单快捷;
Easy mounting;
- 耐压高, 损耗小, 温升低;
High withstanding voltage capability, low dissipation, low temperature rise;
- 高 dv/dt 承受能力。
High dv/dt strength.

▶ 用途 Applications

- IGBT缓冲吸收;
IGBT snubbing;
- 电力电子设备中尖峰电压、尖峰电流吸收保护。
Used in power electronics equipment to absorb and protect from peak voltage and peak current when the switching device is turned off.



MKP-FC Series 系列

直流支撑电容器 DC-Link Capacitors

▶ 性能 Electrical Parameters

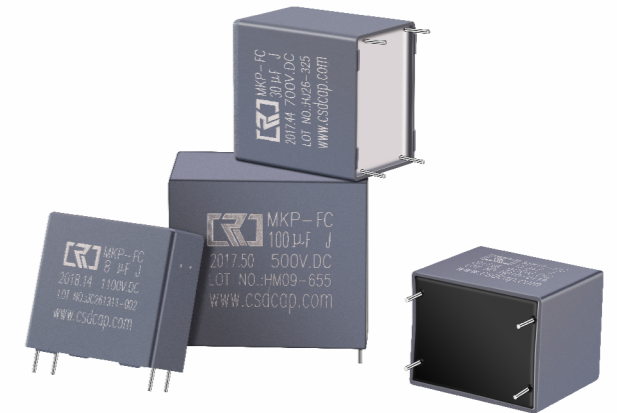
- GB/T 17702-2013
- IEC61071-2017
- 400~1100V.DC
- -40~105°C
- 1~140μF

▶ 特性 Features

- 自感小, 等效串联电阻小;
Low ESL, low ESR;
- 高纹波电流承受能力。
High ripple current capability.

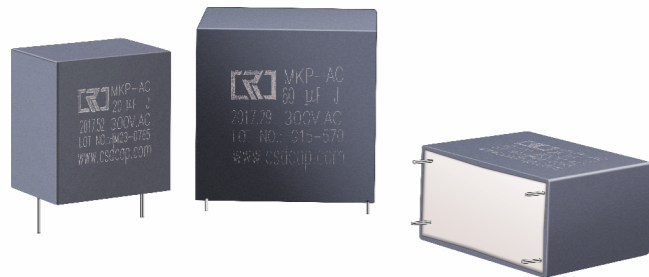
▶ 用途 Applications

- 广泛应用于电力电子电路中作母线支撑作用。
Widely used in power electronics circuits for DC-Link.



MKP-AC Series 系列

交流滤波电容器 AC-Filter Capacitors



▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 200~450V.AC
- -40~105°C
- 2~50 μ F

▶ 特性 Features

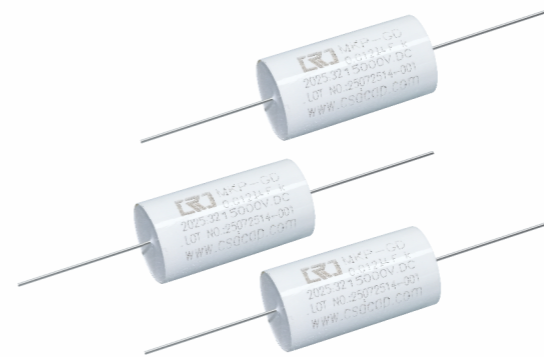
- 耐高压，损耗小；
High withstanding voltage capability, low dissipation;
- 高脉冲电流；
High pulse current capability;
- 高dv/dt承受能力。
High dv/dt strength.

▶ 用途 Applications

- 广泛应用于电子设备中作交流滤波作用。
Widely used in power electronics equipment for AC filtering.

MKP-GD Series 系列

脉冲电容器 Pulse capacitor



▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 1500V.DC
- -40~110°C
- 0.012 μ F

▶ 特性 Features

- 耐高压，损耗小，有自愈特性；
High withstanding voltage capability, low dissipation, with self-healing properties;
- 高脉冲电流，高 dv/dt 承受能力；
High pulse current capability, high dv/dt strength;

▶ 用途 Applications

- 广泛用于高压脉冲电源、激光电路、高频逆变、高压缓冲吸收、电火花脉冲、高频谐振回路
Widely used in high-voltage pulse power supplies, laser circuits, high-frequency inverter, high-voltage buffer absorption, electrical spark pulses, and high-frequency resonant circuits.

MKP-GM Series 系列

脉冲电容器 Pulse capacitor

▶ 性能 Electrical Parameters

- $I_{max}=240A(10KHz)$
- $LS \leq 16nH(1MHZ)$
- IEC61071:2017
- -40°C -105°C

▶ 特性 Features

- 高纹波、高耐压；
High ripple current capability high withstanding voltage capability;
- 低电感；
Compact size;
- 安全膜设计，有自愈特性。
Safety film design with self-healing properties.

▶ 用途 Applications

- DC-Link直流滤波电路；
DC filter circuits;
- 大功率脉冲电源。
High-power pulse power supply.



MKP-GD Series 系列

脉冲电容器 Pulse capacitor

▶ 性能 Electrical Parameters

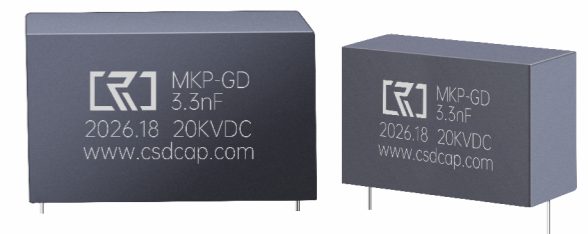
- 10KV~50KV
- 0~75°C
- 330pF~3300pF
- 能量密度0.024J/cc
energy density 0.024J/cc

▶ 特性 Features

- 体积小，耐高压；
Compact size, high voltage resistance;
- 使用寿命 ≥ 100 万次；
Service life $\geq 1,000,000$ times;
- 50次额定电压工作情况下，电容量变化 $\leq 0.05\%$ ，
介质损耗 tg δ 变化 ≤ 0.001 。
Under 50 times rated voltage operation, capacitance change $\leq 0.05\%$, dielectric loss tg δ change ≤ 0.001 .

▶ 用途 Applications

- 脉冲倍增器
Pulse multiplier



MKP-RT Series 系列

高压吸收谐振电容器 Resonant Capacitors



▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 1200~20000V.DC
- -40~105°C
- 0.06 ~ 8uF

▶ 特性 Features

- 耐高压，损耗小；
High withstanding voltage capability, low dissipation.;
- 高脉电源，高dv/dt承受能力；
High pulse current capability, high dv/dt strength;

▶ 用途 Applications

- 广泛用于电力电子设备中的串/并联谐振电路用，亦可用于大功率GTO吸收电容。
Widely used in series / parallel resonant circuit in power electronics electronics, can also be used in snubber circuits for power GTO.

MKP-FS Series 系列

直流支撑电容器 DC-Link Capacitors



▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 400~3000V.DC
- -40~105°C
- 10~3000uF

▶ 特性 Features

- 容量大，体积小；
High ripple current capability, high dv/dt strength;
- 耐高压，具有自愈性；
Large capacity, compact size;
- 高纹波电流，高dv/dt承受力。
High withstanding voltage capability self-healing property.

▶ 用途 Applications

- 广泛应用于电力电子电路中作母线支撑作用。
Widely used in power electronics circuits for DC-Link.

MKP-AT Series 系列

交流滤波电容器 AT-Filter Capacitors

▶ 性能 Electrical Parameters

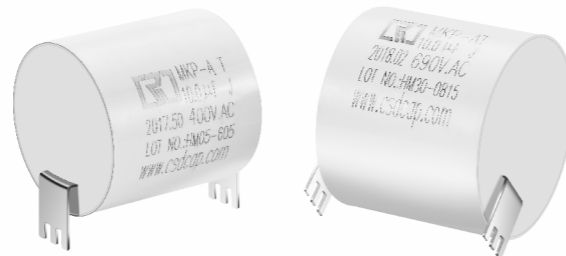
- GB/T 17702-2013
- IEC61071-2017
- 300~690V.AC
- -40~105°C
- 5-50uF

▶ 特性 Features

- 耐高压，损耗小；
High withstanding voltage capability, low dissipation;
- 高脉冲电流；
High pulse current capability;
- 高dv/dt承受力。
High dv/dt strength.

▶ 用途 Applications

- 广泛应用于电子设备中作交流滤波作用。
Widely used in power electronics equipment for AC filtering.



MKP-AS Series 系列

交流滤波电容器 AS-Filter Capacitors

▶ 性能 Electrical Parameters

- | Single-phase | Three-phase |
|------------------|-------------------|
| • GB/T17702-2013 | • GB/T 17702-2013 |
| • IEC61071-2017 | • IEC61071-2017 |
| • 400~1500V.AC | • 400~1140V.AC |
| • -40°C ~ 105°C | • -40°C ~ 105°C |
| • 20~500uF | • 3*10~3*200uF |

▶ 特性 Features

- 耐高压，损耗小；
High withstanding voltage capability, low dissipation;
- 高脉冲电流；
High pulse current capability;
- 高dv/dt承受力。
High dv/dt strength.

▶ 用途 Applications

- 广泛应用于电子设备中作交流滤波作用；
Widely used in power electronics equipment for AC filtering;
- 治理谐波级提高功率因数。
Harmonic control and power factor improvement.



MKP-AB Series 系列

交流滤波电容器 AB-Filter Capacitors



▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 400~2000V.AC
- -40~105°C
- 3*10~3*500uF

▶ 特性 Features

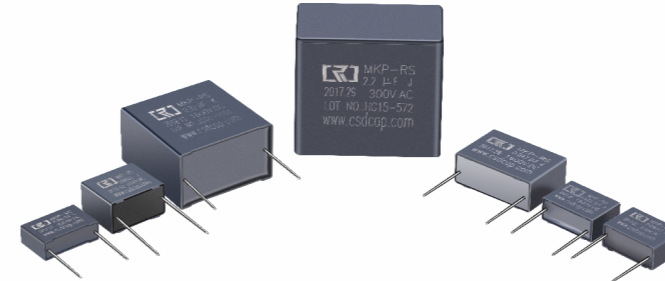
- 耐高压，损耗小；
High withstanding voltage capability, low dissipation;
- 高脉冲电流；
High pulse current capability;
- 高dv/dt承受能力。
High dv/dt strength.

▶ 用途 Applications

- 广泛应用于电子设备中作交流滤波作用。
Widely used in power electronics equipment for AC filtering.

MKP-RS Series 系列

谐振电容器 MKP-RS Capacitors



▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 630~3000V.DC
- -40~105°C
- 0.001~5uF

▶ 特性 Features

- 耐高压，损耗小；
High withstanding voltage capability, low dissipation;
- 高纹波电流承受能力；
High pulse current capability;
- 高dv/dt承受能力。
High dv/dt strength.

▶ 用途 Applications

- 广泛用于电力电子设备中的串/并联谐振电路，以及缓冲吸收电路。
Widely used in series / parallel circuits and snubber circuits.

MKP-FB Series 系列

直流支撑电容器 FB-Link Capacitors

▶ 性能 Electrical Parameters

- GB/T 17702-2013
- IEC61071-2017
- 400~5000V.DC
- -40~105°C
- 10~3000uF

▶ 特性 Features

- 安装简单方便；
Easy mounting;
- 容量大，体积小；
Large capacity, compact size;
- 耐高压，具有自愈性。
High withstanding voltage capability self-healing property.

▶ 用途 Applications

- 广泛应用于电力电子电路中作母线支撑作用。
Widely used in power electronics circuits for DC-Link.



MPB Series 系列

塑壳式金属化聚丙烯电容器 Metallized polypropylene film capacitor

▶ 性能 Electrical Parameters

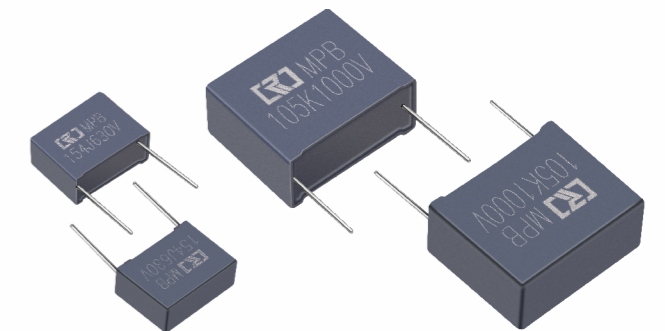
- GB/T 10191 (IEC 60384-16)
- GB/T 14579 (IEC 60384-17)
- 630/1000/1600/2000V
- 100/250/400/520V/630/1000V
- 0.001~22uF

▶ 特性 Features

- 金属化聚酯膜，无感卷绕结构；
Metallized polypropylene film, non-inductive wound construction;
- 良好的电性能，高频损耗小，内部温升小；
Excellent electrical performance, low loss at high frequency, small inherent temperature rise;
- 阻燃环氧外壳封装 (UL94/V0)。
Flam retardant epoxy resin coated (UL94/V0).

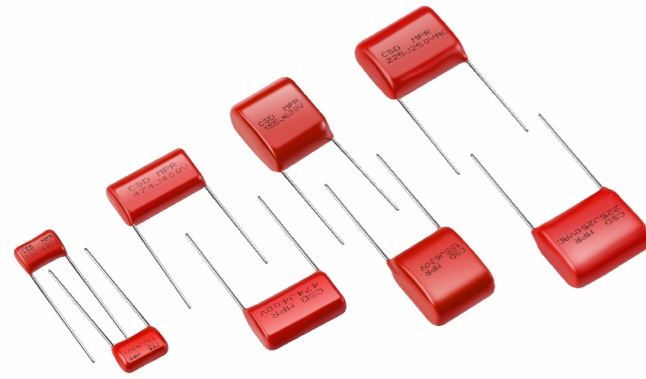
▶ 用途 Applications

- 用于高频，直流，交流和脉冲电路中；
Used in high frequency, DC, AC and pulse circuits;
- 用于各种高频，大电流场合；
Used in situations where high frequency and high current apply;
- 用于电视机，显示器校正电路；
Used in S-correction circuits for TV sets and monitors;
- 用于开关电源，电子整流器和变频器等中间电路直流滤波；
Used as intermediate circuit capacitors for SMPS, Electronic Ballast, converter.



MPR Series 系列

包封式金属化聚丙烯电容器 Metalized polypropylene film capacitor



▶ 性能 Electrical Parameters

- GB/T 10191 (IEC 60384-16)
- GB/T 14579 (IEC 60384-17)
- 630/1000/1250/1600/2000V
- 160/250/400/630/1000V
- 0.001~20uF

▶ 特性 Features

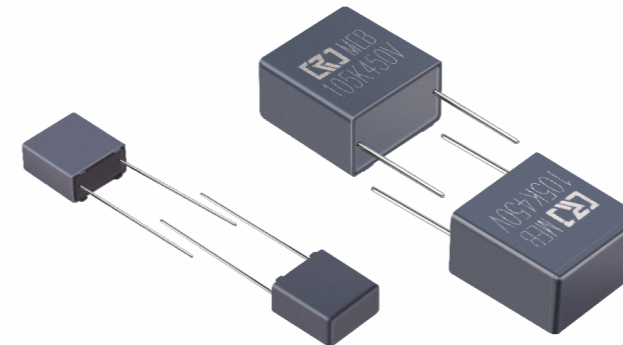
- 金属化聚酯膜，无感卷绕结构；
Metallized polypropylene film, non-inductive wound construction;
- 良好的电性能，高频损耗小，内部温升小；
Excellent electrical performance, low loss at high frequency, small inherent temperature rise;
- 阻燃环氧粉末包装(UL94/V0)。
Flam retardant epoxy resin coated(UL94/V0).

▶ 用途 Applications

- 用于高频，直流，交流和脉冲电路中；
Used in high frequency, DC, AC and pulse circuits;
- 用于各种高频，大电流场合；
Used in situations where high frequency and high current apply;
- 用于开关电源，电子整流器和变频器等中间电路直流滤波。
Used as intermediate circuit capacitors for SMPS, Electronic Ballast, converter.

MEB Series 系列

塑壳式金属化聚酯膜电容器 Metallized polyester film capacitor



▶ 性能 Electrical Parameters

- GB/T 7332 (IEC 60384-2)
- 100/160/250/450/630/1000V
- 0.001~47.0uF

▶ 特性 Features

- 金属化聚酯膜，无感卷绕结构；
Metallized polypropylene film, non-inductive wound construction;
- 容量范围宽，自愈性好，寿命长；
Wide capacitance range, good self-healing properties, long life;
- 阻燃塑料外壳和阻燃环氧封装 (UL94/V0)。
Flame retardant plastic case and epoxy resin sealing (UL94/V0).

▶ 用途 Applications

- 用于电子设备的直流脉动和脉冲电路中；
Used in DC impulse and pulse circuits;
- 用于开关电源转换器、电子镇流器和紧凑型节能灯；
Used in SMPS converter, electronic ballasts, compact fluorescent lamps;
- 用于旁路、隔直、耦合、退耦、逻辑、定时和振荡电路。
Used in by-passing, blocking, coupling, decoupling, logic, timing and oscillator circuits.

MER Series 系列

包封式金属化聚酯膜电容器 Metallized polyester film capacitor

▶ 性能 Electrical Parameters

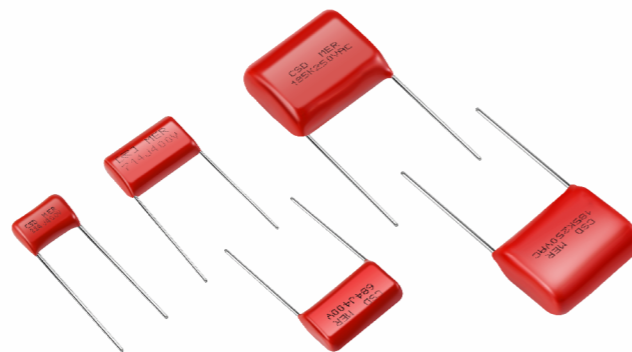
- GB/T 7332 (IEC 60384-2)
- 100/160/250/450/630/1000/1250V
- 0.001~10uF

▶ 特性 Features

- 金属化聚酯膜，无感卷绕结构；
Metallized polypropylene film, non-inductive wound construction;
- 容量范围宽，自愈性好，重量轻；
Wide capacitance range, compact size, and light weight;
- 自愈性好，寿命长；
Good self-healing properties, long life;
- 阻燃环氧粉长 (UL94/V0)。
Flame retardant plastic case and epoxy resin sealing (UL94/V0).

▶ 用途 Applications

- 用于直流和VHF级信号的隔直流、旁路和耦合；
Used in DC impulse and pulse circuits;
- 用于与电源串联的电容降压电路场合；
Used in SMPS converter, electronic ballasts, compact fluorescent lamps;
- 用于快关电源、电子镇流器和变频器等中间电路直流滤波。
Used in by-passing, blocking, coupling, decoupling, logic, timing and oscillator circuits.



MPY Series 系列

Y2 抑制电源电磁干扰用电容器 Y2 Capacitor

▶ 性能 Electrical Parameters

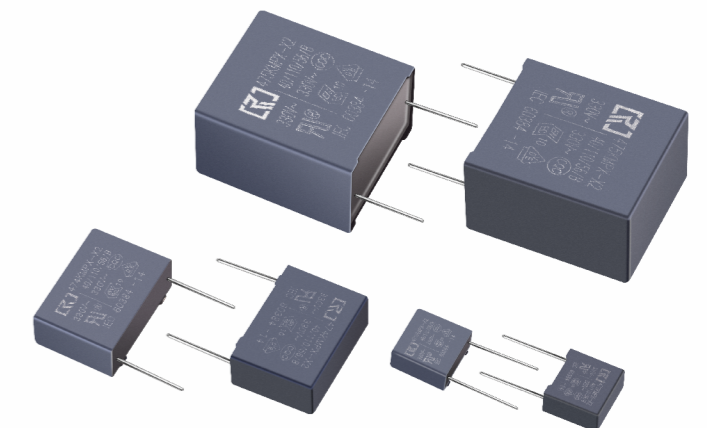
- GB/6346.14 (IEC60384-14)
- VDE/ENEC/CB/UL/CQC
- 330V.A.C
- -40~110°C
- 0.001 F~1UF

▶ 特性 Features

- 金属化聚丙烯膜，无感卷绕结构；
Metallized poly propylene film, non-inductive wound construction;
- 自愈性能优异，能承受过压冲击；
Good self-healing properties, withstanding over voltage capability;
- 优异的阻燃性能，防潮性能。
Excellent active and passive flame resistant capability and moisture resistant capability.

▶ 用途 Applications

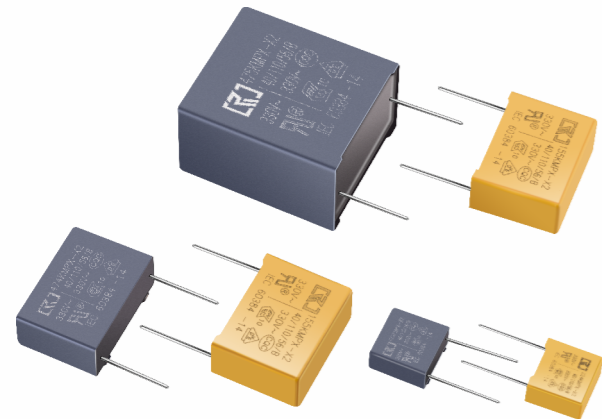
- 用于电源跨线线路等抗干扰场合；
Used in across-the-line, interference suppression circuit;
- 用于与电源串联的电容降压电路场合。
Used in RC voltage-reducing circuits when in series connection with power supplies.



MPX Series 系列

X1、X2 抑制电源电磁干扰用电容器

X1、X2 Capacitor



▶ 性能 Electrical Parameters

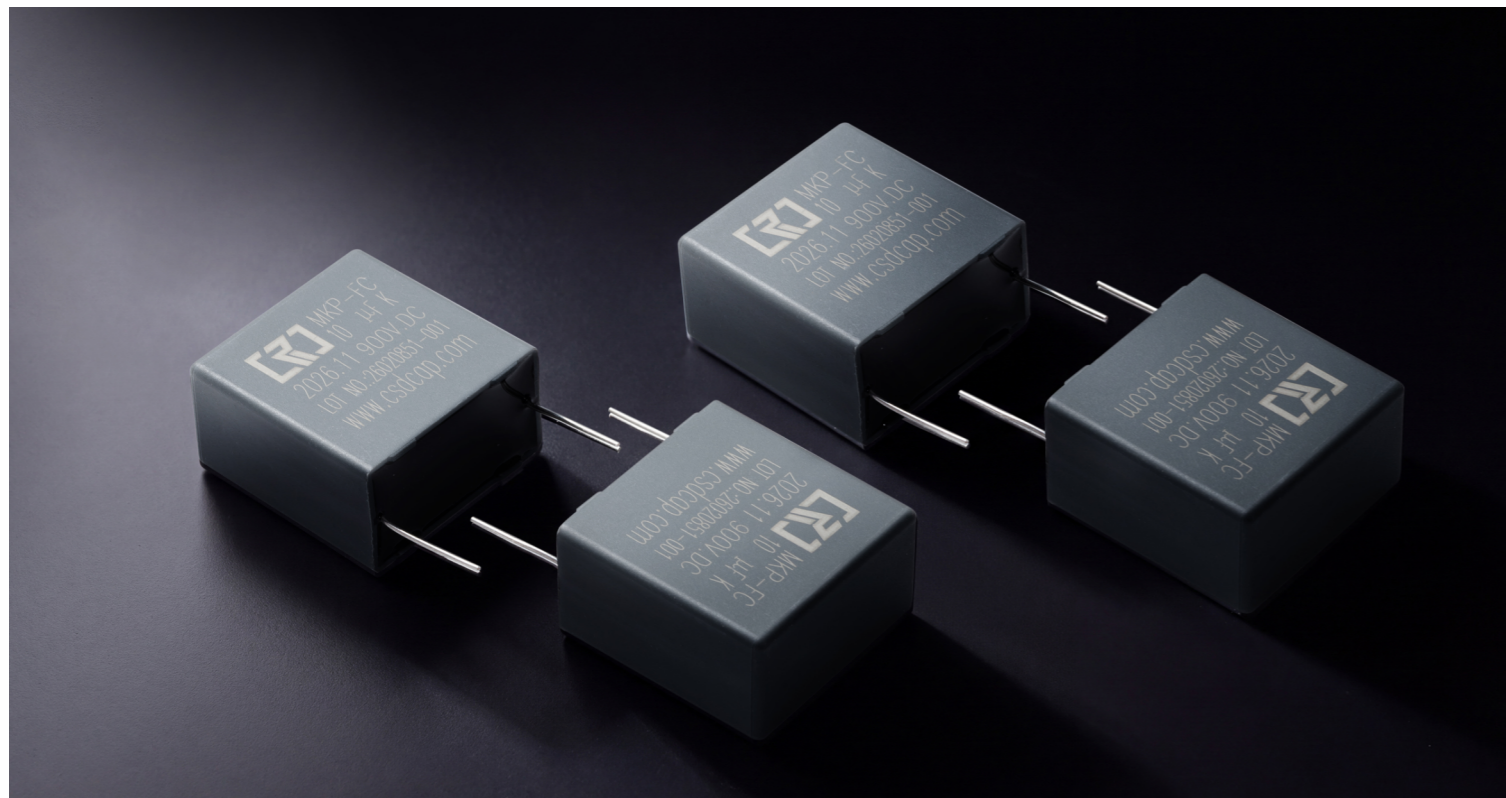
- GB/6346.14(IEC 60384-14)
- VDE/ENEC/CB/UL/CQC
- 275/305/330/440V.AC
- -40-110°C
- 0.001μF~10.0μF

▶ 特性 Features

- 金属化聚丙烯膜，无感卷绕结构；
Metallized polypropylene film, non-inductive wound construction;
- 自息性能优异，能承受过压冲击；
Good self-healing properties,withstanding overvoltage capabilty
- 优异的阻燃性能，防潮性能。
Excellent active and passive flame resistant capabllty and molsture resistant capabllty.

▶ 用途 Applications

- 用于电源跨线线路等抗干扰场合；
Used in across-the-line,interference suppresslon circuit;
- 用于与电源串联的电容降压电路场合。
Used in RC voltage-reducing circuits when in series connection withpower supplles.



EMC 滤波器一站式解决方案

EMC Filter One-stop Solution



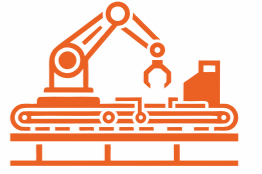
国内顶尖团队，
正向建模设计、仿真



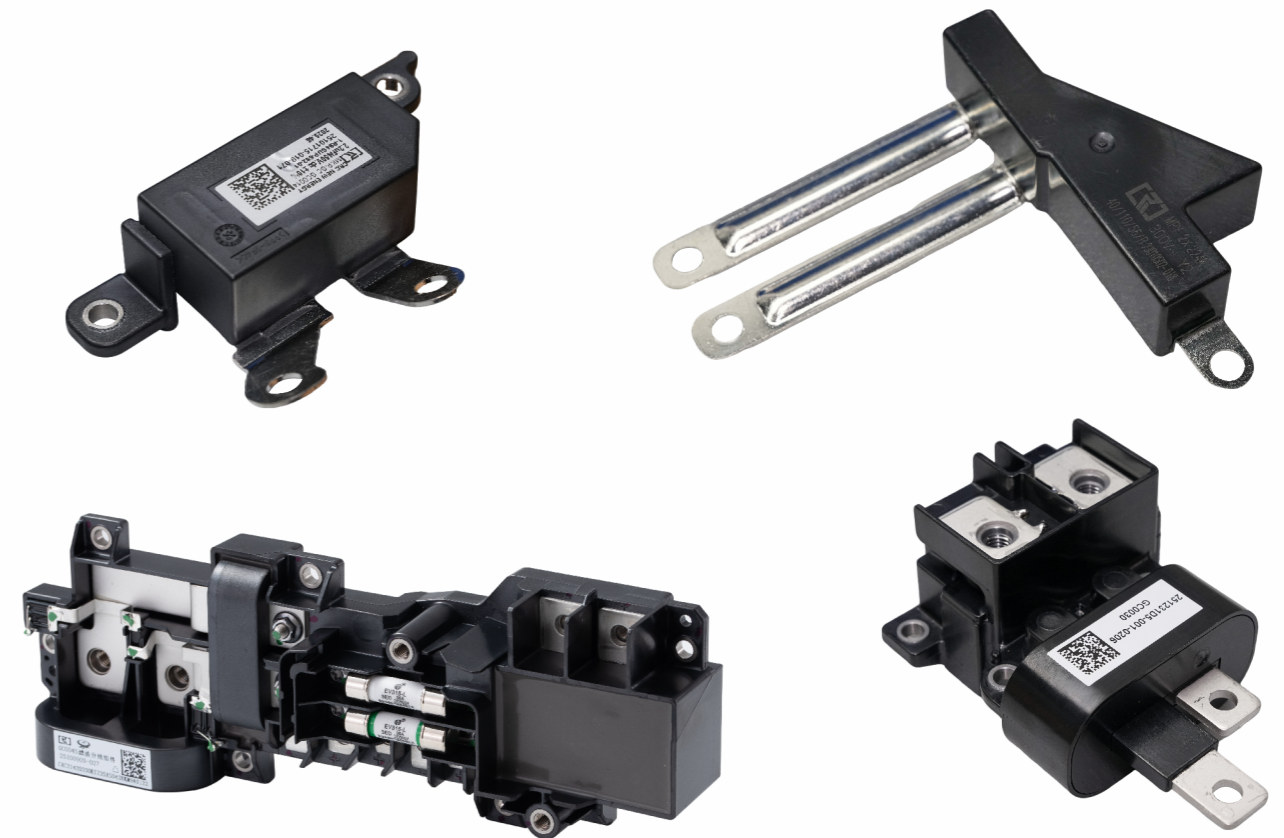
自有高标准 CNAS
实验室验证



自有安规电容产品

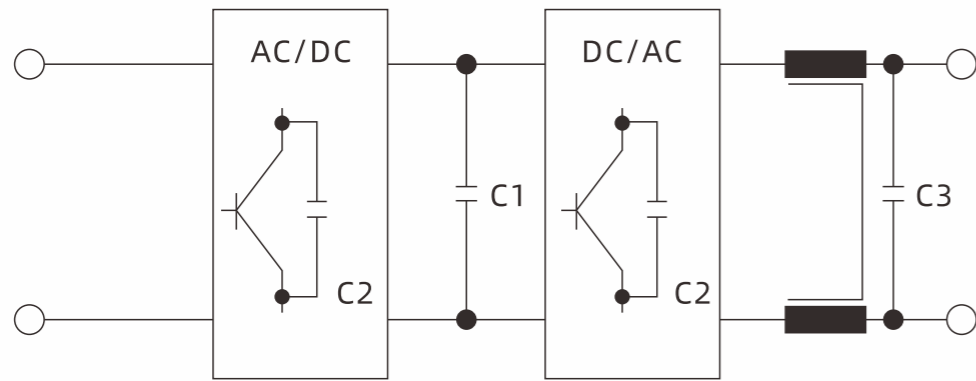


全流程成熟自动化产线



电容器选用指南

Guide to Capacitor Choosing



序号 No.	功能 Function	PCB 安装系列 For PCB mounting series	螺紋式、焊片式引出系列 Screw、lug terminals series
C1	直流滤波 DC-Link	FC	FB FS FT
C2	IGBT 吸收 IGBT Snubberc	HA RS	HS HR
C3	交流滤波 AC Filter	AC	AB AS AT
C4	谐振电容 Resonance	RS	RC RT

▶ 其他系列 Other series

- MKP: EMI滤波 X2、抑制电源干扰
Power EMI resistance
- MPR: CBB21应用于高频直流、交流和脉冲电路
Widely used in high frequency DC, AC and pulse circuit
- MER: CL21用于直流和脉冲电路，滤波，隔直，旁路耦合，降噪等
For the DC and pulse circuit, widely used for ring blocking, noise suppressor, by pass and coupling etc.

常用的标准术语

Terminologies

1. 额定容量 Cn

电容器在 20°C/100HZ 下的设计电容量

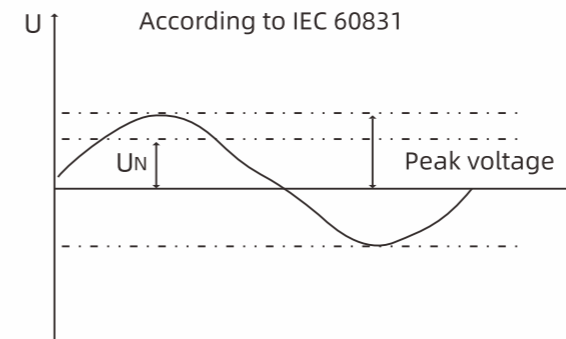
2. 额定电压 Un

对采用 IEC60831-1/-2 标准的电容，仅指设计电容器时规定的交流电压方均根值

对采用 IEC61071标准的电容器，可分为：

额定交流电压 UnAC: 设计电容器时所采用的反复型波形的任一极性的最高运行峰值周期电压。

额定直流电压 UnDC: 设计电容器时所采用的非反复型波形的任一极性的可连续运行的最高运行峰值电压，其值应大于直流工作电压与波纹电压峰值之和。



3. 纹波电压 Ur

单向电压的峰到峰的交流分量。一般来讲，波纹电压的方均根值应低于额定电压的 10%

4. 极间耐压 Ut-t

所有电容器在交货前进行的例行试验(室温下)。在用户处可进行再次的测试，数据根据手册所述的试验电压的 80%。

5. 极壳耐压 Ut-c

所有电容器外壳与端子间的进行的例行试验(室温下)在用户处可以重复进行。

6. 绝缘电压 Ui

设计电容器时规定的电容器端子对外壳或对地交流电压的方均根值。若未作说明，此绝缘电压等于额定电压除以 $\sqrt{2}$ 。

1. Rated capacitance Cn

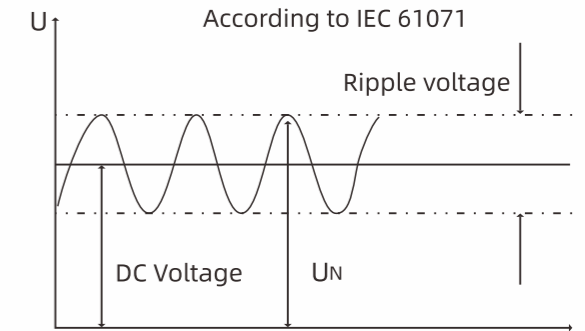
Designed capacitance of the capacitor at 20°C/100HZ

2. Rated voltage Un

IEC60831-1/-2 standard capacitor, the AC voltage RMS value refers only to the design capacitor prescribed. IEC61071 standard capacitor can be divided into:

Rated Ac voltage UnAC: repeatedly used in the design capacitor waveform either polarity, the maximum operating peak cycle voltage.

Rated Dc voltage of the UnDC: polarity in any of the non-repetitive waveform used in the design capacitor continuous operation of the maximum operating peak voltage and its value should be larger than the Dc voltage and ripple voltage peak.



3. Ripple voltage Ur

Peak-to-peak alternating component of the unidirectional voltage. In general, the square of the ripple voltage rms should be less than 10% of the rated voltage

4. Voltage Test between terminals Ut-t

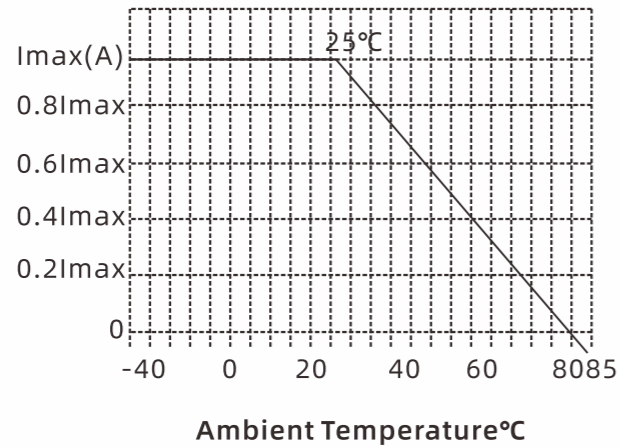
Routine test of all capacitors conducted at room temperature, prior to delivery. A further test with 80% of the test voltage stated in the data sheet may be carried out once at the user's location.

5. Voltage Test between terminals and case Ut-c

Routine test of all capacitors between short-circuited terminals and case conducted at room temperature. Maybe repeated at the user's location.

6. Insulation voltage Ui

The Rms values of Ac voltage for which the insulation of the capacitor is designed and designed with terminal connected to case. The insulation voltage is equal to the rated voltage of the capacitor, divided by $\sqrt{2}$, unless otherwise special.



7. 最大电流 I_{max}

连续运行时的最大电流的方均根值。

8. 等效串联电阻 ESR

一个有效电阻，当它和所探讨的电容器有相等电容值的理想电容器串联时，在规定的运行条件下，该电阻的损耗功率将等于该电容器中耗散的有功功率。

9. 介质损耗因素 tanδ

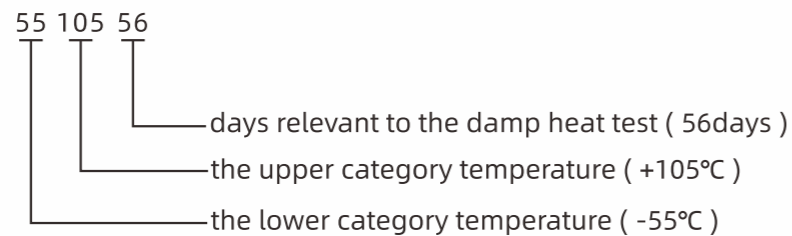
电容器的介质材料在额定频率下的损耗常数。聚丙烯薄膜的典型介质损耗因素为 2x10⁻⁴。

10. 自感 L_s

电容器由于自身结构或组成的原因所表现出来的电感。

11. 气候类别

电容器所属的气候类别用斜线分隔的三个数来表示 (IEC60068-1:如55/105/56)



7. Maximun current I_{max}

Maximum rms current for continuous operation.

8. Equivalent series resistance ESR

Effective resistance which,if connected in series with an ideal capacitor of capacitance value equal to that of the capacitor in question,would have a power loss equal to active power dissipated in that capacitor under specified operating conditions.

9. Dielectric dissipation factortg & o

Constant dissipation factor of the dielectric material for all capacitors at their rated frequency, the typical loss factor of polypropylene film is 2 x 10⁻⁴.

10. Self-inductance L_s

Represents the sum of all inductive elements which are for mechanical and construction reasons-contained in any capacitor.

11. Thermal resistance R_{th}

The thermal resistance indicates by how many degrees the capacitor temperature at the hotspot rises above e amb per watt of the heat dissipation lose.

12. Climatic category

The climatic category which the capacitor belongs to is expressed in three numbers separated by slashes, (IEC60068-1:example55/105/56)

13. 绝缘电阻(IR)/时间常数(t)

绝缘电阻为电容器充电一分钟所加的直流电压和流经电容器的漏电流值的比值，单位为 MΩ。时间常数为绝缘电阻和电容量的乘积，通常以秒表示，公式如下：

$$t[s]=IR[M\Omega]\times C[u F]$$

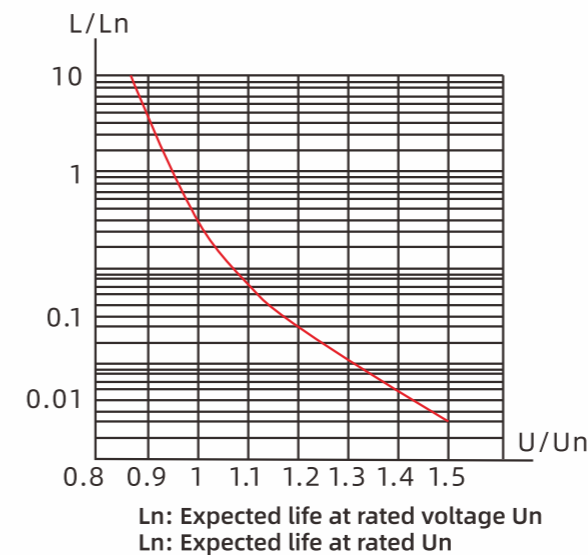
一般情况下，绝缘电阻用于描述小容量电容器的绝缘特性，时间常数用于描述大容(如:C>0.33uF)电容器的N 绝缘特性。

14. 自愈性(仅对金属化膜电容器)

金属化膜的金属镀层是通过真空蒸发的方法将金属沉积在薄膜上，厚度只有几十个纳米，当介质上存在弱点、杂质时，局部电击穿就可能发生，电击穿处的电弧放电所产生的能量足以使电击穿点邻近处的金属镀层蒸发，使击穿点与周围极板隔开，电容器电气性能即可恢复正常。

15. 电容器的预期寿命

薄膜电容器的选用取决于施加的最高电压，并受施加的电压电容器的预期寿命与电容器的运行电压及热点温度有关。对于应用在不同场合的电容器它们的设计寿命是不同的。一般而言，应用在直流滤波电路中的电容器，在额定电压及热点温度为 70°C的应用条件下，它们的预期寿命可达到 100000 小时。电容器的预期寿命是一个基于实践经验和理论计算的统计学数值，以下图片是电容器的预期寿命与运行电压及热点温度之间的特性曲线、仅仅作为理论参考。对于工作条件与额定条件有差别的情况，可以联系我们的技术部门。



13. Insulation Resistance(IR)/Time Constant(t)

The insulation resistance is the ratio between an applied D.C. voltage and the resulting leakage current after a minute of charge.It is expressed in MΩ. The time constant is expressed in seconds with the following formula:

$$t[s]=IR[M\Omega]\times C[u F]$$

In general,Insulation resistance is used for describing smaller capacitance capacitors insulation character,Time Constant for describing larger ones (example: C>0.33 u F).

14. Self-healing(Only for metalized film capacitor)

The metal coatings of the metalized film,which are vacuum deposited directly onto the plastic film, have a thickness of only several tens nm.At weak points or impurities in the dielectric, a dielectric breakdown would occur.The energy released by the arc discharge in the breakdown channel is sufficient to totally evaporate the thin metal coating in the vicinity of the channel. The insulated region thus resulting around the former faulty area will cause the capacitor to regain its full operation.

15. Expected lifetime of the capacitor

The expected lifetime of the capacitor depends on the applied voltage and the hot spot temperature during operation.For capacitors applied in different situation, the designed average service lifes lare different. Generally speaking, capacitors used in DC-Link circuits will have a expected lifetime of probable 100000 hrs at rated voltage and 70°C hot spot temperature. Expected lifetime is a statistical value calculated on the basis of experience and on theoretical evaluations.The following diagrams show the correlation between expected life, operating voltage and hot spot temperature.The diagrams should be considered only as a theoretical reference. Please consult our technical department in case of working condition different from the rated ones.

