铜峰电子
Tongfeng Electronics

电力电子电容器
Power Electronic Capacitor

安徽铜峰电子股份有限公司
Anhui Tongfeng Electronics Co.,Ltd.

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公司介绍
Introduction

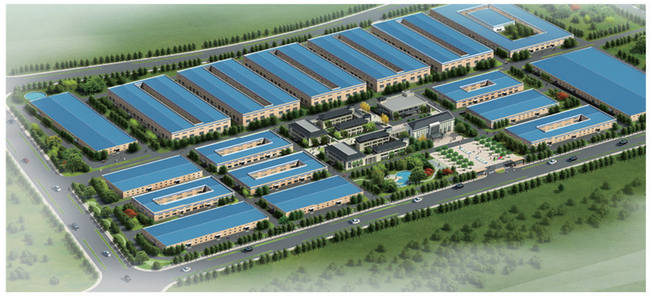
安徽铜峰电子股份有限公司，国家重点高新技术企业、中国“电工三膜”（电工薄膜、金属化薄膜、薄膜电容器）的研究、开发和生产基地，连续多年位列中国电子元件百强企业。

公司还是国家火炬计划——铜陵电子材料产业化基地内重点骨干企业，全国质量管理先进企业，全国重合同守信用先进企业。公司于 2000 年 6 月在上海证券交易所挂牌上市，成为全国同类产品企业中首家上市公司。

公司重点发展电子材料、新型电子元器件和电力节能装备。现已发展成为两大产品发展链：电容器用薄膜——金属化薄膜——薄膜电容器产品发展链；石英晶体材料及延伸产品发展链。公司主导产品年生产能力：电容器用聚丙烯膜 18000 吨，金属膜 4500 吨，聚酯膜 5000 吨，交流电容器 10 亿微法，直流电容器 9 亿只，各类电力电子薄膜电容器 50 万台（只）。石英晶体频率片 3.3 亿片，石英晶体谐振器 1.2 亿只。公司在全国同行业中首批通过 ISO9001 国际质量体系认证及 ISO14001 环境管理体系认证，主导产品相继通过了国家 CQC、美国 UL、欧洲 VDE、TUV、CB 等多项认证；公司现有各项专利 100 项。

公司抓住国家大力发展轨道交通与铁路建设时机，通过公司工程技术人员的自主研发，同时引进部分关键生产与试验设备，建成具有世界先进水平的机车电力电容器生产线，生产各种用途的电力电子电容器。

该电力电子电容器广泛应用于半导体的开关电路中，作为直流支撑，连接，滤波和保护用途。应用范围：机车、有轨电车、无轨电车、高铁、地铁、电动汽车、混合动力汽车及其它电动交通工具用变流器。船舶推进、矿山机车、矿山提升等其它变速传动的机器设备用变频器。风力发电、太阳能光伏等各种新能源设备用变频器。高压柔直、SVG 等。



Anhui Tongfeng Electronics Co., Ltd. is a large scale and national key high-tech enterprise, and the research, development and production base of the whole film capacitor chain (Bopp film/Bopet film, metalized film,film capacitors). It has ranked China Top 100 Electronics Enterprises for many years.

The company is one of the key enterprises in National Torch Plan - Tongling Electronics Materials Industrialization Base, one of the advanced enterprises of National Quality Management. The company listed on the Shanghai Stock Exchange in June 2000, the first listed company in similar industry in China.

The company is focusing on the development of electronic materials, new electronic components and electrical energy-saving equipment. Tongfeng has two major product development chains: BOPP&BOPET film-metalized film-film capacitor; and, quartz crystal materials and the extended products. The annual production capacity of company's leading products: 18,000 tons of capacitor polypropylene film, 4500 tons of metalized film, 5000 tons of polyester film, one billion microfarads of AC capacitors,900 million pieces of DC capacitors, 500,000 units of the various types of film capacitors for power electronics, 60 tons of optical crystal, 330 million pieces of the quartz chip, 120 million pieces of quartz crystal resonator. It got ISO9001 certificate in 1993 and ISO 14000 in 2004, firstly in the same industry in China. The leading products have got many certificates, including National CQC, American UL, European VDE, TUV ，CB and etc. The company has than 100 patents.

Seizing the opportunity of China to vigorously develop rail transit and railway construction, through independent research and development of the company's engineering and technical personnel, Tongfeng has built the world's advanced level traction power capacitor production line to manufacture all kinds capacitors for power electronics by introducing the key production and test equipment.

The power electronic capacitor is widely used in semiconductor switching circuit, as a DC support, connection, filtering and protection purposes. Applications: locomotives, trams, trolley buses, high-speed rail, subway, electric vehicles, hybrid cars and other electric vehicles with converters. Ship propulsion, mining locomotives, mine upgrade and other variable speed transmission equipment and equipment with frequency converter. Wind power, solar photovoltaic and other new energy equipment with frequency converter. High pressure soft straight, SVG and so on.

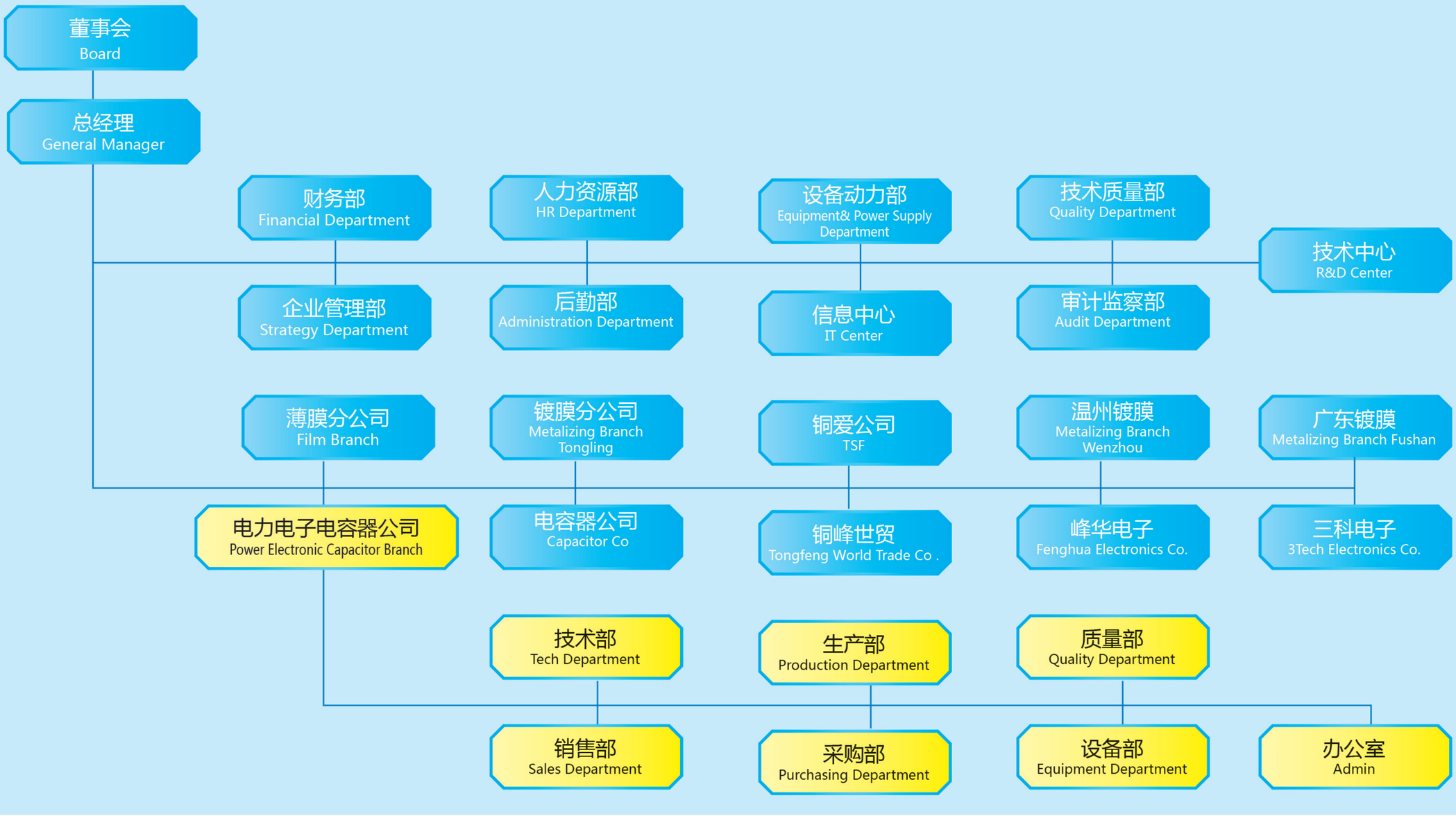
團結奮進 共創輝煌

Your satisfaction is our unremitting pursuit!

公司荣誉
Honor

Anhui Tongfeng Electronics Co.,Ltd. 安徽铜峰电子股份有限公司

股份公司组织架构图
Organizational Chart



企业理念
Corporate Philosophy

使命Mission

以振兴中国电子信息工业为己任，努力为客户、员工、股东和社会创造更大的价值，实现民富企强，科学发展。

Responsibility for the revitalization of China's electronic information industry, strive to create greater values for customers, employees, shareholders and society, to make our employees rich and the enterprise strong with scientific development.

愿景Vision

建成世界一流的电子材料及其相关元器件的研究、开发、生产基地。

To build a word-class research, development and production base of electronic materials and their associated components. to make people rich and the enterprise strong with scientific development.

核心价值观Core values

以人为本、开拓创新、和谐发展。

People-oriented, pioneering innovation and harmonious development.

产品类型
Product type

Anhui Tongfeng Electronics Co.,Ltd. 安徽铜峰电子股份有限公司

电力电子电容器
Power Electronic Capacitor

序号 No.	产品型号 Type	外观 Appearance	性能指标 Specification	封装 Coating	引用标准 Reference standard	用途 Application
1	G73 型金属化薄膜电容器 / DC- Link Metalized film capacitor type G73/DC-Link		1、额定电压:500~6000VDC; 1.Rated voltage: 500~6000VDC; 2、额定容量:100μF~5000μF; 2.Capacitance: 100μF~5000μF;	树脂 Resin	IEC61881-2010 或 IEC61071-2007 IEC61881-2010 or IEC61071-2007	电力机车、高铁、动车、地铁、轻轨、船舶推进及大功率工业变频器。 Electric locomotives, EMU, metro, ship propulsion, high power industrial converter and etc.
2	G75 型金属化薄膜电容器 / DC-Link Metalized film capacitor type G75/DC-Link		1、额定电压:300~1200VDC; 1.Rated voltage: 300~1200VDC; 2、额定容量:100μF~7500μF ; 2.Capacitance: 100μF~7500μF;	塑料外壳或硅胶 Plastic case or silica gel	IEC61071-2007	新能源汽车 New energy vehicle

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3	Y61型金属化薄膜电容器/DC-link/二次滤波 Metalized film capacitor type Y61/DC-Link/Secondary filtering application		1、额定电压：500~6000VDC; 1.Rated voltage:500~6000VDC; 2、额定容量:100μF~16500μF; 2.Capacitance: 100μF~16500μF;	不锈钢 Stainless steel	IEC61881-2010 或 IEC61071-2007 IEC61881-2010 or IEC61071-2007	电力机车、高铁、动车、地铁、轻轨、船舶推进及大功率工业变频器。 Electric locomotives, EMU, metro, ship propulsion, high power industrial converter and etc.
4	Y66型金属化薄膜电容器/DC-link/二次滤波 Metalized film capacitor type Y66/DC-Link/Secondary filtering application		1、额定电压：500~6000VDC; 1.Rated voltage: 500~6000VDC; 2、额定容量：100μF~49000μF; 2.Capacitance: 100μF~49000μF;	不锈钢 Stainless steel	IEC61881-2010 或 IEC61071-2007 IEC61881-2010 or IEC61071-2007	电力机车、高铁、动车、地铁、轻轨、船舶推进及大功率工业变频器。 Electric locomotives, EMU, metro, ship propulsion, high power industrial converter and etc.
5	Y67型金属化薄膜电容器/DC-link/二次滤波 Metalized film capacitor type Y67/DC-Link/Secondary filtering application		1、额定电压：500~6000VDC; 1.Rated voltage: 500~6000VDC; 2、额定容量：100μF~9000μF; 2.Capacitance: 100μF~9000μF;	不锈钢 Stainless steel	IEC61881-2010 或 IEC61071-2007 IEC61881-2010 or IEC61071-2007	SVG、大功率转换、逆变电源之DC滤波、储能滤波电源。 SVG, High-power conversion, Power inverter DC filtering, Storage filtered power.

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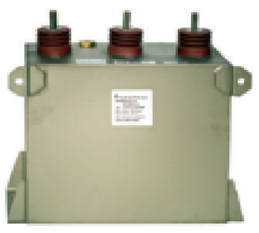
6	G77型金属化薄膜电容器/DC-link/二次滤波 Metalized film capacitor type G77/DC-Link/Secondary filtering application		1、额定电压：500~6000VDC; 1.Rated voltage: 500~6000VDC; 2、额定容量：100μF~9000μF; 2.Capacitance: 100μF~9000μF;	不锈钢或铝壳 Stainless steel or aluminum case	IEC61881-2010 或 IEC61071-2007 IEC61881-2010 or IEC61071-2007	SVG、输变电HVDC、Facts、大功率转换、逆变电源之DC滤波、直流链应用、矿井提升、储能脉冲电源。 SVG, HVDC, Facts, high-power conversion. Power inverter DC filtering, DC chain applications, Mine pulling, Storage pulse power.
7	G79型金属化薄膜电容器/吸收保护应用 Metalized film capacitor type G79/IGBT protection application		1、额定电压：1000~3500VDC; 1.Rated voltage: 1000~3500VDC; 2、额定容量：0.3μF~6μF; 2.Capacitance: 0.3μF~6μF;	塑料外壳 Plastic case	IEC61071-2007	UPS、变频器、电镀电源、超声设备、逆变电焊机、大功率开关电路、IGBT模块吸收、也可用于高电压、大电流、高脉冲场合。 UPS, converter, electroplating power, ultra sonic equipment, high-power switch and IGBT modules, high voltage, high current, and high pulse application.
8	V32型金属化薄膜电容器/交流滤波 Metalized film capacitor type V32 /AC filtering application		1、额定电压：400~2000VAC; 1.Rated voltage: 400~2000VAC; 2、额定容量：单相50μF~600μF; 2.Capacitance: single-phase50μF~600μF;	不锈钢 Stainless steel	IEC61881-2010 或 IEC61071-2007 IEC61881-2010 or IEC61071-2007	风电、光伏大功率逆变器、AC交流滤波。 Wind mill, photovoltaic, high power inverter and AC filtering.

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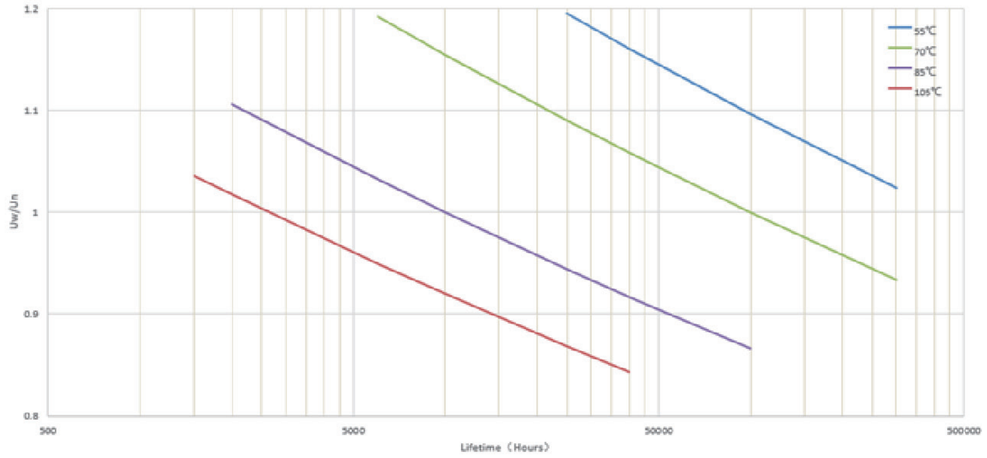
序号 No.	产品型号 Type	外观 Appearance	性能指标 Specification	封装 Coating	引用标准 Reference standard	用途 Application
9	A15、A18型三相交流金属化薄膜电容器/交流滤波 Metalized film three-phase AC capacitor type A15, A18/AC filtering application		1、额定电压：200~900VAC; 1.Rated voltage: 200~900VAC; 2、额定容量：单相10μF~700μF; 2.Capacitance: single-phase 10μF~700μF;	圆柱状铝壳 Cylindrical aluminum case	IEC61071-2007	风电、光伏大功率逆变器、AC交流滤波。 Wind mill, photovoltaic, high power inverter and AC filtering.
10	A16、A17型单相交流金属化薄膜电容器/交流滤波 Metalized film single-phase AC capacitor type A16, A17/AC filtering application		1、额定电压：200~900VAC; 1.Rated voltage: 200~900VAC; 2、额定容量：50μF~700μF; 2.Capacitance: 50μF~700μF;	圆柱状铝壳 Cylindrical aluminum case	IEC61071-2007	风电、光伏大功率逆变器、AC交流滤波。 Wind mill, photovoltaic, high power inverter and AC filtering.
11	W22型金属化薄膜电容器/DC-Link Metalized film capacitor type W22/DC-Link		1、额定电压：600~4000VDC; 1.Rated voltage: 600~4000VDC; 2、额定容量：40μF~7000μF; 2.Capacitance: 40μF~7000μF;	圆柱状铝壳 Cylindrical aluminum case	IEC61071-2007	DC-Link、风电、光伏逆变器及工业变频器。 DC-Link, wind power, photovoltaic inverter and industrial inverter.
12	DA01型金属化薄膜电容器/DC-Link Metalized film capacitor type DA01/DC-Link		1、额定电压：350~3500VDC; 1.Rated voltage: 350~3500VDC; 2、额定容量：3μF~150μF; 2.Capacitance: 3μF~150μF	塑料外壳 Plastic case	IEC61071-2007	滤波、吸收电路、EMI电路、逆变焊机。 Widely applied to filtration, absorb circuit, EMI, Inverter welding machine.

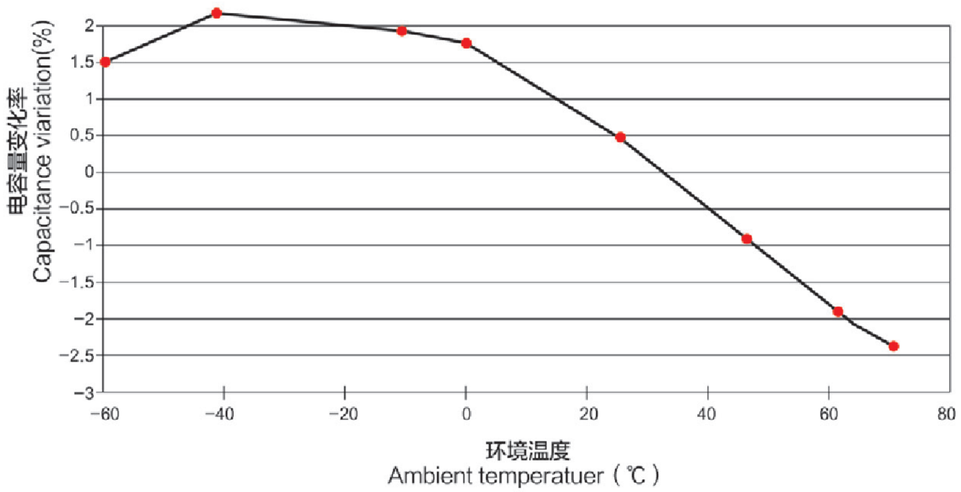
特性曲线
Characteristic curve

■ 电压与预期寿命曲线 U/Un in relation to lifetime expectancy

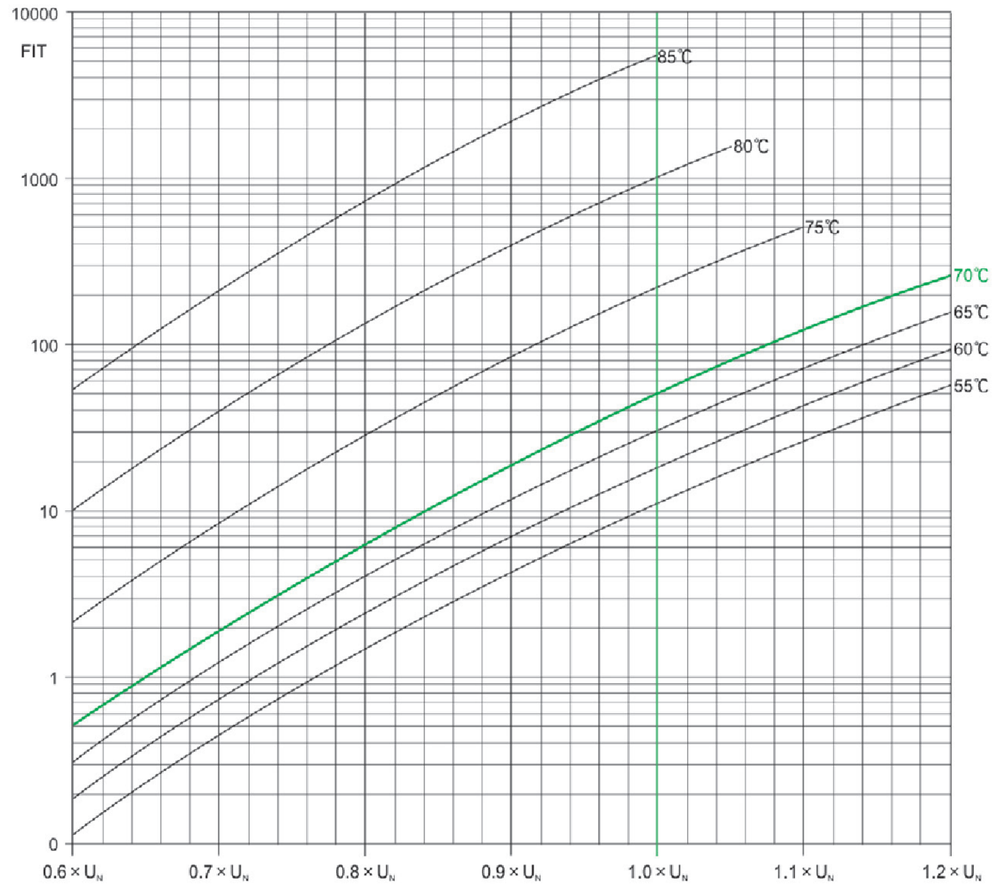


Lifetime Expectancy(Hours)
Uw=Permanent working or operating DC voltage

■ 电容量温度变化曲线 Capacitnace in relation to temperature



■ 失效率与温度电压关系 FIT-RATE versus temperature and voltage



G73 型金属化薄膜电容器 /
DC-Link Metalized film capacitor type G73/ DC-Link application

■特点 Characteristics

1. 金属化聚丙烯膜	metalized polypropylene film
2. 损耗非常小	lower loss factor
3. 低 ESR	low ESR
4. 能承受大电流	high current capability
5. 散热好	good heat dissipation
6. 自愈性	self healing
7. 长寿命	long life expectancy
8. 易于安装	install conveniently
9. 重量轻	in light weight

■性能指标 Specification

额定电压 /Rated voltage	500~6000VDC
额定电容量 /capacitance	100μF~5000μF
容量偏差 /cap tolerance	±5%
介质损耗角正切 /media loss factor	$2*10^{-4}$
损耗角正切 /loss factor	⩽ $30*10^{-4}$(1V,100Hz)
端子间耐电压 /test voltage between terminals	1.5U_n, 10s
端子与外壳间耐电压 /test voltage between terminals and case	(2U_n+1000)VAC, 60s
运行温度 /operating temperature	-25℃ ~+70℃
存储温度 /storage temperature	-25℃ ~+70℃
预期寿命（小时）/life expectancy(hours)	⩾ 100000
气候类别 /climate category	40/85/56
封装 /coating	树脂 resin
引用标准 /reference standard	IEC61881-2010 , IEC61071-2007

■客户需要特殊尺寸，请联系我们。
Please contact us if customers require special sizes.

G75 型金属化薄膜电容器 /
DC-Link Metalized film capacitor type G75/ DC-Link application

■特点 Characteristics

1. 金属化聚丙烯膜	metalized polypropylene film
2. 损耗非常小	lower loss factor
3. 低 ESR	low ESR
4. 能承受大电流	high current capability
5. 低电感	low self-inductance
6. 自愈性	self healing
7. 长寿命	long life expectancy
8. 易于安装	install conveniently

■性能指标 Specification

额定电压 /Rated voltage	300~1200VDC
额定电容量 /capacitance	100μF~7500μF
容量偏差 /cap tolerance	±10%
介质损耗角正切 /media loss factor	$2*10^{-4}$
损耗角正切 /loss factor	⩽ $10*10^{-4}$(1V,100Hz)
端子间耐电压 /test voltage between terminals	1.5U_n, 10s
端子与外壳间耐电压 /test voltage between terminals and case	(2U_n+1000)VAC, 60s
运行温度 /operating temperature	-40℃ ~+105℃ (θhs ⩽ 105℃)
存储温度 /storage temperature	-40℃ ~+105℃
预期寿命（小时）/life expectancy(hours)	⩾ 100000
气候类别 /climate category	40/105/56
封装 /coating	塑料外壳 plastic case
填充剂 /Filling material	环氧树脂或硅胶 epoxy resin orsilica gel
引用标准 /reference standard	IEC61071

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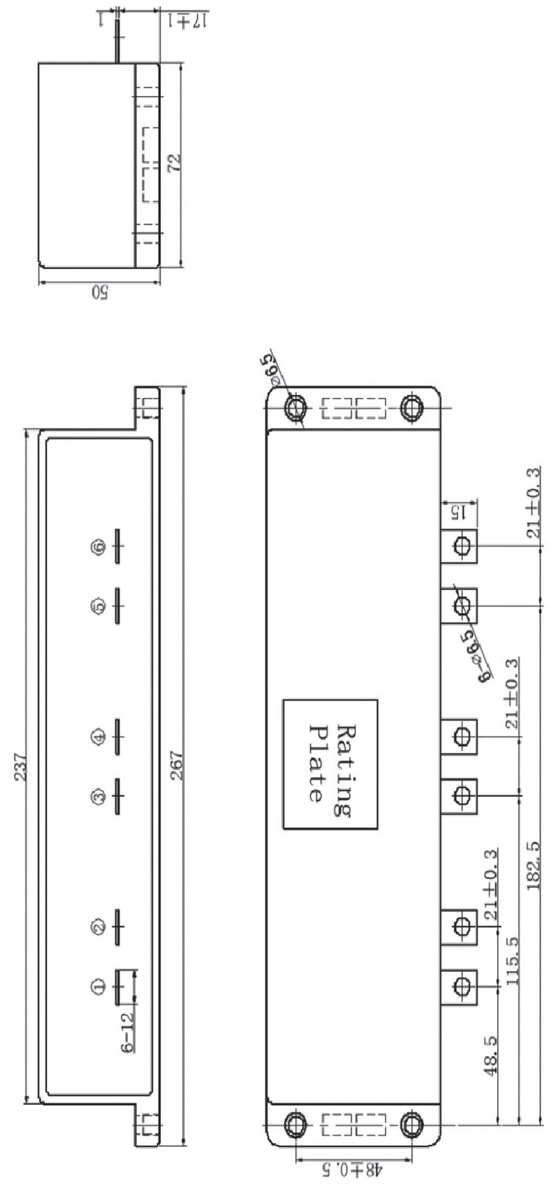
Please contact us if customers require special sizes.

■ 产品外观 Part appearance

■ 参数 Data

额定电压 /Rated voltage	450VDC
额定电容量 /capacitance	700μF
容量偏差 /cap tolerance	±10%
介质损耗角正切 /media loss factor	$2*10^{-4}$
损耗角正切 /loss factor	⩽ $10*10^{-4}$(1V,100Hz)
最大电流 /maximum current	135A
最大峰值电流 /maximum peak current	3KA
最大浪涌电流 /maximum surge current	9KA
等效串联电阻 /ESR	⩽ 1.25mΩ（1V,100Hz,20℃）
自感 /Ls	⩽ 25nH
端子间耐电压 /test voltage between terminals	$1.5U_n$, 10s
端子与外壳间耐电压 /test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度 /operating temperature	-40℃ ~+105℃ (θhs ⩽ 105℃)
存储温度 /storage temperature	-40℃ ~+105℃
预期寿命（小时）/life expectancy(hours)	⩾ 100000
失效率 /failure rate	50Fit
爬电距离 /creepage distance	9mm
空气间隙 /clearance in air	9mm
气候类别 /climate category	40/105/56
重量 /weight	≈ 1.4Kg
封装 /encapsulating	塑料外壳 plastic case
填充剂 /Filling material	环氧树脂 epoxy resin
引用标准 /reference standard	IEC61071

■ 外形尺寸Outline dimension

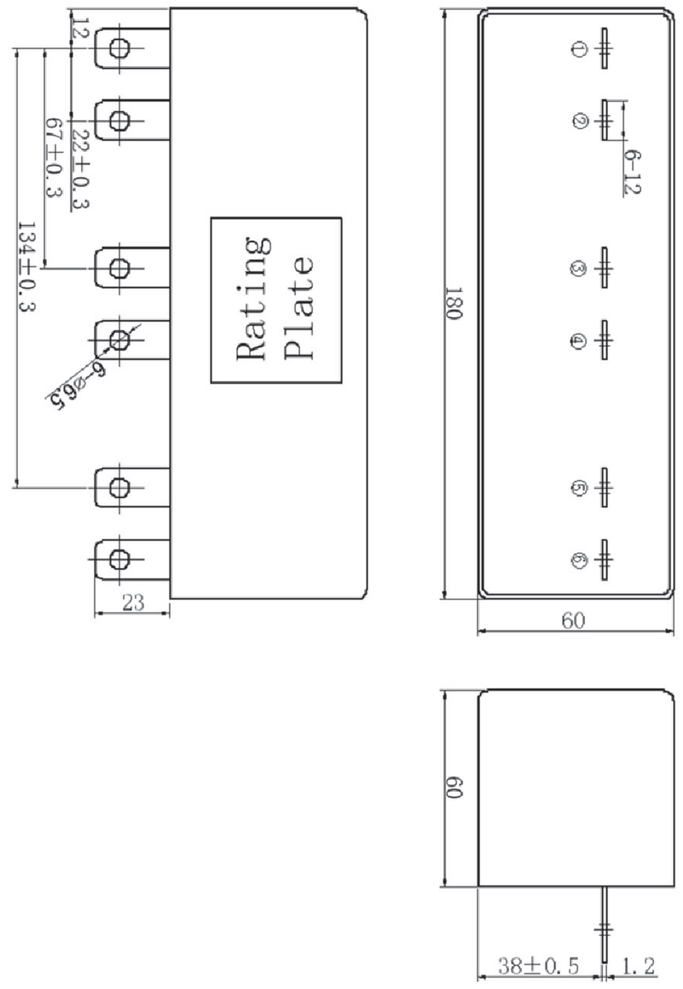


■ 产品外观 Part appearance

■ 参数 Data

额定电压 /Rated voltage	450VDC
额定电容量 /capacitance	600μF
容量偏差 /cap tolerance	±10%
介质损耗角正切 /media loss factor	$2*10^{-4}$
损耗角正切 /loss factor	⩽ $10*10^{-4}$(1V,100Hz)
最大电流 /maximum current	200A
最大峰值电流 /maximum peak current	3KA
最大浪涌电流 /maximum surge current	6KA
等效串联电阻 /ESR	⩽ 0.7mΩ（1V,1KHz,20℃）
自感 /Ls	⩽ 25nH
端子间耐电压 /test voltage between terminals	$1.5U_n$, 10s
端子与外壳间耐电压 /test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度 /operating temperature	-40℃ ~+105℃ (θhs ⩽ 105℃)
存储温度 /storage temperature	-40℃ ~+105℃
预期寿命（小时）/life expectancy(hours)	⩾ 100000
失效率 /failure rate	50Fit
爬电距离 /creepage distance	10mm
空气间隙 /clearance in air	10mm
气候类别 /climate category	40/105/56
重量 /weight	≈ 1.1Kg
封装 /encapsulating	塑料外壳 plastic case
填充剂 /Filling material	环氧树脂 epoxy resin
引用标准 /reference standard	IEC61071

■ 外形尺寸Outline dimension

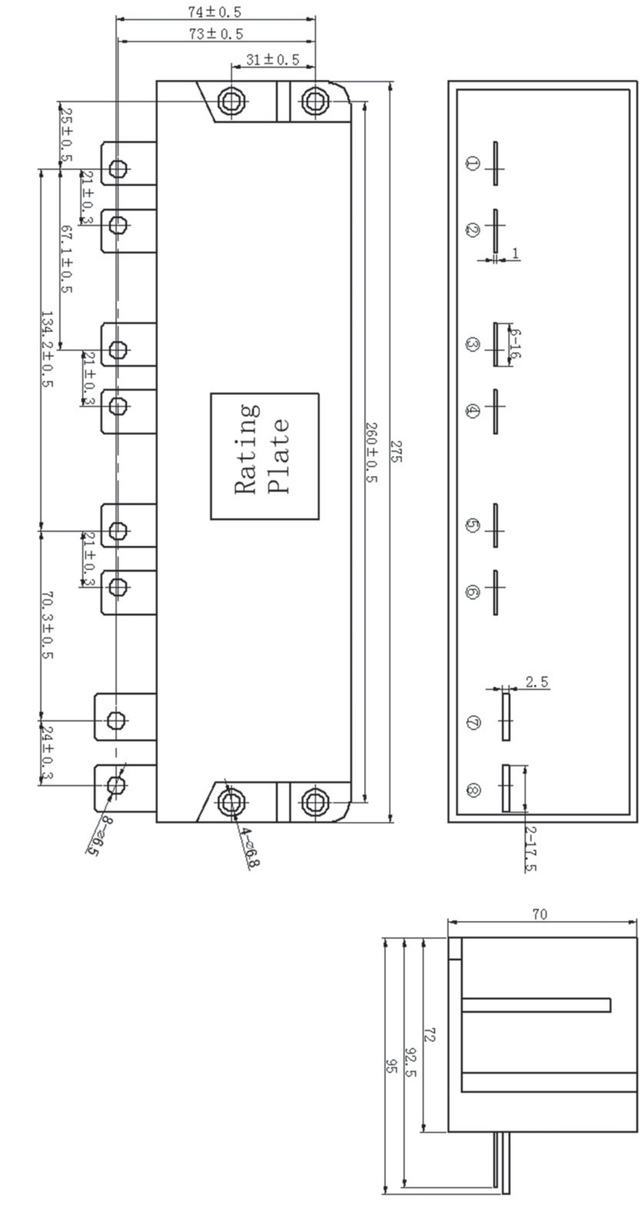


■ 产品外观 Part appearance

■ 参数 Data

额定电压 /Rated voltage	450VDC
额定电容量 /capacitance	1000μF
容量偏差 /cap tolerance	±10%
介质损耗角正切 /media loss factor	$2*10^{-4}$
损耗角正切 /loss factor	≤ $10*10^{-4}$(1V,100Hz)
最大电流 /maximum current	170A@80℃
最大浪涌电流 /maximum surge current	5KA
等效串联电阻 /ESR	≤ 0.4mΩ（1V,10KHz,20℃）
自感 /Ls	≤ 15nH
端子间耐电压 /test voltage between terminals	$1.5U_n$, 10s
端子与外壳间耐电压 /test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度 /operating temperature	-40℃ ~+105℃ (θhs ≤ 105℃)
存储温度 /storage temperature	-40℃ ~+105℃
预期寿命（小时）/life expectancy(hours)	≥ 100000
失效率 /failure rate	50Fit
爬电距离 /creepage distance	9mm
空气间隙 /clearance in air	9mm
气候类别 /climate category	40/105/56
重量 /weight	≈ 2.0Kg
封装 /encapsulating	塑料外壳 plastic case
填充剂 /Filling material	环氧树脂 epoxy resin
引用标准 /reference standard	IEC61071

■ 外形尺寸 Outline dimension

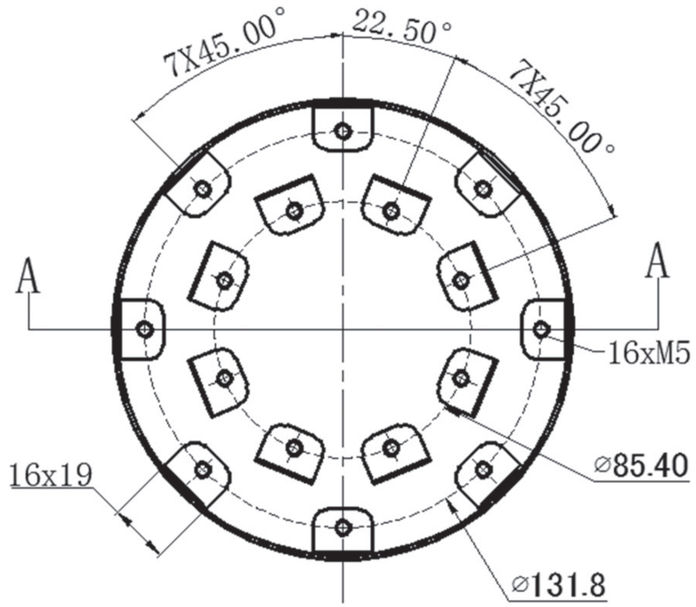


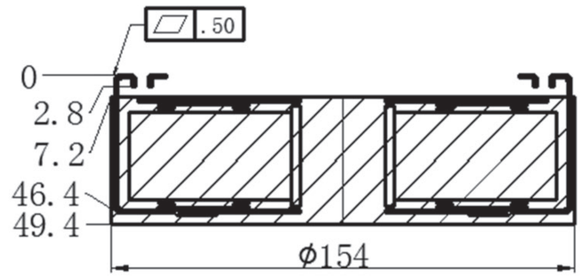
■ 产品外观 Part appearance

■ 参数 Data

额定电压 /Rated voltage	900VDC
额定电容量 /capacitance	315μF
容量偏差 /cap tolerance	±10%
介质损耗角正切 /media loss factor	$2*10^{-4}$
损耗角正切 /loss factor	⩽ $10*10^{-4}$(1V,100Hz)
持续有效电流 /permanent RMS current	150A
最大峰值电流 /maximum peak current	250A
等效串联电阻 /ESR	⩽ 0.3mΩ（1V,1KHz,20℃）
自感 /Ls	⩽ 10nH
端子间耐电压 /test voltage between terminals	$1.5U_n$, 10s
端子与外壳间耐电压 /test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度 /operating temperature	-40℃ ~+105℃ (θhs ⩽ 105℃)
存储温度 /storage temperature	-40℃ ~+85℃
预期寿命（小时）/life expectancy(hours)	⩾ 100000
失效率 /failure rate	100Fit
爬电距离 /creepage distance	20mm
空气间隙 /clearance in air	8mm
气候类别 /climate category	40/105/56
重量 /weight	≈ 1.3Kg
封装 /encapsulating	硅胶 silica gel
引用标准 /reference standard	IEC61071

■ 外形尺寸Outline dimension





Y61型金属化薄膜电容器/DC-Link/二次滤波
Metalized film capacitor type Y61/ DC-Link/ Secondary filtering application

■ 特点 Characteristics

1.安全金属化聚丙烯膜	segmentation metalized polypropylene film
2.低电感	low self-inductance
3.损耗非常小	lower dissipation factor
4.低ESR	low ESR
5.能承受大电流	high current capability
6.耐高浪涌电流能力	high surge current capability
7.自愈性	self healing
8.长寿命	long life expectancy
9.易于安装	install conveniently

■ 性能指标 Specification

额定电压/Rated voltage	500~6000VDC
额定电容量/capacitance	100μF~16500μF
容量偏差/cap tolerance	±5%%~±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	≤$20*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	1.5U_n, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	(2U_n+1000)VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{hs})	-40℃~+85℃
预期寿命（小时）/life expectancy(hours)	＞100000
气候类别/climate category	40/85/56
封装/encapsulating	不锈钢 Stainless steel
浸渍剂/impregnant	植物油 Vegetable oil
引用标准/reference standard	IEC61881-2010 or IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

Y66型金属化薄膜电容器/DC-Link/二次滤波
Metalized film capacitor type Y66/ DC-Link/ Secondary filtering application

■ 特点 Characteristics

1. 微化安全金属化聚丙烯膜	micro security metalized polypropylene film
2. 低电感	low self-inductance
3. 损耗非常小	lower dissipation factor
4. 低ESR	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 自愈性	self healing
8. 容量体积比大	smaller volume, higher capacitance
9. 长寿命	long life expectancy
10.易于安装	install conveniently

■ 性能指标 Specification

额定电压/Rated voltage	500~6000VDC
额定电容量/capacitance	100μF~49000μF
容量偏差/cap tolerance	±5%，±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	≤$25*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	1.5U_n, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	(2U_n+1000)VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{hs})	-40℃~+85℃
预期寿命（小时）/life expectancy(hours)	＞100000
气候类别/climate category	40/85/56
封装/encapsulating	不锈钢 Stainless steel
浸渍剂/impregnant	植物油 Vegetable oil
引用标准/reference standard	IEC61881-2010 or IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

Y67型金属化薄膜电容器/DC-Link/二次滤波
Metalized film capacitor type Y67/ DC-Link/ Secondary filtering application

■ 特点 Characteristics

1. 微化安全金属化聚丙烯膜	micro security metalized polypropylene film
2. 低电感	low self-inductance
3. 损耗非常小	lower dissipation factor
4. 低ESR	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 能承受高峰值电流	high peak current capability
8. 自愈性	self healing
9. 容量体积比大	smaller volume, higher capacitance
10.长寿命	long life expectancy
11.易于安装	installation conveniently
12.圆柱形卷绕	cylindrical winding

■ 性能指标 Specification

额定电压/Rated voltage	500~6000VDC
额定电容量/capacitance	100μF~9000μF
容量偏差/cap tolerance	±5%，±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	$\leq 25*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	$1.5U_n$, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	−40℃~+85℃
预期寿命（小时）/life expectancy(hours)	> 100000
气候类别/climate category	40/85/56
封装/encapsulating	不锈钢 Stainless steel
浸渍剂/impregnant	植物油 Vegetable oil
引用标准/reference standard	IEC61881-2010 or IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

G77型金属化薄膜电容器/DC-Link/二次滤波
Metalized film capacitor type G77/ DC-Link/ Secondary filtering application

■ 特点 Characteristics

1. 微化安全金属化聚丙烯膜	micro security metalized polypropylene film
2. 低电感	low self-inductance
3. 损耗非常小	lower dissipation factor
4. 低ES	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 能承受高峰值电流	high peak current capability
8. 自愈性	self healing
9. 容量体积比大	smaller volume, higher capacitance
10.长寿命	long life expectancy
11.易于安装	installation conveniently
12.圆柱形卷绕	cylindrical winding

■ 性能指标 Specification

额定电压/Rated voltage	500~6000VDC
额定电容量/capacitance	100μF~9000μF
容量偏差/cap tolerance	±5%，±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	$\leq 25*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	$1.5U_n$, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	−40℃~+85℃
预期寿命（小时）/life expectancy(hours)	> 100000
气候类别/climate category	40/85/56
封装/encapsulating	不锈钢或铝壳Stainless steel or aluminum case
浸渍剂/impregnant	聚氨酯、环氧树脂 Polyurethane, epoxy resin
引用标准/reference standard	IEC61881-2010 or IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

G79型金属化薄膜电容器/吸收保护应用
Metalized film capacitor type G79/ IGBT protection application

■ 特点 Characteristics

1. 双面金属化聚丙烯膜	double side metalized polypropylene film
2. 低电感	low self-inductance
3. 高频损耗非常小	lower dissipation factor at high frequency
4. 低ESR	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 能承受高峰值电流	high peak current capability
8. 自愈性	self healing
9. 长寿命	long life expectancy
10.易于安装	installation conveniently
11.圆柱形卷绕	cylindrical winding

■ 性能指标 Specification

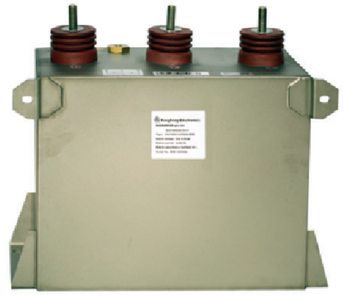
额定电压/Rated voltage	1000~3500VDC
额定电容量/capacitance	0.3μF~6μF
容量偏差/cap tolerance	±5%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	≤$10*10^{-4}$(1V,10kHz)
端子间耐电压/test voltage between terminals	1.5U_n, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	(2U_n+1000)VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	−40℃~+85℃
预期寿命（小时）/life expectancy(hours)	＞100000
气候类别/climate category	40/85/56
封装/encapsulating	塑料外壳 plastic case
浸渍剂/ impregnant	环氧树脂 epoxy resin
引用标准/reference standard	IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

V32型金属化薄膜电容器/交流滤波
Metalized film capacitor type V32/ AC filtering application

■ 特点 Characteristics

1. 安全防爆装置	safe and explosion-proof device
2. 金属化聚丙烯膜	metalized polypropylene film
3. 损耗非常小	lower dissipation factor
4. 低ESR	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 能承受高峰值电流	high peak current capability
8. 自愈性	self healing
9. 长寿命	long life expectancy
10.易于安装	installation conveniently
11.圆柱形卷绕	cylindrical winding



■ 性能指标 Specification

额定电压/Rated voltage	400~2000VAC
额定电容量/capacitance	单相single-phase:0.3μF~6μF
容量偏差/cap tolerance	±5%，±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	≤$10*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	1.5U_n, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	(2U_n+1000)VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	−40℃~+85℃
预期寿命（小时）/life expectancy(hours)	＞100000
气候类别/climate category	40/85/56
封装/encapsulating	不锈钢Stainless steel
浸渍剂/impregnant	聚氨酯、环氧树脂 Polyurethane, epoxy resin
引用标准/reference standard	IEC61881-2010 or IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

A15、A18型三相交流金属化薄膜电容器/交流滤波
Metalized film three-phase AC capacitor type A15, A18/ AC filtering application

■ 特点 Characteristics

1. 安全防爆装置	safe and explosion-proof device
2. 金属化聚丙烯膜	metalized polypropylene film
3. 损耗非常小	lower dissipation factor
4. 低ESR	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 能承受高峰值电流	high peak current capability
8. 自愈性	self healing
9. 长寿命	long life expectancy
10.易于安装	installation conveniently
11.圆柱形卷绕	cylindrical winding

■ 性能指标 Specification

额定电压/Rated voltage	200~900VAC
额定功率/Rated Power	2~60Kvar
额定电容量/capacitance	单相single-phase:10μF~700μF
容量偏差/cap tolerance	±5%，±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	$\leqslant 10*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	$1.5U_n$, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	−40℃~+85℃
预期寿命（小时）/life expectancy(hours)	> 100000
气候类别/climate category	40/85/56
封装/encapsulating	圆柱状铝壳Cylindrical aluminum case
浸渍剂/impregnant	聚氨酯、环氧树脂或植物油 Polyurethane, epoxy resin or vegetable oil
引用标准/reference standard	IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

A16、A17型三相交流金属化薄膜电容器/交流滤波
Metalized film three-phase AC capacitor type A16, A17/ AC filtering application

■ 特点 Characteristics

1. 安全防爆装置	safe and explosion-proof device
2. 金属化聚丙烯膜	metalized polypropylene film
3. 损耗非常小	lower dissipation factor
4. 低ESR	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 能承受高峰值电流	high peak current capability
8. 自愈性	self healing
9. 长寿命	long life expectancy
10.易于安装	installation conveniently
11.圆柱形卷绕	cylindrical winding

■ 性能指标 Specification

额定电压/Rated voltage	200~900VAC
额定功率/Rated Power	5~20Kvar
额定电容量/capacitance	50μF~700μF
容量偏差/cap tolerance	±5%，±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	$\leqslant 10*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	$1.5U_n$, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	$(2U_n+1000)$VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	−40℃~+85℃
预期寿命（小时）/life expectancy(hours)	> 100000
气候类别/climate category	40/85/56
封装/encapsulating	圆柱状铝壳Cylindrical aluminum case
浸渍剂/impregnant	聚氨酯、环氧树脂或植物油 Polyurethane, epoxy resin or vegetable oil
引用标准/reference standard	IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

W22型金属化薄膜电容器/DC-Link
Metalized film capacitor type W22/ DC-Link

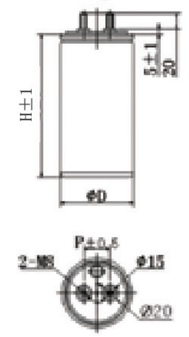
■ 特点 Characteristics

1. 微化安全金属化聚丙烯膜	micro security metalized polypropylene film
2. 低电感	low self-inductance
3. 损耗非常小	lower dissipation factor
4. 低ESR	low ESR
5. 能承受大电流	high current capability
6. 耐高浪涌电流能力	high surge current capability
7. 能承受高峰值电流	high peak current capability
8. 自愈性	self healing
9. 容量体积比大	smaller volume, higher capacitance
10.长寿命	long life expectancy
11.易于安装	installation conveniently
12.圆柱形卷绕	cylindrical winding

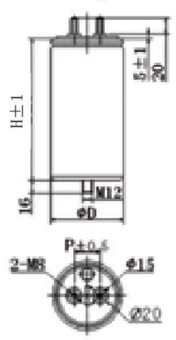
■ 性能指标 Specification

额定电压/Rated voltage	600~4000VDC
额定电容量/capacitance	40μF~7000μF
容量偏差/cap tolerance	±5%，±10%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	≤$20*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	1.5U_n, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	(2U_n+1000)VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	-40℃~+85℃
预期寿命（小时）/life expectancy(hours)	＞100000
气候类别/climate category	40/85/56
封装/encapsulating	圆柱状铝壳 Cylindrical aluminum case
浸渍剂/impregnant	聚氨酯、环氧树脂 Polyurethane, epoxy resin
引用标准/reference standard	IEC61071-2007

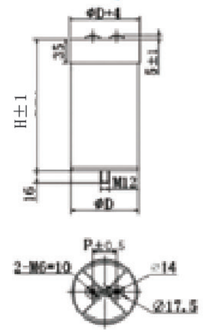
Design A



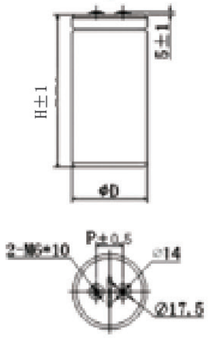
Design B



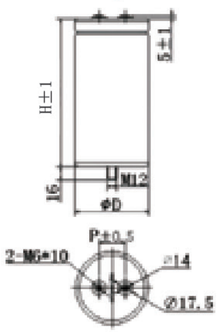
Design E



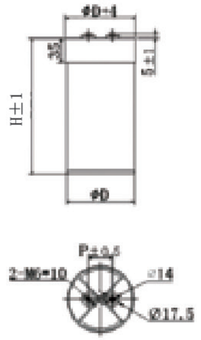
Design C



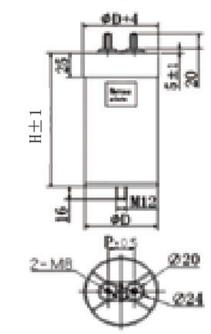
Design D



Design F



Design G



■ 技术参数 Technical data

C_n (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_s (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_n= 600VD		Us=900V			Ur=100V		U_n=900VDC			U_n=3000VAC		
480	1.5	5.6	45	2.40	7.20	55	86	32	76	95	0.6	W22 E09-4806D1
650	1.2	5.1	45	3.25	9.75	55	117	32	86	95	0.72	W22 E09-6506D2
780	1.0	4.6	60	3.90	11.70	60	140	32	76	140	0.75	W22 E14-7806D1
1080	1.0	3.7	70	4.86	14.58	50	194	32	86	155	0.9	W22 E15-1087D2
1200	0.7	4.2	80	5.40	16.20	55	216	50	116	95	1.95	W22 E09-1207D5
1600	0.7	3.3	80	7.20	21.60	60	288	50	116	120	1.5	W22 E12-1607D5
2000	1.0	2.3	80	8.00	24.00	60	360	32	86	252	1.6	W22 D25-2007D2
2000	0.5	2.3	80	8.00	24.00	50	360	50	116	165	1.9	W22 E16-2007D5
2400	0.5	2.3	100	8.40	25.20	60	432	50	116	175	2.2	W22 E17-2407D5
3000	0.5	1.7	100	10.50	31.50	50	540	50	116	230	2.5	W22 E23-3007D5
4000	0.6	1.3	100	12.00	36.00	70	720	50	116	295	3.2	W22 E29-4007D5
5000	0.7	1.1	100	15.00	45.00	70	900	50	116	345	3.5	W22 E34-5007D5
5600	0.6	1.1	120	16.80	50.40	70	1008	50	136	295	4.5	W22 E29-5607D6
7000	0.6	0.9	120	21.00	63.00	70	1260	50	136	345	5.3	W22 E34-7007D6

C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 700VDC		Us=1050V			Ur=200V	U_n=1050VDC			U_{ac}=3000VAC			
360	1.6	5.6	40	2.52	7.56	55	88	32	76	95	0.6	W22 E09-3606D1
440	1.5	4.3	40	3.08	9.24	60	108	32	76	145	0.8	W22 E14-4406D1
470	1.4	4.7	55	3.29	9.87	60	115	32	86	125	0.9	W22 E12-4706D2
620	1.5	4.3	60	4.03	12.09	60	152	32	76	155	0.9	W22 E15-6206D1
650	1.4	4.7	60	4.23	12.68	60	159	32	86	120	1	W22 E12-6506D2
820	1.4	3.9	60	5.33	15.99	50	201	32	86	155	1.25	W22 E15-8206D2
950	1.3	3.4	60	6.18	18.53	55	233	32	86	175	1.3	W22 E17-9506D2
1460	0.5	2.3	60	8.76	26.28	50	358	50	116	165	1.9	W22 E16-1467D5
1800	0.6	2.3	70	10.80	32.40	60	441	50	116	175	2.2	W22 E17-1807D5
2190	0.6	1.7	100	13.14	39.42	50	537	50	116	230	2.5	W22 E23-2197D5
2920	0.6	1.3	100	14.60	43.80	70	715	50	116	295	3.2	W22 E29-2927D5
3700	0.7	1.1	100	14.80	44.40	70	907	50	116	345	3.5	W22 E34-3707D5
4200	0.6	1.1	120	16.80	50.40	70	1029	50	136	295	4.5	W22 E29-4207D6
5200	0.7	0.9	120	20.80	62.40	70	1274	50	136	345	5.3	W22 E34-5207D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 800VDC			Us=1200V			Ur=200V			U_n=1200VDC			U_{ac}=3000VAC
290	2.1	5.6	50	2.32	6.96	55	92.8	32	76	95	0.6	W22 E09-2906D1
430	1.9	3.9	55	3.44	10.3 2	60	137.6	32	76	120	0.65	W22 E12-4306D1
550	1.4	3.5	55	4.40	13.20	60	176	32	86	125	0.85	W22 E12-5506D2
650	1.5	3.9	65	5.85	13.65	50	208	32	86	155	1.25	W22 E15-6506D2
800	1.1	2.0	60	4.80	14.40	65	256	32	76	225	1.25	W22 E22-8006D1
980	1.1	3.3	70	5.88	17.64	60	313.6	50	116	120	1.5	W22 E12-9806D5
1100	1.1	2.4	65	6.60	19.80	60	352	32	86	252	1.8	W22 E25-1107D2
1200	0.9	2.6	100	6.96	20.88	50	384	50	116	155	2	W22 E15-1207D5
1500	0.8	2.3	100	7.50	22.50	60	480	50	116	175	2.2	W22 E17-1507D5
1800	0.8	1.8	100	9.00	27.00	50	576	50	116	230	2.8	W22 E23-1807D5
3200	0.8	1.4	100	14.40	43.20	70	1024	50	116	295	3.0	W22 E29-3207D5
3700	0.7	1.2	100	16.65	49.95	70	1184	50	136	295	4.5	W22 E29-3207D6
3900	0.7	1.1	100	17.55	52.65	70	1248	50	116	345	3.5	W22 E34-3907D5
4500	0.6	0.9	120	20.25	60.75	70	1440	50	136	345	5.3	W22 E34-4507D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 900VDC			Us=1350V			Ur=200V			U_n=1350VDC			U_{ac}=3000 VAC
290	2.2	5.6	45	2.32	6.96	55	117	32	76	95	0.6	W22 E09-2906D1(B)
350	2.1	5.2	50	2.80	8.40	60	142	32	76	125	0.7	W22 E12-3506D1
450	1.7	4.5	55	3.60	10.80	60	182	32	86	125	0.9	W22 E12-4506D2
520	1.5	4.3	65	3.90	11.70	60	211	32	86	125	1	W22 E12-5206D2
560	1.3	3.9	65	4.20	12.60	50	227	32	86	145	1	W22 E14-5606D2
610	1.1	3.7	65	4.27	12.81	50	247	32	86	155	0.9	W22 E15-6106D2
650	1.1	3.9	65	4.55	13.65	50	263	32	86	155	1.25	W22 E15-6506D2(B)
750	1.1	3.4	65	4.88	14.63	55	304	32	86	175	1.3	W22 E17-7506D2
900	1.0	2.7	65	5.85	17.55	60	365	32	86	225	1.5	W22 E22-9006D2
1020	1.0	2.7	65	6.12	18.36	60	413	32	86	225	1.5	W22 E22-1027D2

1100	0.7	2.5	80	6.60	19.80	50	446	50	116	150	2.1	W22 E15-1107D5
1200	0.7	2.9	80	7.20	21.60	50	486	50	116	140	1.75	W22 E14-1207D5
1450	0.7	2.1	90	8.70	26.10	60	587	50	116	180	2.4	W22 E18-1457D5
1680	0.6	1.7	100	10.08	30.24	50	680	50	116	230	2.5	W22 E23-1687D5
2240	0.6	1.3	100	11.20	33.60	70	907	50	116	295	3.2	W22 E29-2247D5
2800	0.8	1.1	100	14.00	42.00	70	1134	50	116	345	3.5	W22 E34-2807D5
3200	0.6	1.1	120	16.00	48.00	70	1296	50	136	295	4.5	W22 E29-3207D6
4000	0.7	0.9	120	20.00	60.00	70	1620	50	136	345	5.3	W22 E34-4007D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1000VDC			Us=1500V			Ur=250V		U_n=1500VDC			U_{ac}=3000VAC	
220	2.2	5.6	50	1.76	5.28	55	110	32	76	95	0.6	W22 E09-2206D1
350	2.2	5.2	50	2.45	7.35	60	175	32	76	120	0.85	W22 E12-3506D1(B)
470	2.2	4.4	65	3.06	9.17	50	235	32	86	136	1.1	W22 E13-4706D2
480	1.7	4.3	65	3.12	9.36	50	240	32	86	140	1.15	W22 E14-4806D2
500	1.6	3.9	65	3.25	9.75	50	250	32	86	155	1.25	W22 E15-5006D2
540	1.0	4.2	80	3.51	10.53	55	270	50	116	95	1.95	W22 E09-5406D5
1400	0.9	1.8	100	7.00	21.00	50	700	50	116	230	2.8	W22 E23-1407D5
2300	0.9	1.5	100	14.00	34.5	70	1150	50	116	345	4.6	W22 E34-2307D5
2500	0.9	1.1	100	12.50	37.50	70	1250	50	136	295	4.9	W22 E29-2507D6
3900	0.7	0.9	120	20.00	60.00	70	1620	50	136	345	5.3	W22 E34-3907D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1100VDC			Ur=250V			U_n=1650VDC		U_{ac}=3000VAC			Us=1650V	
180	2.7	5.6	50	1.80	5.40	55	109	32	76	95	0.6	W22 E09-1806D1
240	2.5	5.2	50	2.40	7.20	60	145	32	76	125	0.7	W22 E12-2406D1
240	2.2	5.1	50	2.40	7.20	55	145	32	86	95	0.72	W22 E09-2406D2
300	2.2	4.6	50	2.70	8.10	60	182	32	76	145	0.8	W22 E14-3006D1
320	2.1	4.3	65	2.88	8.64	60	194	32	86	125	0.9	W22 E12-3206D2
380	2.2	4.3	50	3.42	10.26	55	230	32	76	180	1	W22 E18-3806D1
400	2.0	4.1	65	3.60	10.80	50	242	32	86	145	1.2	W22 E14-4006D2
420	2.0	4.2	65	3.78	11.34	50	254	32	86	136	0.8	W22 E13-4206D2
420	1.7	3.9	65	3.78	11.34	50	254	32	86	155	1.25	W22 E15-4206D2
500	1.5	3.4	70	4.50	13.50	55	303	32	86	175	1.3	W22 E17-5006D2
620	1.4	3.3	80	4.96	14.88	60	375	50	116	120	1.5	W22 E12-6206D5
650	1.2	2.9	80	5.20	15.60	60	393	50	116	125	1.7	W22 E12-6506D5
660	1.2	2.7	70	5.28	15.84	60	399	32	86	225	1.5	W22 E22-6606D2
750	1.1	2.4	65	5.63	16.88	60	454	32	86	252	1.8	W22 E25-7506D2
750	1.1	2.9	75	5.63	16.88	50	454	50	116	140	1.75	W22 E14-7506D5
800	1.0	2.3	80	5.92	17.76	50	484	50	116	165	1.9	W22 E16-8006D5
900	0.9	1.8	90	6.30	18.90	60	545	50	136	125	2.3	W22 E12-9006D6
920	1.1	2.3	100	6.44	19.32	60	557	50	116	175	2.2	W22 E17-9206D5
1000	1.0	2.2	100	6.50	19.50	60	605	50	116	180	2.2	W22 E18-1007D5
1075	1.0	2.0	100	6.99	20.96	50	650	50	116	190	2.2	W22 E19-1077D5
1200	0.6	1.7	100	7.80	23.40	50	726	50	116	230	2.5	W22 E23-1207D5
1400	0.6	1.5	100	8.40	25.20	60	847	50	116	260	3	W22 E26-1407D5
1600	0.6	1.3	100	9.28	27.84	70	968	50	116	295	3.2	W22 E29-1607D5
1700	0.6	1.3	100	9.35	28.05	70	1029	50	116	295	3.2	W22 E29-1707D5

1700	0.6	1.4	100	9.35	28.05	50	1029	50	136	230	4.2	W22 E23-1707D6
1900	0.5	1.2	100	9.50	28.50	60	1150	50	136	260	4.7	W22 E26-1907D6
2000	0.5	1.2	100	9.60	28.80	70	1210	50	136	260	4.2	W22 E26-2007D6
2000	0.6	1.1	100	9.60	28.80	70	1210	50	116	345	3.5	W22 E34-2007D5
2200	0.5	1.1	100	9.90	29.70	70	1331	50	136	295	4.5	W22 E29-2207D6
2300	0.5	1.1	120	10.35	31.05	70	1392	50	116	295	4.2	W22 E29-2307D5
2440	0.5	1.1	100	10.49	31.48	70	1476	50	136	295	4.5	W22 E29-2447D6
2900	0.5	0.9	120	11.60	34.80	70	1755	50	116	345	5.0	W22 E34-2907D5
3000	0.5	0.9	120	12.00	36.00	70	1815	50	136	345	5.3	W22 E34-3007D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_s (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1200VDC		Ur=300V			U_{ft}=1800VDC			U_{ic}=3000VAC			Us=1800V	
190	2.7	5.1	50	1.90	5.70	55	137	32	76	95	0.72	W22 E09-1906D1
240	2.5	4.6	50	2.40	7.20	60	173	32	76	140	0.75	W22 E14-2406D1
240	2.5	4.3	65	2.40	7.20	60	173	32	76	155	0.9	W22 E15-2406D1
250	2.2	3.5	65	2.45	7.35	60	180	32	86	120	0.85	W22 E12-2506D2
320	2.0	4.4	65	2.88	8.64	50	230	32	86	136	1.1	W22 E13-3206D2
330	1.8	3.9	65	2.97	8.91	50	238	32	86	155	1.25	W22 E15-3306D2
470	1.7	1.8	65	4.00	11.99	60	338	32	86	225	1.5	W22 E22-4706D2
500	1.6	3.3	75	4.25	12.75	60	360	50	116	120	1.5	W22 E12-5006D5
600	1.3	2.9	75	4.80	14.40	65	432	50	116	140	1.75	W22 E14-6006D5
720	1.2	2.3	100	5.76	17.28	60	518	50	116	175	2.2	W22 E17-7206D5
950	0.9	1.8	100	6.17	18.52	50	684	50	116	230	2.8	W22 E23-9506D5
1500	0.6	1.1	100	8.25	24.75	70	1080	50	116	295	4.5	W22 E29-1507D5
1900	0.6	1.1	100	9.5	28.50	70	1368	50	116	345	5.0	W22 E34-1907D5
2100	0.5	0.9	100	10.08	30.24	70	1512	50	136	295	4.9	W22 E29-2107D6
2700	0.6	0.9	100	10.80	32.40	70	1634	50	136	345	5.3	W22 E34-2707D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_s (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1300VDC		Us=1950V			Ur=300V			U_{ft}=1950VDC			U_{ic}=3000VAC	
120	2.9	5.6	40	1.44	4.32	55	101	32	76	95	0.6	W22 E09-1206D1
160	2.5	5.2	40	1.92	5.76	60	135	32	76	125	0.7	W22 E12-1606D1
200	2.2	4.6	40	2.20	6.60	60	169	32	76	145	0.8	W22 E14-2006D1
220	2.0	4.3	50	2.31	6.93	60	186	32	86	125	0.9	W22 E12-2206D2
240	2.0	4.2	65	2.40	7.20	55	203	32	76	175	1	W22 E17-2406D1
250	1.9	4.3	65	2.50	7.50	55	211	32	76	180	1	W22 E18-2506D1
270	1.8	4.1	65	2.57	7.70	50	228	32	86	145	1	W22 E14-2706D2
300	1.6	3.7	60	2.70	8.10	50	254	32	86	160	1	W22 E16-3006D2
320	1.5	4.2	70	2.88	8.64	55	270	50	116	95	1.95	W22 E09-3206D5
330	1.4	3.3	60	2.97	8.91	55	279	32	86	180	1.2	W22 E18-3306D2
430	1.1	3.3	65	3.87	11.61	60	363	50	116	120	1.5	W22 E12-4306D5
460	1.5	2.7	65	4.14	12.42	60	389	32	86	225	1.5	W22 E22-4606D2
500	0.9	2.5	65	4.25	12.75	50	423	50	116	150	2.1	W22 E15-5006D5
545	0.6	2.3	80	4.63	13.90	50	461	50	116	165	1.9	W22 E16-5456D5
560	1.5	2.3	60	4.93	14.78	60	473	32	86	230	1.6	W22 E23-5606D2
630	0.8	1.8	70	5.04	15.12	60	532	50	136	125	2.3	W22 E12-6306D6
760	0.8	1.8	70	6.08	18.24	60	642	50	116	215	2.4	W22 E21-7606D5
820	0.6	1.7	100	6.15	18.45	50	693	50	116	230	2.5	W22 E23-8206D5

900	0.8	1.6	90	6.75	20.25	60	761	50	136	180	3.3	W22 E18-9006D6
1090	0.6	1.4	100	8.18	24.53	70	921	50	116	295	3.2	W22 E29-1097D5
1200	0.6	1.4	100	8.40	25.20	50	1014	50	136	230	4.1	W22 E23-1207D6
1370	0.8	1.1	100	9.59	28.77	70	1158	50	116	345	3.5	W22 E34-1377D5
1560	0.6	1.1	120	9.83	29.48	70	1318	50	136	295	4.5	W22 E29-1567D6
1950	0.7	0.9	120	11.70	35.10	70	1648	50	136	345	5.3	W22 E34-1957D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_s (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1400VDC		Ur=330V			U_{ft}=2100VDC			U_{ic}=3000VAC			Us=2100V	
100	3.1	5.6	50	1.20	3.60	55	98	32	76	95	0.6	W22 E09-1006D1
140	2.4	5.1	60	1.68	5.04	55	137.2	32	86	95	0.72	W22 E09-1406D2
190	2.5	4.7	55	2.28	6.84	60	186.2	32	86	120	1	W22 E12-1906D2
240	1.9	3.9	65	2.88	8.64	50	235.2	32	86	155	1.25	W22 E15-2406D2
260	1.3	4.2	70	3.12	9.36	55	254.8	50	116	95	1.95	W22 E09-2606D5
350	1.4	1.8	70	3.50	10.50	60	343	32	86	225	1.5	W22 E22-3506D2
450	1.4	2.9	70	4.50	13.50	50	441	50	116	140	1.75	W22 E14-4506D5
540	1.3	2.3	90	5.40	16.20	60	529.2	50	116	175	2.2	W22 E17-5406D5
700	0.9	1.8	100	5.60	16.80	50	686	50	116	230	2.8	W22 E23-7006D5
1250	0.9	1.1	100	10.00	30.00	70	1225	50	116	345	4.0	W22 E34-1257D5
1300	0.9	1.1	100	10.40	31.20	70	1274	50	136	295	4.9	W22 E29-1307D6
1950	0.7	0.9	120	11.70	35.10	70	1911	50	136	345	5.3	W22 E34-1957D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_s (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1500VDC		Us=2250V			Ur=300V			U_{ft}=2250VDC			U_{ic}=3000VAC	
90	3.3	5.6	40	1.26	3.78	55	101	32	76	95	0.6	W22 E09-9005D1
110	2.1	5.2	45	1.54	4.62	60	124	32	76	125	0.7	W22 E12-1106D1
150	1.8	4.3	45	2.10	6.30	60	169	32	86	125	0.9	W22 E12-1506D2
190	1.7	4.3	35	2.66	7.98	55	214	32	76	180	1	W22 E18-1906D1
230	1.6	3.7	45	2.76	8.28	50	259	32	86	155	1	W22 E15-2306D2
245	1.6	3.1	45	2.94	8.82	55	276	32	86	180	1.2	W22 E18-2456D2
300	1.6	3.1	40	3.00	9.00	55	338	32	86	180	1.2	W22 E18-3006D2
320	1.2	3.3	45	3.20	9.60	60	360	50	116	120	1.5	W22 E12-3206D5
345	1.4	2.7	60	3.45	10.35	60	388	32	86	225	1.5	W22 E22-3456D2
410	1.2	2.3	80	4.10	12.30	50	461	50	116	165	1.9	W22 E16-4106D5
540	0.9	1.9	80	5.40	16.20	60	608	50	116	215	2.2	W22 E21-5406D5
615	0.6	1.7	100	6.15	18.45	50	692	50	116	230	2.5	W22 E23-6156D5
820	0.7	1.4	100	6.56	19.68	70	923	50	116	295	3.2	W22 E29-8206D5
1020	0.9	1.1	100	8.16	24.48	70	1148	50	116	345	3.5	W22 E34-1027D5
1170	0.6	1.1	120	9.36	28.08	70	1316	50	136	295	4.5	W22 E29-1177D6
1490	0.6	0.9	120	10.43	31.29	70	1676	50	136	345	5.3	W22 E34-1497D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_s (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1600VDC		Us=2400V			Ur=350V			U_{ft}=2400VDC			U_{ic}=3000VAC	
100	3.3	3.9	40	1.40	4.20	60	128	32	76	120	0.6	W22 E12-1006D1
140	3.0	3.5	45	1.96	5.88	50	179	32	86	140	0.7	W22 E14-1406D2
200	1.7	2.0	50	2.40	7.20	75	256	32	76	295	0.9	W22 E29-2006D1
270	1.6	1.8	55	3.24	9.72	60	346	32	86	225	1	W22 E22-2706D2

320	1.2	3.3	45	3.20	9.60	60	410	50	116	120	1.5	W22 E12-3206D5(B)
410	0.7	2.3	80	4.10	12.30	50	525	50	116	165	1.9	W22 E16-4106D5(B)
615	0.6	1.7	100	4.92	14.76	50	787	50	116	230	2.5	W22 E23-6156D5(B)
800	0.6	1.4	100	6.40	19.20	50	1024	50	136	230	3	W22 E23-8006D6
800	0.7	1.4	100	6.40	19.20	70	1024	50	116	295	3.2	W22 E29-8006D5
1020	0.9	1.1	100	7.14	21.42	70	1306	50	116	345	3.5	W22 E34-1027D5(B)
1150	0.6	1.1	100	8.05	24.15	70	1472	50	136	295	4.5	W22 E29-1157D6
1490	0.8	0.9	120	10.43	31.29	70	1907	50	136	345	5.3	W22 E34-1497D6(B)
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1800VDC			Us=2700V			Ur=400V			U_{ti}=2700VDC			U_{to}=3000VAC
120	3.2	4.3	50	1.68	5.04	60	194	32	86	125	0.9	W22 E12-1206D2
160	2.9	2.0	50	1.76	5.28	65	259	32	76	225	1.25	W22 E22-1606D1
185	2.8	3.1	50	1.85	5.55	55	300	32	86	180	1.2	W22 E18-1856D2
260	1.7	2.7	60	2.60	7.80	60	421	32	86	225	1.5	W22 E22-2606D2
275	1.6	2.5	60	2.75	8.25	60	446	32	86	230	1.5	W22 E23-2756D2
295	0.7	2.3	80	2.95	8.85	50	478	50	116	165	1.9	W22 E16-2956D5
420	0.7	1.7	100	3.36	10.08	50	680	50	116	230	2.5	W22 E23-4206D5
590	0.7	1.4	100	4.72	14.16	70	956	50	116	295	3.2	W22 E29-5906D5
740	0.9	1.1	100	5.92	17.76	70	1199	50	116	345	3.5	W22 E34-7406D5
900	0.8	1.1	120	7.20	21.60	70	1458	50	136	295	4.5	W22 E29-9006D6
1050	0.9	0.9	120	8.40	25.20	70	1701	50	136	345	5.3	W22 E34-1057D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1900VDC			Us=2850V			Ur=400V			U_{ti}=2850VDC			U_{to}=3600VAC
150	3.0	2.4	50	2.10	6.30	55	271	32	86	175	1.3	W22 E17-1506D2
200	2.7	1.8	50	2.80	8.40	60	361	32	86	225	1.7	W22 E22-2006D2
380	1.8	1.7	65	4.56	13.68	50	686	50	116	230	3	W22 E23-3806D5
480	1.5	1.4	65	5.76	17.28	70	8664	50	116	295	3.2	W22 E29-4806D5
600	1.3	1.1	65	7.20	21.60	70	972	50	116	345	3.5	W22 E34-6006D5
660	0.8	1.1	100	7.92	23.76	70	1191	50	136	295	4.5	W22 E29-6606D6
810	0.9	0.9	120	9.72	29.16	70	1462	50	136	345	5.3	W22 E34-8106D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2000VDC			Us=3000V		Ur=500V		U_{ti}=3000VDC			U_{to}=3600VAC		
125	3.2	3.7	50	2.00	6.00	50	250	32	86	155	1	W22 E15-1256D2
170	2.9	1.8	55	2.72	8.16	60	340	32	86	225	1.5	W22 E22-1706D2
225	1.8	2.3	80	3.15	9.45	50	450	50	116	165	1.9	W22 E16-2256D5
330	1.0	1.7	100	4.62	13.86	50	670	50	116	230	2.5	W22 E23-3306D5
560	1.0	1.1	100	6.72	20.16	70	1120	50	116	345	3.5	W22 E34-5606D5
650	0.8	1.1	100	7.80	23.40	70	1300	50	136	295	4.5	W22 E29-6506D6
800	0.9	0.9	120	9.60	28.80	70	1600	50	136	345	5.3	W22 E34-8006D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2200VDC			Us=3300V		Ur=600V		U_{ti}=3300VDC			U_{to}=4200VAC		
75	3.5	4.3	50	1.35	4.05	50	222	32	86	125	0.9	W22 E12-7505D2
100	2.0	3.7	50	1.80	5.40	50	242	32	86	155	1	W22 E15-1006D2

75	3.5	4.3	50	1.35	4.05	50	222	32	86	125	0.9	W22 E12-7505D2
100	2.0	3.7	50	1.80	5.40	50	242	32	86	155	1	W22 E15-1006D2
120	1.7	3.1	50	2.16	6.48	55	346	32	86	180	1.2	W22 E18-1206D2
165	1.2	2.7	60	2.97	8.91	70	477	32	86	225	1.5	W22 E22-1656D2
180	1.1	2.3	80	3.24	9.72	50	436	50	116	165	1.9	W22 E16-1806D5
270	1.0	1.7	80	4.32	12.96	50	654	50	116	230	2.5	W22 E23-2706D5
360	0.9	1.4	100	5.76	17.28	70	871	50	116	295	3.2	W22 E29-3606D5
460	1.0	1.1	100	6.44	19.32	70	1113	50	116	345	3.4	W22 E34-4606D5
520	0.7	1.1	120	6.76	20.28	70	1258	50	136	295	4.5	W22 E29-5206D6
660	0.9	0.9	120	8.58	25.74	70	1598	50	136	345	5.3	W22 E34-6606D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2400VDC			Us=3600V		Ur=600V		U_{ti}=3600VDC			U_{to}=4500VAC		
75	3.5	3.7	50	1.50	4.50	50	216	32	86	155	1	W22 E15-7505D2
120	1.7	1.8	50	2.40	7.20	60	345	32	86	225	1.5	W22 E22-1206D2
135	1.2	2.3	60	2.43	7.29	50	389	50	116	165	1.9	W22 E16-1356D5
200	1.0	1.7	60	3.60	10.80	50	576	50	116	230	2.5	W22 E23-2006D5
200	0.8	1.8	60	3.60	10.80	60	576	50	116	215	2.4	W22 E21-2006D5
270	0.8	1.4	80	4.86	14.58	70	778	50	116	295	3.2	W22 E29-2706D5
350	0.8	0.9	80	6.30	18.90	70	1008	50	136	345	3.5	W22 E34-3506D6
390	0.6	1.1	100	6.63	19.89	70	1123	50	136	295	4.5	W22 E29-3906D6
500	0.7	0.9	100	8.50	25.50	70	1440	50	136	345	5.3	W22 E34-5006D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2500VDC			Us=3750V		Ur=600V		U_{ti}=3750VDC			U_{to}=4500VAC		
95	3.4	2.0	40	1.90	5.70	50	297	50	116	130	1.8	W22 E13-9506D5
100	3.2	1.8	40	2.00	6.00	60	313	50	86	225	125	W22 E22-1006D2
130	2.4	1.8	50	2.34	7.02	50	406	50	136	130	2.5	W22 E13-1306D6
200	1.6	1.8	40	3.60	10.80	50	625	50	116	230	3	W22 E23-2006D5(B)
280	1.1	1.4	45	4.48	13.44	50	875	50	136	230	4.1	W22 E23-2806D6
330	1.0	1.1	80	5.28	15.84	70	1031	50	116	345	4.5	W22 E34-3306D5
370	0.9	1.1	100	5.18	15.54	70	1156	50	136	295	4.5	W22 E29-3706D6
480	1.0	0.9	100	6.72	20.16	70	1500	50	136	345	6.1	W22 E34-4806D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2600VDC			Us=3900V		Ur=600V		U_{ti}=3900VDC			U_{to}=4500VAC		
50	4.8	4.3	50	1.25	3.75	60	181	32	86	125	0.9	W22 E12-5005D2
80	3.0	3.1	50	1.60	4.80	55	283	32	86	180	1.2	W22 E18-8005D2
115	2.0	1.8	60	2.30	6.90	60	392	32	86	225	1.5	W22 E22-1156D2
125	1.0	2.3	60	2.50	7.50	50	422	50	116	165	1.9	W22 E16-1256D5
180	0.8	1.8	60	3.60	10.80	60	608	50	116	215	2.4	W22 E21-1806D5
185	0.6	1.7	80	3.33	9.99	50	625	50	116	230	2.5	W22 E23-1856D5
245	0.7	1.4	80	3.68	11.03	70	845	50	116	295	3.2	W22 E29-2456D5
320	0.8	1.1	80	4.80	14.40	70	1082	50	116	345	3.5	W22 E34-3206D5
360	0.6	1.1	100	5.40	16.20	70	1217	50	136	295	4.5	W22 E29-3606D6
460	0.7	0.9	100	6.90	20.70	70	1555	50	136	345	5.3	W22 E34-4606D6

320	1.2	3.3	45	3.20	9.60	60	410	50	116	120	1.5	W22 E12-3206D5(B)
410	0.7	2.3	80	4.10	12.30	50	525	50	116	165	1.9	W22 E16-4106D5(B)
615	0.6	1.7	100	4.92	14.76	50	787	50	116	230	2.5	W22 E23-6156D5(B)
800	0.6	1.4	100	6.40	19.20	50	1024	50	136	230	3	W22 E23-8006D6
800	0.7	1.4	100	6.40	19.20	70	1024	50	116	295	3.2	W22 E29-8006D5
1020	0.9	1.1	100	7.14	21.42	70	1306	50	116	345	3.5	W22 E34-1027D5(B)
1150	0.6	1.1	100	8.05	24.15	70	1472	50	136	295	4.5	W22 E29-1157D6
1490	0.8	0.9	120	10.43	31.29	70	1907	50	136	345	5.3	W22 E34-1497D6(B)
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1800VDC			Us=2700V			Ur=400V			U_R=2700VDC			U_{ac}=3000VAC
120	3.2	4.3	50	1.68	5.04	60	194	32	86	125	0.9	W22 E12-1206D2
160	2.9	2.0	50	1.76	5.28	65	259	32	76	225	1.25	W22 E22-1606D1
185	2.8	3.1	50	1.85	5.55	55	300	32	86	180	1.2	W22 E18-1856D2
260	1.7	2.7	60	2.60	7.80	60	421	32	86	225	1.5	W22 E22-2606D2
275	1.6	2.5	60	2.75	8.25	60	446	32	86	230	1.5	W22 E23-2756D2
295	0.7	2.3	80	2.95	8.85	50	478	50	116	165	1.9	W22 E16-2956D5
420	0.7	1.7	100	3.36	10.08	50	680	50	116	230	2.5	W22 E23-4206D5
590	0.7	1.4	100	4.72	14.16	70	956	50	116	295	3.2	W22 E29-5906D5
740	0.9	1.1	100	5.92	17.76	70	1199	50	116	345	3.5	W22 E34-7406D5
900	0.8	1.1	120	7.20	21.60	70	1458	50	136	295	4.5	W22 E29-9006D6
1050	0.9	0.9	120	8.40	25.20	70	1701	50	136	345	5.3	W22 E34-1057D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 1900VDC			Us=2850V			Ur=400V			U_R=2850VDC			U_{ac}=3600VAC
150	3.0	2.4	50	2.10	6.30	55	271	32	86	175	1.3	W22 E17-1506D2
200	2.7	1.8	50	2.80	8.40	60	361	32	86	225	1.7	W22 E22-2006D2
380	1.8	1.7	65	4.56	13.68	50	686	50	116	230	3	W22 E23-3806D5
480	1.5	1.4	65	5.76	17.28	70	8664	50	116	295	3.2	W22 E29-4806D5
600	1.3	1.1	65	7.20	21.60	70	972	50	116	345	3.5	W22 E34-6006D5
660	0.8	1.1	100	7.92	23.76	70	1191	50	136	295	4.5	W22 E29-6606D6
810	0.9	0.9	120	9.72	29.16	70	1462	50	136	345	5.3	W22 E34-8106D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2000VDC			Us=3000V		Ur=500V		U_R=3000VDC			U_{ac}=3600VAC		
125	3.2	3.7	50	2.00	6.00	50	250	32	86	155	1	W22 E15-1256D2
170	2.9	1.8	55	2.72	8.16	60	340	32	86	225	1.5	W22 E22-1706D2
225	1.8	2.3	80	3.15	9.45	50	450	50	116	165	1.9	W22 E16-2256D5
330	1.0	1.7	100	4.62	13.86	50	670	50	116	230	2.5	W22 E23-3306D5
560	1.0	1.1	100	6.72	20.16	70	1120	50	116	345	3.5	W22 E34-5606D5
650	0.8	1.1	100	7.80	23.40	70	1300	50	136	295	4.5	W22 E29-6506D6
800	0.9	0.9	120	9.60	28.80	70	1600	50	136	345	5.3	W22 E34-8006D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2200VDC			Us=3300V		Ur=600V		U_R=3300VDC			U_{ac}=4200VAC		
75	3.5	4.3	50	1.35	4.05	50	222	32	86	125	0.9	W22 E12-7505D2
100	2.0	3.7	50	1.80	5.40	50	242	32	86	155	1	W22 E15-1006D2

75	3.5	4.3	50	1.35	4.05	50	222	32	86	125	0.9	W22 E12-7505D2
100	2.0	3.7	50	1.80	5.40	50	242	32	86	155	1	W22 E15-1006D2
120	1.7	3.1	50	2.16	6.48	55	346	32	86	180	1.2	W22 E18-1206D2
165	1.2	2.7	60	2.97	8.91	70	477	32	86	225	1.5	W22 E22-1656D2
180	1.1	2.3	80	3.24	9.72	50	436	50	116	165	1.9	W22 E16-1806D5
270	1.0	1.7	80	4.32	12.96	50	654	50	116	230	2.5	W22 E23-2706D5
360	0.9	1.4	100	5.76	17.28	70	871	50	116	295	3.2	W22 E29-3606D5
460	1.0	1.1	100	6.44	19.32	70	1113	50	116	345	3.4	W22 E34-4606D5
520	0.7	1.1	120	6.76	20.28	70	1258	50	136	295	4.5	W22 E29-5206D6
660	0.9	0.9	120	8.58	25.74	70	1598	50	136	345	5.3	W22 E34-6606D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2400VDC			Us=3600V		Ur=600V		U_R=3600VDC			U_{ac}=4500VAC		
75	3.5	3.7	50	1.50	4.50	50	216	32	86	155	1	W22 E15-7505D2
120	1.7	1.8	50	2.40	7.20	60	345	32	86	225	1.5	W22 E22-1206D2
135	1.2	2.3	60	2.43	7.29	50	389	50	116	165	1.9	W22 E16-1356D5
200	1.0	1.7	60	3.60	10.80	50	576	50	116	230	2.5	W22 E23-2006D5
200	0.8	1.8	60	3.60	10.80	60	576	50	116	215	2.4	W22 E21-2006D5
270	0.8	1.4	80	4.86	14.58	70	778	50	116	295	3.2	W22 E29-2706D5
350	0.8	0.9	80	6.30	18.90	70	1008	50	136	345	3.5	W22 E34-3506D6
390	0.6	1.1	100	6.63	19.89	70	1123	50	136	295	4.5	W22 E29-3906D6
500	0.7	0.9	100	8.50	25.50	70	1440	50	136	345	5.3	W22 E34-5006D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2500VDC			Us=3750V		Ur=600V		U_R=3750VDC			U_{ac}=4500VAC		
95	3.4	2.0	40	1.90	5.70	50	297	50	116	130	1.8	W22 E13-9506D5
100	3.2	1.8	40	2.00	6.00	60	313	50	86	225	125	W22 E22-1006D2
130	2.4	1.8	50	2.34	7.02	50	406	50	136	130	2.5	W22 E13-1306D6
200	1.6	1.8	40	3.60	10.80	50	625	50	116	230	3	W22 E23-2006D5(B)
280	1.1	1.4	45	4.48	13.44	50	875	50	136	230	4.1	W22 E23-2806D6
330	1.0	1.1	80	5.28	15.84	70	1031	50	116	345	4.5	W22 E34-3306D5
370	0.9	1.1	100	5.18	15.54	70	1156	50	136	295	4.5	W22 E29-3706D6
480	1.0	0.9	100	6.72	20.16	70	1500	50	136	345	6.1	W22 E34-4806D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2600VDC			Us=3900V		Ur=600V		U_R=3900VDC			U_{ac}=4500VAC		
50	4.8	4.3	50	1.25	3.75	60	181	32	86	125	0.9	W22 E12-5005D2
80	3.0	3.1	50	1.60	4.80	55	283	32	86	180	1.2	W22 E18-8005D2
115	2.0	1.8	60	2.30	6.90	60	392	32	86	225	1.5	W22 E22-1156D2
125	1.0	2.3	60	2.50	7.50	50	422	50	116	165	1.9	W22 E16-1256D5
180	0.8	1.8	60	3.60	10.80	60	608	50	116	215	2.4	W22 E21-1806D5
185	0.6	1.7	80	3.33	9.99	50	625	50	116	230	2.5	W22 E23-1856D5
245	0.7	1.4	80	3.68	11.03	70	845	50	116	295	3.2	W22 E29-2456D5
320	0.8	1.1	80	4.80	14.40	70	1082	50	116	345	3.5	W22 E34-3206D5
360	0.6	1.1	100	5.40	16.20	70	1217	50	136	295	4.5	W22 E29-3606D6
460	0.7	0.9	100	6.90	20.70	70	1555	50	136	345	5.3	W22 E34-4606D6

C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 2800VDC		Us=4200V		Ur=600V		U_t=4200VDC			U_{ac}=5000VAC			
60	4.7	3.7	40	1.80	5.40	50	235	32	86	155	1	W22 E15-6005D2
85	3.7	1.8	40	2.55	7.65	60	333	32	86	225	1.5	W22 E22-8505D2
110	2.9	2.3	60	3.08	9.24	50	431	50	116	165	1.9	W22 E16-1106D5
165	1.9	1.7	60	4.62	13.86	50	647	50	116	230	2.5	W22 E23-1656D5
165	2.4	1.6	60	4.62	13.86	80	647	32	86	345	2.1	W22 E34-1656D2
220	1.4	1.4	80	4.84	14.52	70	862	50	116	295	3.2	W22 E29-2206D5
275	0.9	1.1	80	5.50	16.50	70	1078	50	116	345	3.5	W22 E34-2756D5
310	0.6	1.1	100	6.20	18.60	70	1251	50	136	295	4.5	W22 E29-3106D6
390	0.8	0.9	100	7.80	23.40	70	1529	50	136	345	5.3	W22 E34-3906D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 3000VDC		Us=4500V		Ur=600V		U_t=4500VDC			U_{ac}=5200VAC			
52	4.8	3.7	50	1.56	4.68	50	239	32	86	155	1	W22 E15-5205D2
90	3.6	2.5	60	2.52	7.56	60	414	32	86	225	1.5	W22 E22-9005D2
96	3.4	2.3	60	2.69	8.06	50	432	50	116	165	1.9	W22 E16-9605D5
115	2.9	2.3	60	3.22	9.66	50	518	50	116	165	1.9	W22 E16-1156D5
120	1.3	2.3	60	3.36	10.08	50	518	50	116	165	2	W22 E16-1206D5
135	1.2	2.0	60	3.38	10.13	60	608	50	116	190	2.2	W22 E19-1356D5
140	1.1	1.8	70	3.50	10.50	60	630	50	116	215	2.4	W22 E21-1406D5
140	1.1	1.8	70	3.50	10.50	50	630	50	116	225	2.5	W22 E22-1406D5
145	1.1	1.7	80	3.63	10.88	50	653	50	116	230	2.5	W22 E23-1456D5
145	1.1	1.6	60	3.63	10.88	80	653	32	86	345	2.1	W22 E34-1456D2
190	1.0	1.4	80	3.80	11.40	70	864	50	116	295	3.2	W22 E29-1906D5
245	1.0	1.1	100	4.90	14.70	70	1103	50	116	345	3.5	W22 E34-2456D5
270	0.6	1.1	100	5.40	16.20	70	1238	50	136	295	4.5	W22 E29-2706D6
350	0.8	0.9	100	7.00	21.00	70	1598	50	136	345	5.3	W22 E34-3506D6(B)
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 3200VDC		Us=4800V		Ur=700V		U_t=4800VDC			U_{ac}=5800VAC			
65	4.9	1.8	35	1.95	5.85	60	332.8	32	86	225	1.5	W22 E22-6505D2
120	2.7	1.7	50	3.36	10.08	50	614.4	50	116	230	3	W22 E23-1206D5
170	1.0	1.4	50	4.25	1275	70	870.4	50	116	295	3.2	W22 E29-1706D5
190	1.7	1.1	60	4.75	14.25	70	972.8	50	116	345	3.5	W22 E34-1906D5
230	1.5	1.1	70	5.75	17.25	70	1177	50	136	295	4.5	W22 E29-2306D6
250	1.3	0.9	80	6.25	18.75	70	1280	50	136	345	5.3	W22 E34-2506D6

C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 3600VDC		Us=5400V		Ur=800V		U_t=5400VDC			U_{ac}=6400VAC			
50	6.4	1.8	25	1.50	4.50	60	504	32	86	225	2.2	W22 E22-5005D2
88	3.6	1.7	35	2.20	6.60	50	570	50	116	230	3	W22 E23-8805D5
125	2.5	1.4	40	2.50	7.50	50	810	50	136	230	4.1	W22 E23-1256D6
180	2.3	1.1	50	4.50	13.50	70	1166	50	116	345	3.5	W22 E34-1806D5
200	2.2	1.1	50	5.00	15.00	70	1177	50	136	295	4.5	W22 E29-2306D6
220	2.2	0.9	60	5.50	16.5	70	1425	50	136	345	5.5	W22 E23-2206D6
C_N (uF)	RS (mΩ)	R_{th} (K/W)	Imax (A)	Ipeak (kA)	Is (Ka)	L (nH)	W_N (Ws)	P (mm)	D (mm)	H (mm)	M (kg)	Order No.
U_N= 4000VDC		Us=6000V		Ur=900V		U_t=6000VDC			U_{ac}=7000VAC			
40	8.0	1.8	25	1.20	3.60	60	320	32	86	225	2.3	W22 E22-4005D2
70	4.5	1.7	30	1.75	5.25	50	560	50	116	230	3	W22 E23-7005D5
100	3.2	1.4	40	2.00	6.00	50	800	50	136	230	4.1	W22 E23-1006D6
140	2.7	1.1	40	3.5	10.50	70	1120	50	116	345	3.5	W22 E34-1806D5
150	2.5	1.1	50	3.75	11.25	70	1200	50	136	295	4.5	W22 E29-2306D6
200	2.3	0.9	60	5.00	15	70	1600	50	136	345	5.5	W22 E34-1106D6

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

DA01型金属化薄膜电容器/DC-Link
Metalized film capacitor type DA01/ DC-Link application

■ 特点 Characteristics

1. 金属化聚丙烯膜	metalized polypropylene film
2. 损耗非常小	lower dissipation factor
3. 低ESR	low ESR
4. 能承受大电流	high current capability
5. 耐高浪涌电流能力	high surge current capability
6. 能承受高峰值电流	high peak current capability
7. 自愈性	self healing
8. 长寿命	long life expectancy
9. 易于安装	install conveniently

■ 性能指标 Specification

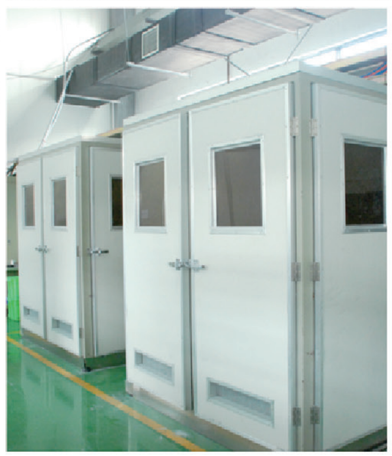
额定电压/Rated voltage	350~3500VDC
额定电容量/capacitance	3μF~150μF
容量偏差/cap tolerance	±5%，±3%
介质损耗正切值/dielectric dissipation factor	$2*10^{-4}$
损耗角正切值/dissipation factor	≤$10*10^{-4}$(1V,100Hz)
端子间耐电压/test voltage between terminals	1.5U_n, 10/60s
端子与外壳间耐电压/test voltage between terminals and case	($2U_n$+1000)VAC, 60s
运行温度（外壳）/operating temperature(case)	-40℃~+70℃
热点温度/hot spot temperature(θ_{HS})	−40℃~+85℃
预期寿命（小时）/life expectancy(hours)	> 100000
气候类别/climate category	40/85/56
封装/encapsulating	塑料外壳 plastic case
浸渍剂/impregnant	环氧树脂 epoxy resin
引用标准/reference standard	IEC61071-2007

■ 若客户需要特殊规格和尺寸，请联系我们。
Other specification and dimmension can be designed as customer's requrement.

研发与试验检测能力
R&D And Test Ability

电力电子电容器生产线
Power Electronic Capacitor Production Lines

电力电子电容器生产场地建筑面积10000平方米，拥有一流的生产、试验设备，生产、技术、质量等各项管理严格执行ISO9001和IRIS标准要求，从供应商的选择到原材料的入场检验、各种新产品的设计与验证、各种设备的管理、产品生产过程检验与控制、产品最终出厂检验与试验，始终坚持严格的、科学的程序，形成各种矩形电力电子电容器年生产能力可达50000台，铝壳圆柱形及各种塑壳电力电子电容器年生产能力可达50万只。

世界级电力电子电容研发生产基地



Power Electronic Capacitor Branch covers an area of 10,000 square meters for production, with first-class production and testing equipment. The management activities of production, technology, quality and others are strictly carried out according to the requirements of ISO9001 and IRIS standard. The choice of the suppliers, incoming inspection of raw materials, the design and validation of new products, equipment management, inspection and control of production process, the final factory inspection and testing, always subject to strict scientific procedures. The annual production capacity of a variety of rectangular power electronic capacitors reaches 50,000 units, of the cylindrical aluminum case and plastic case power electronic capacitors are up to 500,000 pieces.




项目应用
Projects

◆机车项目应用 Application in Locomotive

大连机车项目	Dalian locomotive projectHXD3B/9600kW/500 units
大同机车项目	Datong locomotive projectHXD2C/7200kW/50 units
大同六轴机车	Datong 6-axial locomotiveHXD2B/34 units
神华八轴货运机车	Shenhua 8-axial locomotiveHXD/2 units
白俄罗斯机车项目	Locomotive in white Russia24 units
韶山7,8系列机车及改造项目	Renovation project for Shao 7&8: 750 locomotives

◆动车项目应用 Application in EMU

动车 CRH1/CRH 803/804/CHE EMU 200-250km/h, 100 trainsets

高铁动车 CHR380D 380km/h, 50 trainsets

◆地铁项目应用 Application in subway/metro

北京地铁4号线	Beijing Line 4
北京地铁4号线延长线-大兴线	Beijing Line 4--Daxin
德黑兰地铁	LY004Tehran Ly004
伊朗德黑兰地铁1,2号线65列车及	Tehran Line 1&2
上海地铁7&9号线	Shanghai Line 7&9
上海地铁12号线	Shanghai Line 12
广州地铁2号线	Guangzhou Line 2
北京地铁14号线	Beijing Line 14
哈尔滨地铁1号线	Haerbin Line1
重庆地铁2号线	Chongqing Line 2
南京地铁3号线	Nanjing Line 3
英国伦敦地铁	London subway
西班牙马德里延长线	Madrid subway
瑞典斯德哥尔摩地铁项目及其他瑞典国内地铁项目	Stockholm subway or light train
加拿大温哥华地铁	Vancouver subway
美国芝加哥地铁	Chicago subway
马来西亚吉隆坡地铁	Kuala Lumpur subway
西班牙	RecifeSubway or light train in Spain
苏州2号线	Suzhou Line 2

◆风力发电、太阳能光伏及汽车等应用
Wind power, solar system, hybrid &electric car and etc..

山东长兴风电项目	Changxin Shandong project
张北风场项目	Zhangbei project
金峰光伏系统项目	Jinfeng solar project
安凯电动大巴车项目	Ankai electric bus project

◆柔性输变电项目等应用/动态无功补偿与谐波治理装置的应用
Fexible AC Transmission System/Application in Static Var Generator& Active Power Filter

张家口清三营	Zhangjiakou Sanying
敦煌光伏升压站	Dunhuang solar booster station
穆棱市金跃太阳能	Muleng Jingyue solar system
大同同生同基煤矿	Datong Tongsheng Coal Mine
太原南岭煤业	Taiyuan Nanling Coal Mine
永城陈四楼、车集矿	Yongcheng Mine
国电蓬莱	Penglai Power Station
黄石山力六辊可逆单机轧机	Huangshi Steel
国华（利津）	Guohua Lijin
山西龙源南桦山	Shanxi Longhua Nanhuashan
大安天威安白风电场	Anbai windmill field
阳泉荫营	Yangquan Yinying
沈阳华能昌图风电场一期	Shenyang Huanen windmill
大丰龙源（如东）风电场	Rudong windmill
大同大梁上风电场	Datong Daliangshan windmill
云南云开电气丰乐风电场	Yunan Fengle windmill
华能天镇风力发电	Huaneng Tianzhen windmill
中核甘肃风力发电有限公司	Zhonghe Gansu
美国北卡大学35KV-8MW	North Carolina University
上海思源浙江绍兴35KV-20MW	Shaoxing Zhejiang
电科院35KV-100MW	China Electric Power Research Institute
大连35KV-500MW	Dalian project from CEPRI

◆变频器应用 High voltage converter applications

上海科达公司	Shanghai Keda Company
山东新风光	Shandong Xinfengguang Company
国电南自	Guodian Nanjing Automation
株洲时代装备	Zhuzhou Times electric
北京金自天正	Beijing Aritime intelligent Control
天津天传所	Tianjin Design& Research institute of Electric Drive

◆其它方面应用 Other application

UPS电源，逆变电焊机，船舶推进等

UPS power supply, welding machine, Ship propulsion system and etc.

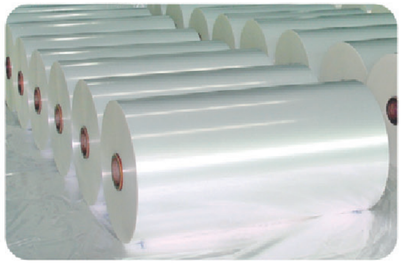
公司其他产品
Other Products

电容器用聚丙烯/聚酯薄膜
Polypropylene or Polyester Film for Capacitor

厚度：2.4微米~12微米　2.4μm~12μm
年产量：18000 吨　output per year: 18000tons/y

■ 应用范围：
金属化膜电容器和箔式电容器，如交流电动机电容器、低压并联电力电容器、节能灯具电容器、混合动力汽车用电容器、直流电容器等。
Mainly used for metalized film capacitors and foil capacitors, such as AC motor capacitors, low-voltage shunt power capacitors, energy-saving lighting capacitors, hybrid cars capacitors, DC capacitors.

膜纸复合浸油介质或全膜浸油介质电容器，如输变电系统的无功补偿、均压、滤波、耦合等中高压电力电容器、电容式互感器制造等。
Mainly used for capacitors with oil impregnated film and paper or all film as dielectric, i.e. the capacitors for power transmission system such as medium and high voltage power capacitors used for reactive power compensation, equalizing, filtering and coupling, it is also used in capacitive transformers.



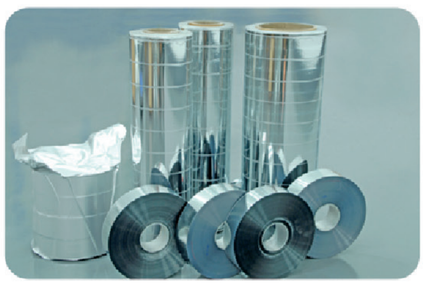
电容器用金属化膜
Metalized film for capacitor

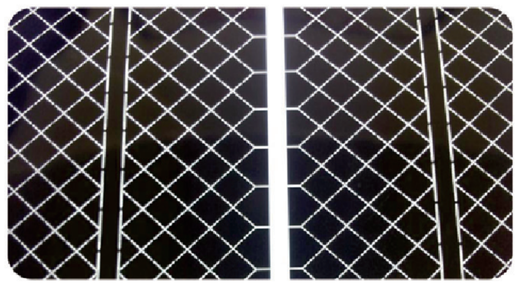
★ 铝锌边缘加厚金属化薄膜，方阻2.5Ω/7.5Ω ±25%
Aluminum/Zinc Alloy Film for Capacitor with heavy edge in square resistance 2.5Ω/7.5Ω ±25%

★ 铝金属化薄膜，方阻1.5Ω到 2.5Ω
Aluminum metalized film with square resistance 1.5Ω to 2.5Ω

★ 金属化安全膜，使电容器安全性能满足UL和VDE的要求
Segment safety film ensures capacitor's safety property meeting UL and VDE requirements.

年产量4500吨　output per year：4500 tons/year





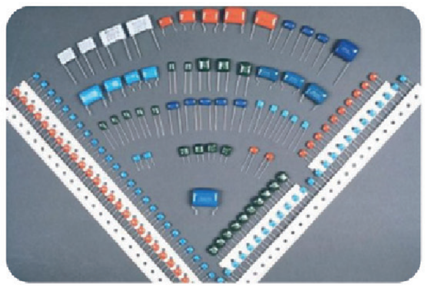
交流电动机用电容器
AC capacitor for motor-run

★ 各种规格空调和灯具单相电动机50Hz（60Hz）用AC电容器
Broadly applied to starting and running of AC single-phase motors at 50Hz(60Hz) frequency for family air conditioners and high power illuminators for the sake of power factor compensation.
年产量4000万只　output per year: 40million pcs/y

电子设备用直流电容器
DC capacitor for Electronic Equipment

■ 主要型号有：
CL21型金属化聚酯膜电容器，CBB81型高压金属箔-金属化聚丙烯电容器，CBB21型金属化聚丙烯电容器，CBB13型无感箔式聚丙烯电容器，抑制电源电磁干扰电容器（MKP/CBB62/CL62）。
The main categories:CL21 metalized polyester film capacitors, CBB81 high voltage aluminum foil/metalized polypropylene film capacitors, CBB21 metalized polypropylene film capacitors, CBB13 non-inductive aluminum foil and polypropylene film capacitors, Film capacitor for electromagnetic interference suppression(MKP/CBB62/CL62) .

年产量9亿只　output per year: 900 million pcs/y



主要客户
Main customers

世界级电力电子电容研发生产基地

- 江苏常州庞巴迪牵引系统有限公司
  Bombardier CPC propulsion System Co., Ltd
- 庞巴迪轨道交通集团
  Bombardier Transportation Group
- 上海阿尔斯通电气有限公司
  Shanghai ALSTOM Transport Co., Ltd
- 南京南瑞集团公司
  Nanjing Nari Group Corporation
- 阳光电源股份有限公司
  Sungrow Power Supply Co., Ltd
- 永济新时速电机电器有限责任公司
  Yongji Xinshisu electric Equipment Co., Ltd
- 南车株洲电力机车研究所有限公司
  CSR Zhuzhou Institute Co., Ltd
- 武汉正远铁路电气有限公司
  Wuhan zhengyuan railway electric Co., Ltd
- 思源清能电气电子有限公司
  Sieyuan electric Co., Ltd
- 中国电力科学研究院
  China electric power research institute
- 江苏大全凯帆电器股份有限公司
  Jiangsu Daqo Kfine electric Co., Ltd
- 北京三得普华科技有限责任公司
  Beijing soundpower tech Co., Ltd
- 山东泰开电力电子有限公司
  Shandong taikai power electronics Co., Ltd
- 荣信电力电子股份有限公司
  Rongxin Power Electronic Co., Ltd
- 江苏经纬斯柯达电器有限公司
  Jiangsu Jingwei Skoda Equipment Co., Ltd
- 大连东芝机车电器设备有限公司
  Dalian Toshiba Locomotive Electric Equipment Co., Ltd
- 中国北车集团大连机车研究所有限公司
  CNR Dalian locomotive research institute Co., Ltd
- 上海电气集团股份有限公司
  Shanghai Electric Group Co., Ltd
- 西班牙卡佛公司
  Trainelec S1
- 许继电气股份有限公司
  XJ Group Corporation
- 众泰新能源汽车有限公司
  ZOTYE AUTO
- 中山大洋电机股份有限公司
  BROAD-OCEAN
- 汇川技术有限公司
  Huichuan Technology Co., Ltd

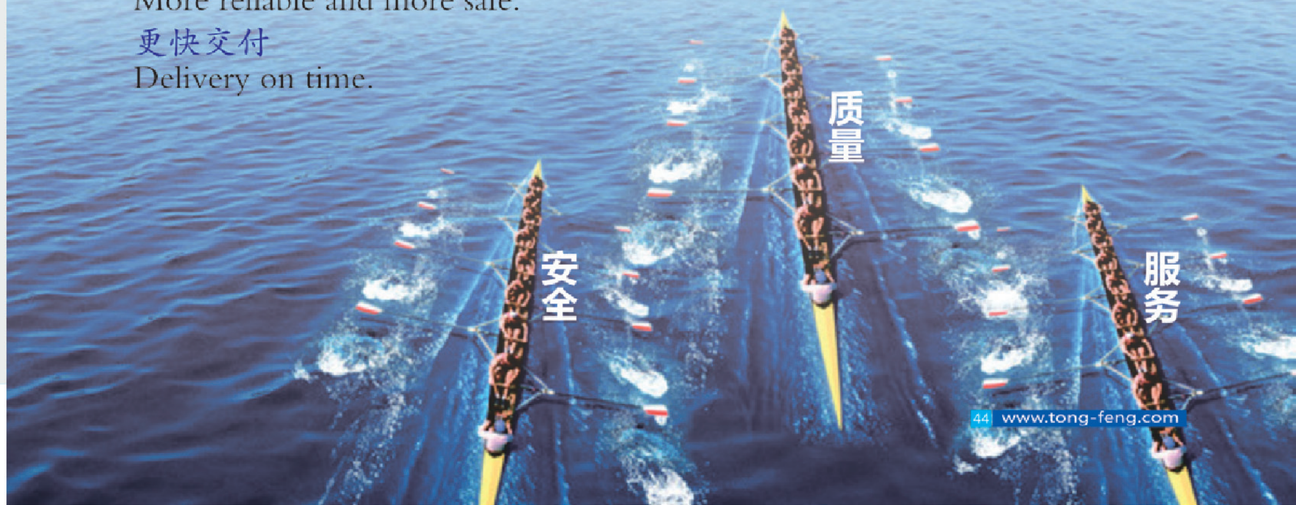
铜峰目标
Pursuit of Tongfeng

更高质量，更低成本，为用户节约资金
Higher quality and lower cost, saving cost for customer.

更小体积，更长寿命
Smaller volume and longer life.

更可靠，更安全
More reliable and more safe.

更快交付
Delivery on time.



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