



XIANGYEE

HUNAN XIANGYEE ZHONGYUAN TECHNOLOGY CO. LTD

Company Profile

Company Culture

Interpersonal relationship: **Simple & Harmonious**

Life Attitude: **Competition & Enterprising**

Principles of Behaviour: **Honest & Gratitude**

Team Spirit: **Unite & Working Together**

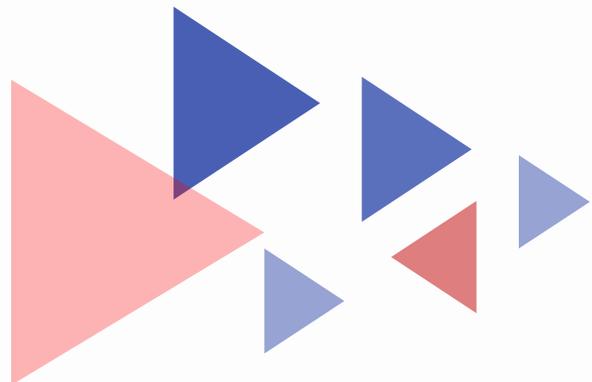
www.xiangyee.cn

Professional Research & Development Manufacturer
of Tantalum Capacitor



XIANGYEE

HUNAN XIANGYEE ZHONGYUAN TECHNOLOGY CO. LTD



CONTENTS

01

Company Profile

02

Product Description

03

Application

04

Development Planning



XIANGYEE

HUNAN XIANGYEE ZHONGYUAN TECHNOLOGY CO. LTD

01

Part

Company Profile

Company Profile



The company is located in the high-tech development zone of Zhuzhou city, Hunan province. It is affiliated to Zhuzhou Hongda Electronics Corp., Ltd. (stock code: 300726). It is the largest professional R&D production base of civil tantalum capacitors in China.

The company has more than 30 years experience on research and production of tantalum capacitors. It has advanced and mature tantalum capacitor production lines and three large-scale production bases. It has advanced production lines and sophisticated equipment imported from the United States and Japan. The current annual production capacity is about 600 million. The company has expanded the existing production capacity to meet the domestic demand for tantalum capacitors through production line mergers and acquisitions, fixed asset investment and other methods.

The company pays attention to technological innovation and technological progress, and it cooperates with the supply chain to develop materials and equipment suitable for new tantalum capacitors. It has extensive technical exchanges and cooperation with advanced enterprises and universities at home and abroad. It keeps pace with the times and makes unremitting efforts. Mainly capacitors, tantalum electrolytic capacitors are well-known in domestic and foreign markets for their complete varieties, good quality, high reputation and good service.

Company Profile

» The group will be based on the base of No. 006 Wenchang Road, Xiangxiang Economic Development Zone, Xiangtan City, Hunan Province in 2021

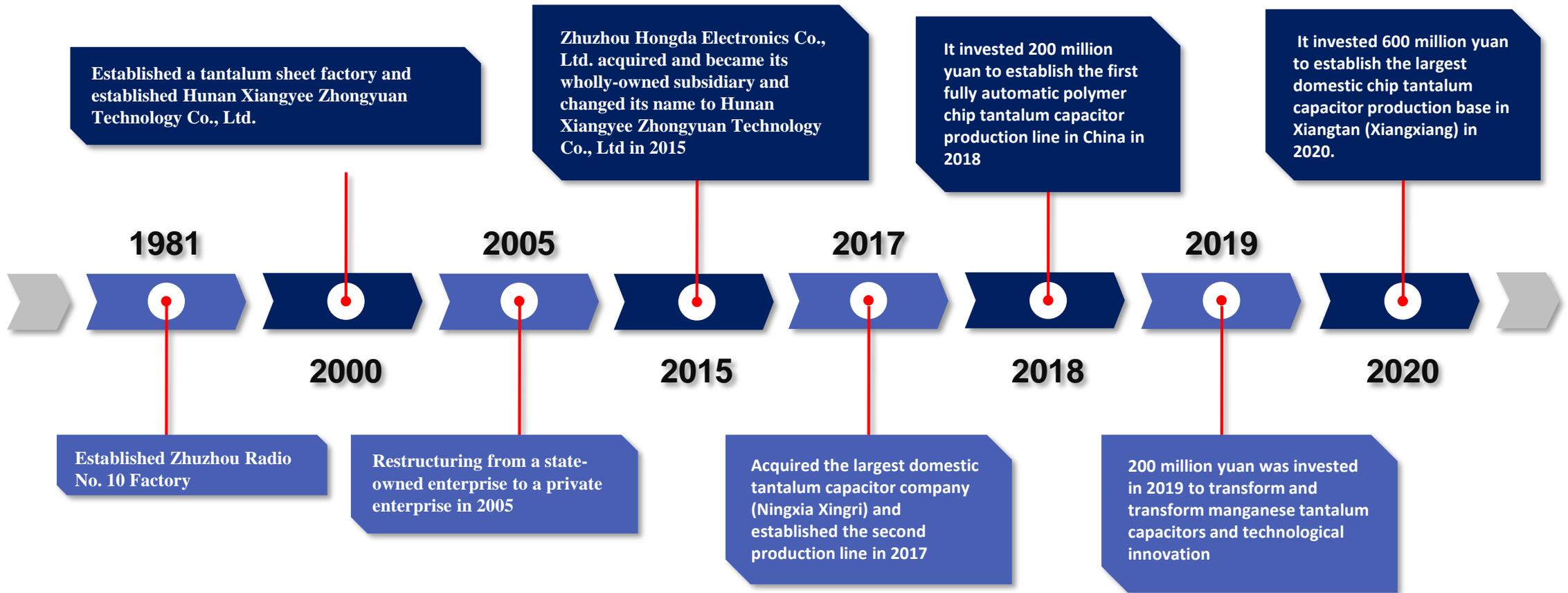
Build a first-class chip tantalum capacitor production and R&D base

- **Area:** Covers an area of 68 Mu, with a building area of 90340 m²
- **Investment Amount:** 60 million yuan
- **Main Layout:** chip tantalum capacitors, chip niobium oxide capacitors

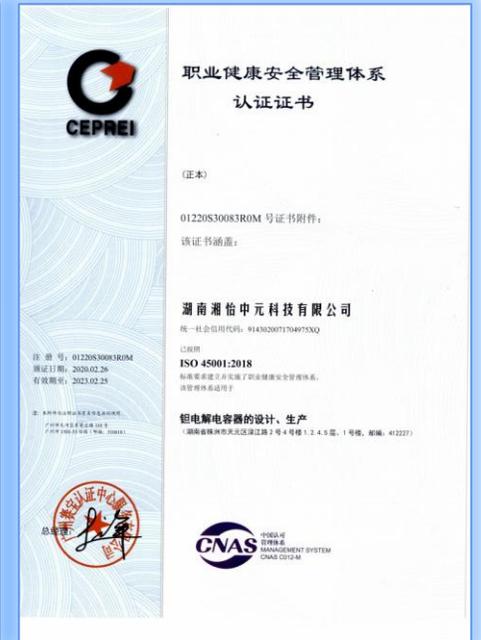
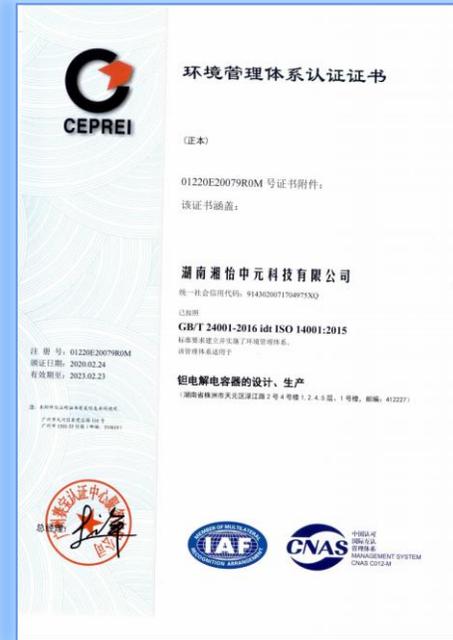
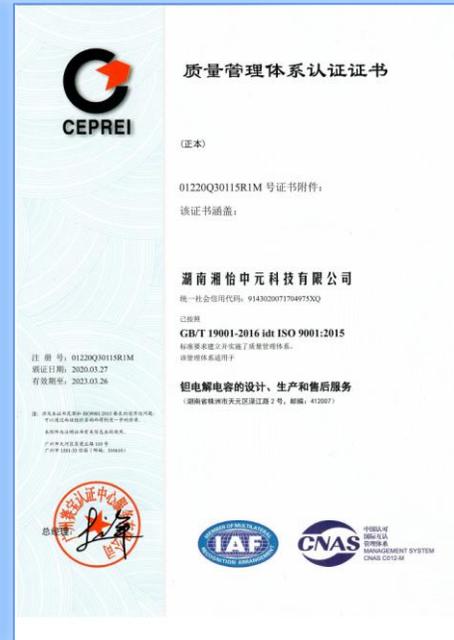
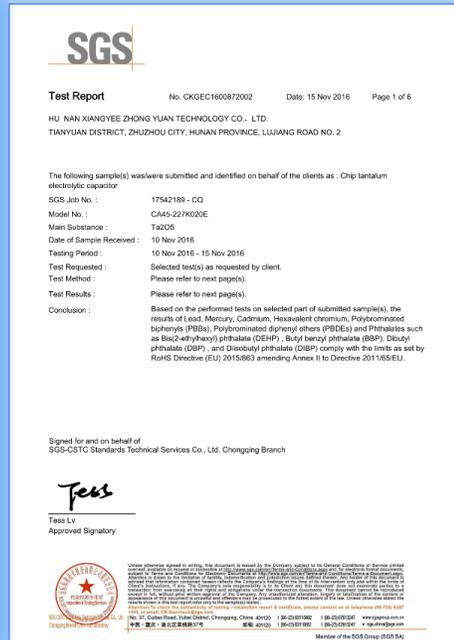


The head office has always been committed to creating a platform for R&D and innovation of high-tech electronic components, constantly introducing advanced talents and equipment, expanding to cover high-reliability niobium oxide capacitors, polymer tantalum capacitors, manganese tantalum dioxide capacitors, ceramic capacitors, film capacitors, inductors, resistors, integrated circuits and other products, providing customers with overall electronic components supply solutions.

Development Path



Qualification Certificate



**IATF16949
Auto Electronics**

**REACH, ROHS
Hazardous Substance
Identification**

**ISO9001-2015
Quality Management
System**

**ISO14001-2015
Environmental
Management System**

**ISO45001-2018
Occupational Health and
Safety Management System**

With strong technical force, rigorous work style, scientific enterprise management and other work concepts, the company makes all the indicators of its products meet industry standards and user needs, and has successively passed IATF16949, ISO9001, ISO14001, ISO45001 and other system certifications.

Company Profile

Product Introduction

Market Application

Development Plan

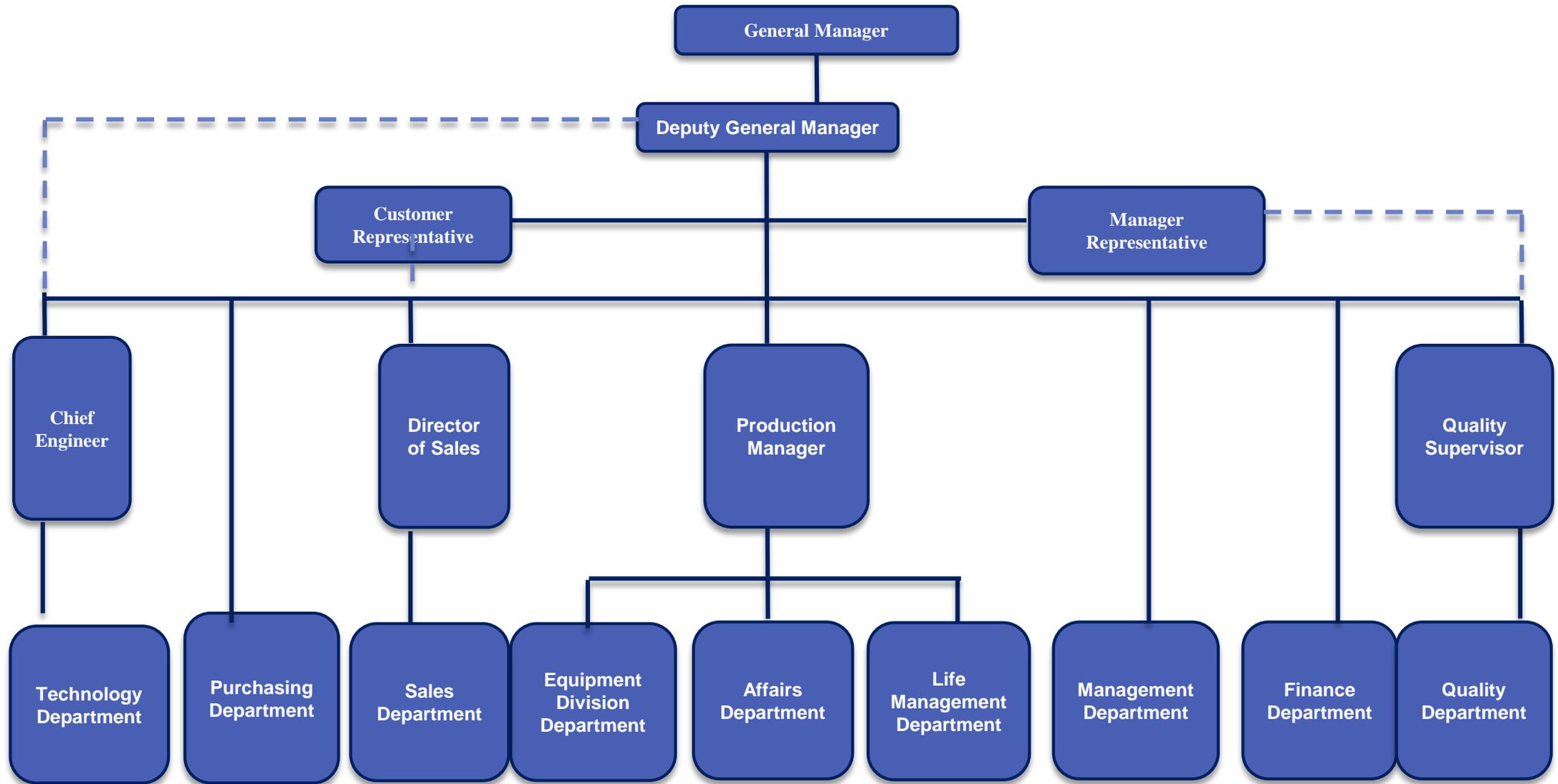
Production Capacity

The company has always been committed to creating a platform for R&D and innovation of high-tech electronic components, and continues to introduce advanced talents and equipment. Currently, it can stably supply high-reliability niobium oxide capacitors, polymer tantalum capacitors, manganese tantalum dioxide capacitors and other products.

The products produced by the company are mainly used in communications, security, medical electronics, automotive electronics, educational equipment, industrial control instruments, consumer electronics and other fields, and can also meet the special needs of drilling instrumentation, radar and other fields.

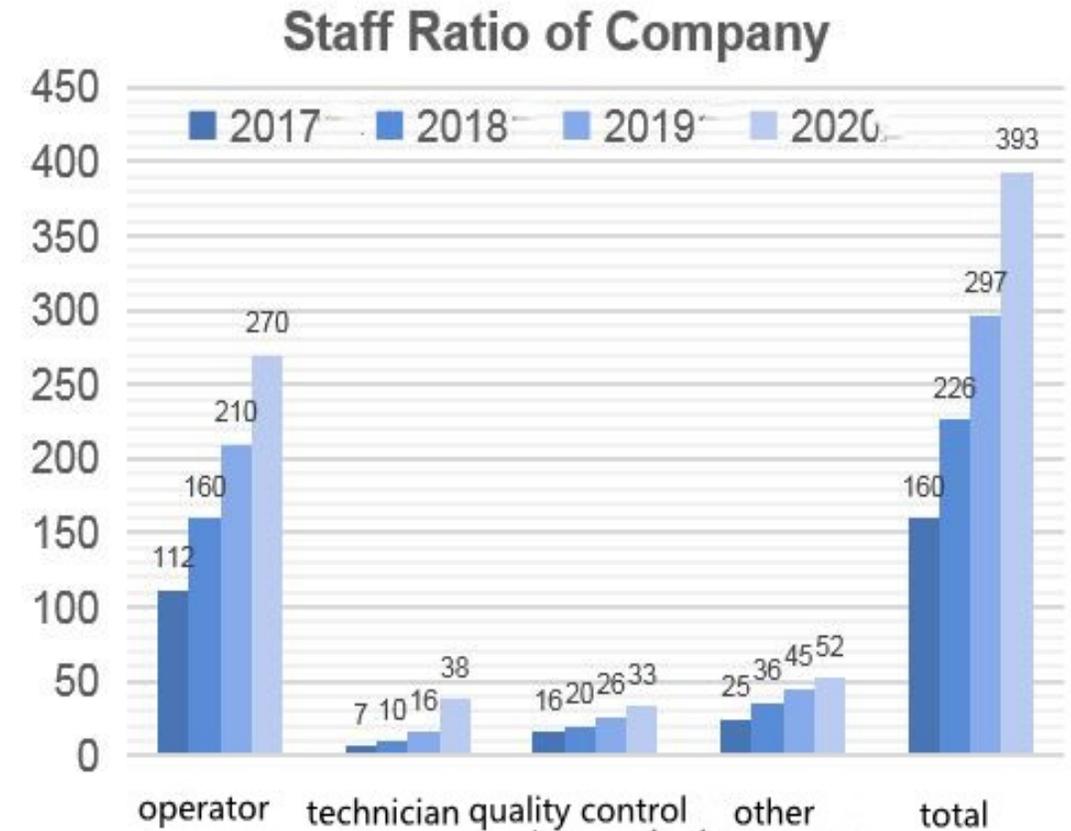


Organizational Structure



Personnel Composition

| Personnel Structure | 2017Year (Person) | 2018Year (Person) | 2019Year (Person) | 2020Year (Person) |
|---------------------|-------------------|-------------------|-------------------|-------------------|
| Operator | 112 | 160 | 210 | 270 |
| Technician | 7 | 10 | 16 | 38 |
| Quality Controller | 16 | 20 | 26 | 33 |
| Other | 25 | 36 | 45 | 52 |
| Total | 160 | 226 | 297 | 393 |





XIANGYEE

HUNAN XIANGYEE ZHONGYUAN TECHNOLOGY CO. LTD

02

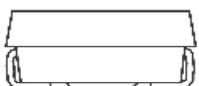
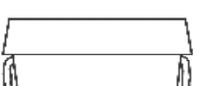
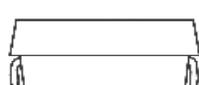
Part

Product Introduction

Product Dimension

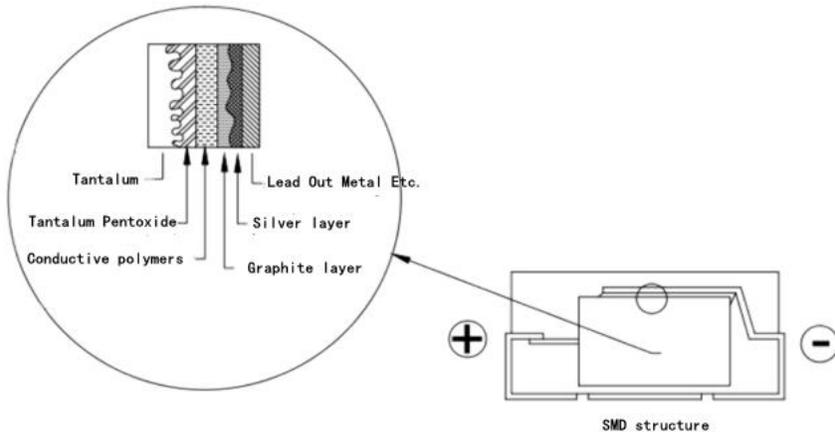
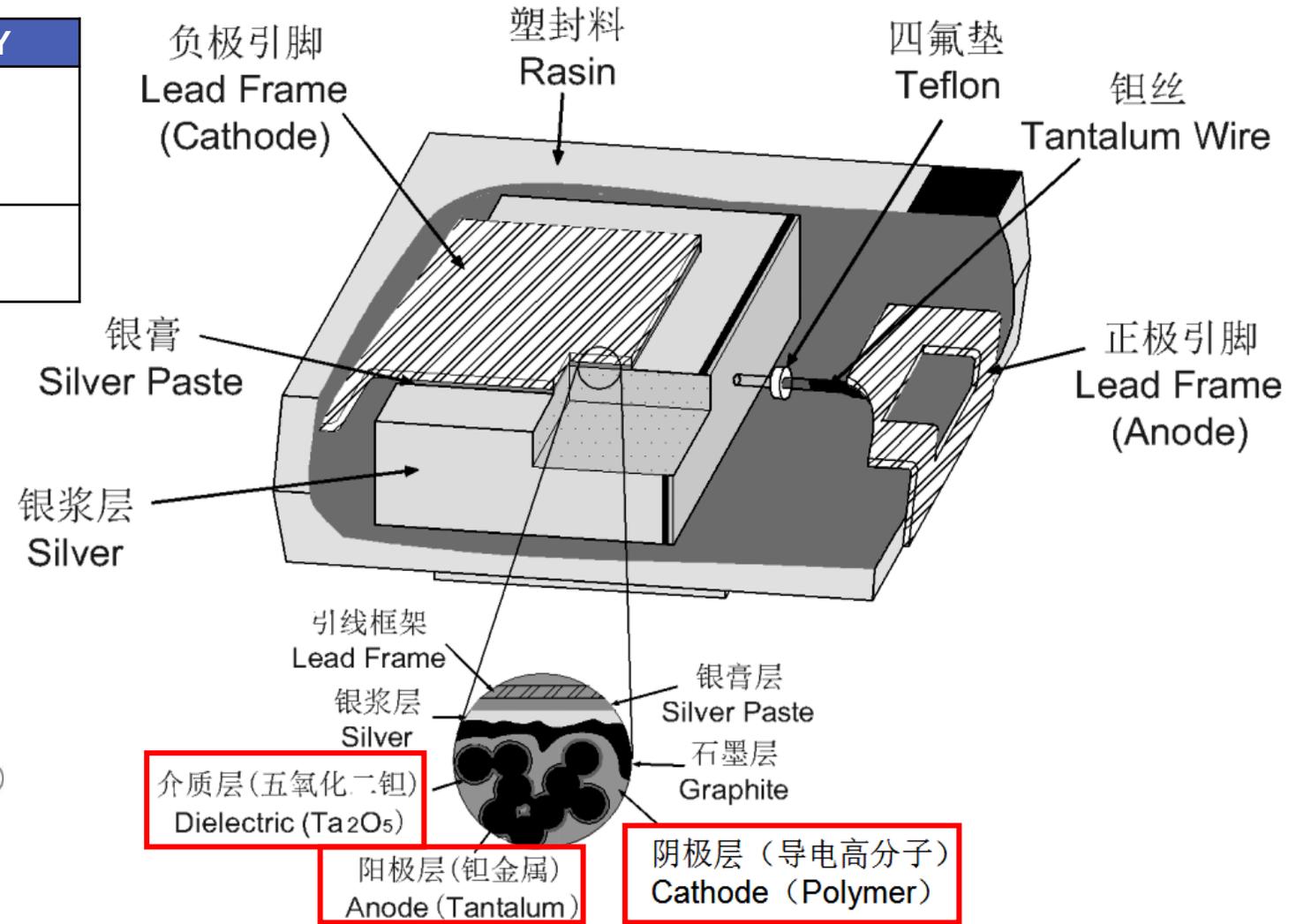
| EIA | Shell Number & Size (Unit: mm) | | | | | | | |
|------|--------------------------------|---------|-------|---------|-------------------|-----------|--------------------|---------|
| | AVX | | KEMET | | PANASONIC (SANYO) | | XiangYee ZhongYuan | |
| 3216 | K | 3216-10 | | | | | | |
| | S | 3216-12 | | | | | | |
| | A | 3216-18 | A | 3216-18 | A14 | 3216-14 | A | 3216-16 |
| 3528 | T | 3528-12 | T | 3528-12 | B1G、 B1S、 B1 | 3528-11 | | |
| | H | 3528-15 | M | 3528-15 | B15G | 3528-14 | | |
| | B | 3528-21 | B | 3528-19 | B2S、 B2 | 3528-19 | B | 3528-19 |
| 6032 | W | 6032-15 | U | 6032-15 | | | | |
| | F | 6032-20 | L | 6032-19 | | | | |
| | C | 6032-28 | C | 6032-25 | | | C | 6032-25 |
| 7343 | | | T | 7343-12 | D12 | 7343-1.15 | | |
| | X | 7343-15 | W | 7343-15 | D15E、 D15S、 D15 | 7343-14 | | |
| | Y | 7343-20 | V | 7343-19 | D2E、 D2 | 7343-19 | H | 7343-19 |
| | D | 7343-31 | D | 7343-28 | D3L | 7343-28 | D | 7343-28 |
| | | | Y | 7343-40 | D4 | 7343-38 | E | 7343-41 |
| | E | 7343-43 | X | 7343-43 | | | | |
| 7360 | | | J | 7360-15 | | | | |
| | | | H | 7360-20 | | | F | 7361-19 |
| | V | 7361-38 | | | | | V | 7361-36 |
| | U | 7361-43 | | | | | | |

Product Category

| Category | Executive Standard | Exterior Figure | Capacity Range(μ F) | Voltage Range(V) | Size Shell Number |
|----------|--------------------|--|--------------------------|------------------|------------------------|
| CA55 | QJ/PWV517-2013 |  | 0.68 ~ 1000 | 2.5 ~ 50 | A、 B、 C、 H、 D、 E、 F、 V |
| CA55H | QJ/PWV527-2019 |  | 0.47 ~ 220 | 2.5 ~ 50 | A、 B、 C、 H、 D、 E、 F、 V |
| CA45 | QJ/PWV109-2003 |  | 0.1 ~ 2200 | 2.5 ~ 50 | A、 B、 C、 D、 E、 V |
| QCA45 | QJ/XY-2015 |  | 0.1 ~ 680 | 4 ~ 50 | A、 B、 C、 H、 D、 E、 F、 V |
| CA45L | QJ/PWV305-2008 |  | 0.47 ~ 1000 | 4 ~ 50 | A、 B、 C、 H、 D、 E、 F、 V |
| CA45H | QJ/PWV326-2010 |  | 0.47 ~ 220 | 4 ~ 50 | A、 B、 C、 H、 D、 E、 F、 V |
| CN45 | QJ/XY122-2019 |  | 0.1 ~ 1000 | 4 ~ 16 | C、 H、 D、 E、 V |

CA55 Chip Conductive Polymer Solid Tantalum Capacitor

| XiangYee | AVX | KEMET | VISHAY |
|----------|---------|-------------------|--------|
| CA55 | TCJ、TCM | T520、T525 T530 | T55 |
| CA55H | TCJ、TCM | T520、T525 T530 | T55 |

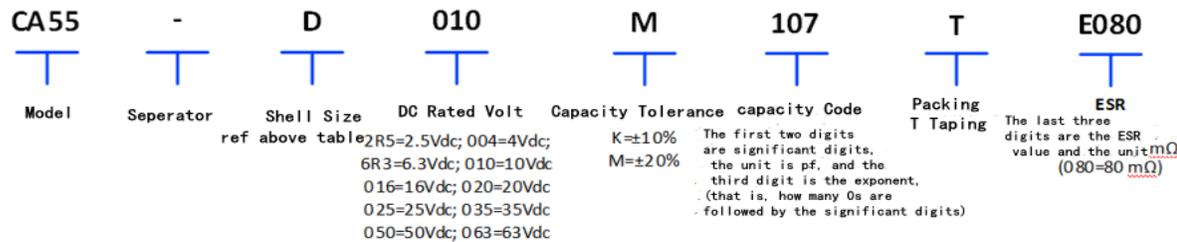


CA55 Chip Conductive Polymer Solid Tantalum Capacitor

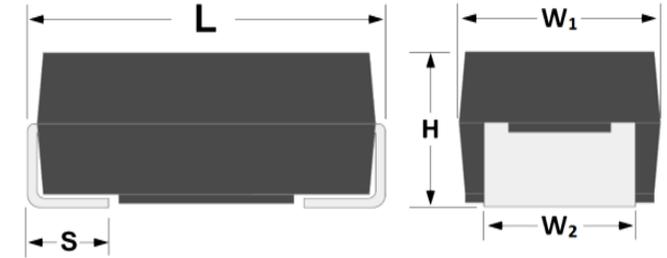
Product Features:

- ◆ With extremely low ESR and low ESL [equivalent series inductance], it can be used in higher frequency filter circuits;
- ◆ It will not burn or explode during accidental breakdown, will not cause fire and secondary breakdown effects, and has excellent safety;
- ◆ Using low-impedance switching power supply circuits, it is not sensitive to surge current and voltage. It only needs to be derated by 10-20% to ensure high safety and lower failure rate;
- ◆ Low internal resistance, higher ripple resistance, greatly reduced heat generated during filtering and high-power discharge, better filtering effect, and easier discharge waveform to meet technical requirements;
- ◆ The reliability is an order of magnitude higher than that of chip tantalum capacitors with manganese dioxide as the cathode;
- ◆ It can be used in high-ripple filter circuits and high-power high-frequency discharge circuits without substantial derating;
- ◆ Executive standard: QJ/PWV517-2013.

Product Naming:



Product Size:



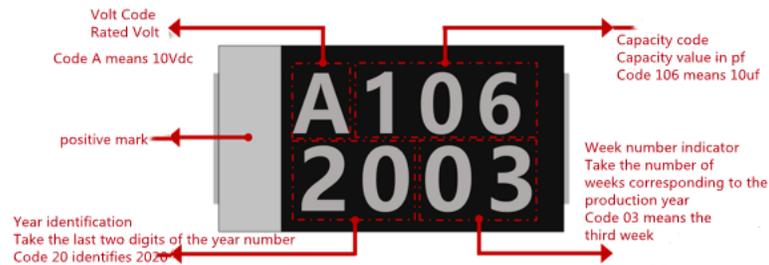
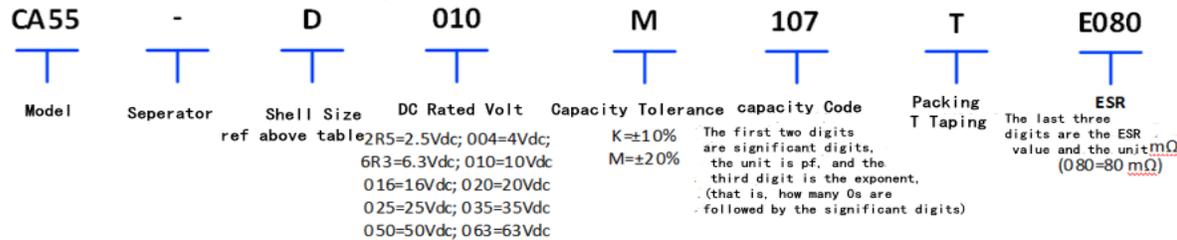
| Case Code | EIA Code | EIA Metric | L | W ₁ | H | S | W ₂ |
|-----------|----------|------------|-----------|----------------|-----------|-----------|----------------|
| A | 1206 | 3216-16 | 3.20±0.20 | 1.60±0.20 | 1.60±0.20 | 0.80±0.20 | 1.20±0.20 |
| B | 1210 | 3528-19 | 3.50±0.20 | 2.80±0.20 | 1.90±0.20 | 0.80±0.20 | 2.20±0.20 |
| C | 2312 | 6032-25 | 6.00±0.30 | 3.20±0.30 | 2.50±0.30 | 1.30±0.30 | 2.20±0.30 |
| H | 2917 | 7343-20 | 7.30±0.30 | 4.30±0.30 | 2.00±0.30 | 1.30±0.30 | 2.40±0.30 |
| D | 2917 | 7343-28 | 7.30±0.30 | 4.30±0.30 | 2.80±0.30 | 1.30±0.30 | 2.40±0.30 |
| E | 2917 | 7343-43 | 7.30±0.30 | 4.30±0.30 | 4.10±0.30 | 1.30±0.30 | 2.40±0.30 |
| F | 2924 | 7361-19 | 7.30±0.30 | 6.10±0.30 | 1.90±0.30 | 1.35±0.30 | 4.00±0.30 |
| V | 2924 | 7361-36 | 7.30±0.30 | 6.10±0.30 | 3.60±0.30 | 1.35±0.30 | 3.00±0.30 |

| technical parameter | All technical parameters are measured at 1 atmosphere pressure and +25°C |
|----------------------------------|--|
| Operating temperature range | -55°C ~ +125°C |
| Nominal capacity range | 0.68 ~ 1000 μ F at 100 Hz |
| Capacity tolerance | M 级(±20%); |
| DC leakage current DCL | $C_R \leq 16V$, $DCL=0.1CV$ (μ A); $C_R \geq 20V$, $DCL=0.01CV$, Charge for 5 minutes at rated voltage |
| Equivalent series resistance ESR | See "Product Code and Specification Parameters" table |
| Pin plating | Pure tin plating (standard), gold plating or tin-lead plating should be separately requested |
| Resistance to welding heat | Not more than $3 \times 260^\circ C$, 10s reflow soldering |

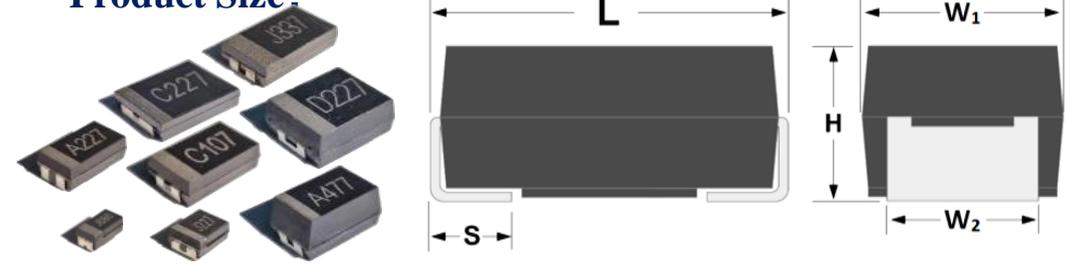
CA55H High Temperature Resistant Chip Conductive Polymer Tantalum Capacitor

Product Features

- ◆ Due to the use of high temperature resistant anode and cathode materials, the maximum allowable operating temperature can reach 150 °C, and the leakage current is small;
- ◆ With extremely low ESR and low ESL [equivalent series inductance], it can be used in higher frequency filter circuits;
- ◆ It will not burn or explode during accidental breakdown, will not cause fire and secondary breakdown effects, and has excellent safety;
- ◆ Using low-impedance switching power supply circuits, it is not sensitive to surge current and voltage. It only needs to be derated by 10-20% to ensure high safety and lower failure rate;
- ◆ Low internal resistance, higher ripple resistance, greatly reduced heat generated during filtering and high-power discharge, better filtering effect, and easier discharge waveform to meet technical requirements;
- ◆ The reliability is an order of magnitude higher than that of chip tantalum capacitors with manganese dioxide as the cathode;
- ◆ Can be used in high-ripple filter circuits and high-power high-frequency discharge circuits without significant derating
- ◆ Executive standard: QJ/PWV517-2013.



Product Size:

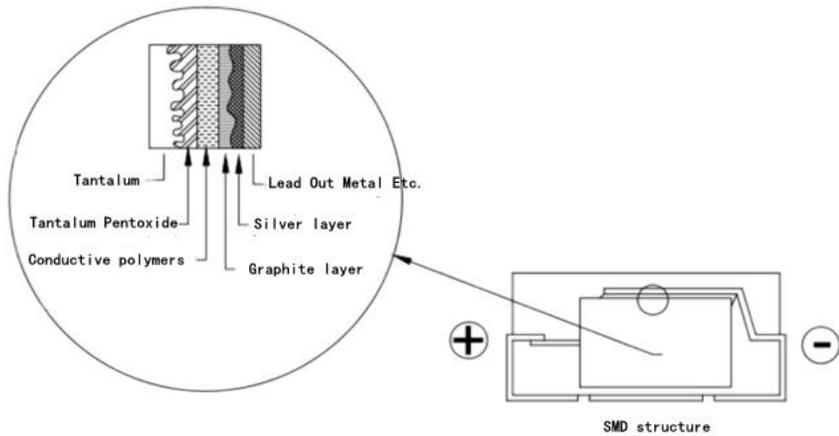
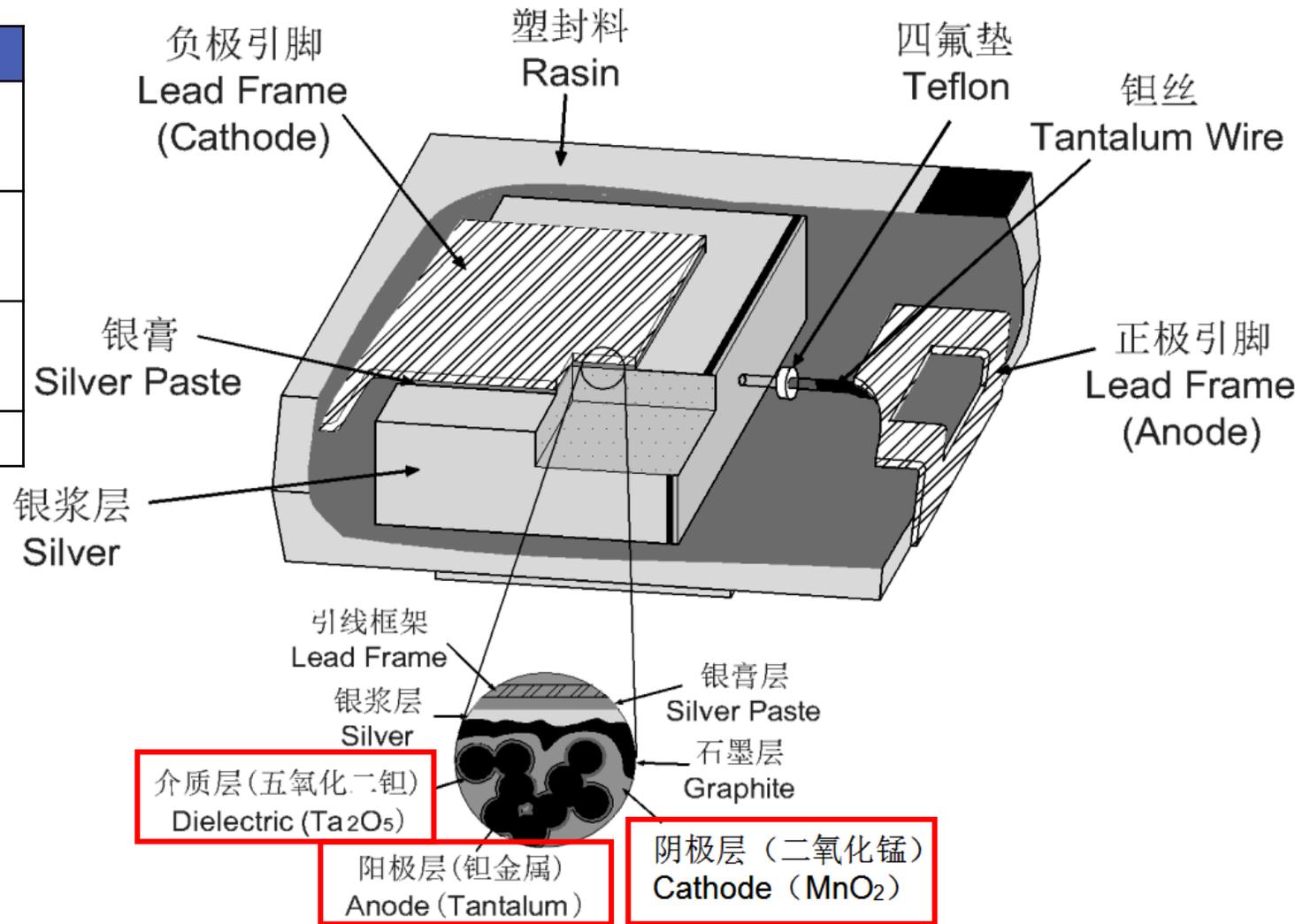


| Case Code | EIA Code | EIA Metric | L | W ₁ | H | S | W ₂ |
|-----------|----------|------------|-----------|----------------|-----------|-----------|----------------|
| A | 1206 | 3216-16 | 3.20±0.20 | 1.60±0.20 | 1.60±0.20 | 0.80±0.20 | 1.20±0.20 |
| B | 1210 | 3528-19 | 3.50±0.20 | 2.80±0.20 | 1.90±0.20 | 0.80±0.20 | 2.20±0.20 |
| C | 2312 | 6032-25 | 6.00±0.30 | 3.20±0.30 | 2.50±0.30 | 1.30±0.30 | 2.20±0.30 |
| H | 2917 | 7343-20 | 7.30±0.30 | 4.30±0.30 | 2.00±0.30 | 1.30±0.30 | 2.40±0.30 |
| D | 2917 | 7343-28 | 7.30±0.30 | 4.30±0.30 | 2.80±0.30 | 1.30±0.30 | 2.40±0.30 |
| E | 2917 | 7343-43 | 7.30±0.30 | 4.30±0.30 | 4.10±0.30 | 1.30±0.30 | 2.40±0.30 |
| F | 2924 | 7361-19 | 7.30±0.30 | 6.10±0.30 | 1.90±0.30 | 1.35±0.30 | 4.00±0.30 |
| V | 2924 | 7361-36 | 7.30±0.30 | 6.10±0.30 | 3.60±0.30 | 1.35±0.30 | 3.00±0.30 |

| technical parameter | All technical parameters are measured at 1 atmosphere pressure and +25°C |
|----------------------------------|---|
| Operating temperature range | -55°C ~ +125°C |
| Nominal capacity range | 0.68 ~ 1000 μ F at 100 Hz |
| Capacity tolerance | M 级(±20%); |
| DC leakage current DCL | $C_R \leq 16V$, DCL=0.1CV (μ A); $C_R \geq 20V$, DCL=0.01CV, Charge for 5 minutes at rated voltage |
| Equivalent series resistance ESR | See "Product Code and Specification Parameters" table |
| Pin plating | Pure tin plating (standard), gold plating or tin-lead plating should be separately requested |
| Resistance to welding heat | Not more than 3×260°C, 10s reflow soldering |

CA45 Chip Solid Electrolyte Tantalum Capacitor

| XiangYee | AVX | KEMET | VISHAY |
|----------|----------------|------------------------|--------|
| CA45 | TAJ、F93 TLJ | T489、T490 T491、T493 | 293D |
| QCA45 | TAJ F93-AJ6 | T489、T490 T491 | |
| CA45L | TPS、F91 TPM | T494、T495 T510、TSM | 593D |
| CA45H | THJ | T498 | TH3 |

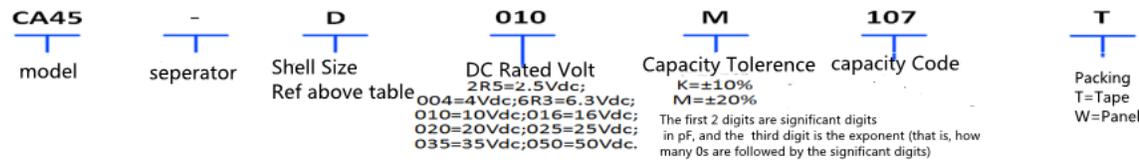


CA45 Chip Solid Electrolyte Tantalum Capacitor

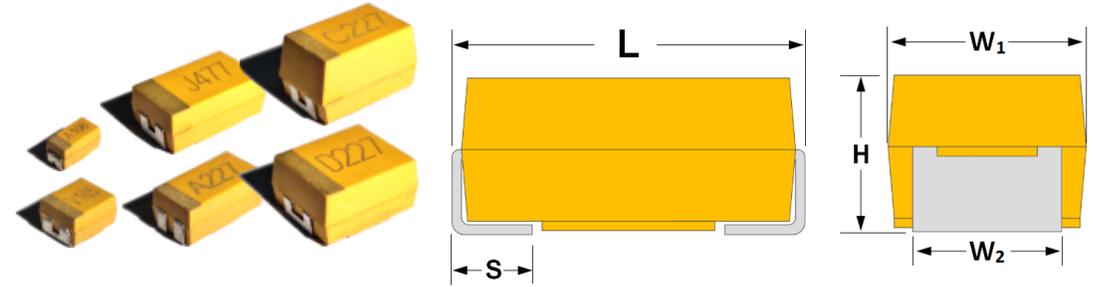
Product Features:

- ◆ It has a very high working electric field strength, and is larger than any type of capacitor, so as to ensure its miniaturization;
- ◆ Larger capacity can be easily obtained, and there are few competitors in power supply filtering, AC bypass and other purposes;
- ◆ It has unidirectional conductivity, the so-called "polarity". When applied, the current should be connected in the positive and negative directions of the power supply. "If it is connected incorrectly, not only the capacitor will not work, but also the leakage current is very large, the core will heat up in a short time, destroying the oxide film and then failing;
- ◆ The working voltage has a certain upper limit flat value, but the shortcomings in this regard can be compensated by the transistor or integrated circuit power supply;
- ◆ It has the performance of storing power, charging and discharging;
- ◆ Exective Stardard: QJ/PWV109-2003.

Product Naming



Product Size:



| Case Code | EIA Code | EIA Metric | L | W ₁ | H | S | W ₂ |
|-----------|----------|------------|-----------|----------------|-----------|-----------|----------------|
| A | 1206 | 3216-16 | 3.20±0.20 | 1.60+0.20 | 1.60±0.20 | 0.80±0.20 | 1.20±0.20 |
| B | 1210 | 3528-19 | 3.50±0.20 | 2.80±0.20 | 1.90±0.20 | 0.80±0.20 | 2.20±0.20 |
| C | 2312 | 6032-25 | 6.00±0.20 | 3.20±0.20 | 2.50±0.20 | 1.30±0.20 | 2.20±0.20 |
| D | 2917 | 7343-28 | 7.30±0.20 | 4.30±0.20 | 2.80±0.20 | 1.30±0.20 | 2.40±0.20 |
| E | 2917 | 7343-43 | 7.30±0.40 | 4.30±0.40 | 4.10±0.40 | 1.30±0.20 | 2.40±0.20 |
| V | 2924 | 7361-36 | 7.30±0.40 | 6.10±0.40 | 3.60±0.40 | 1.35±0.20 | 3.00±0.20 |

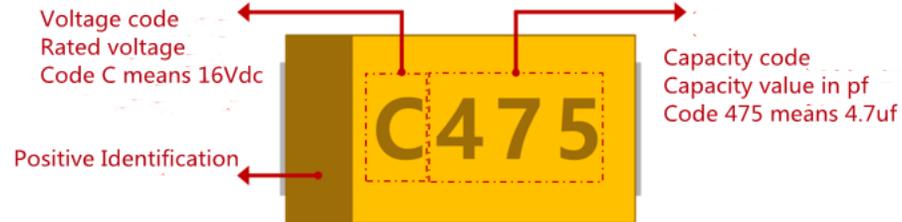
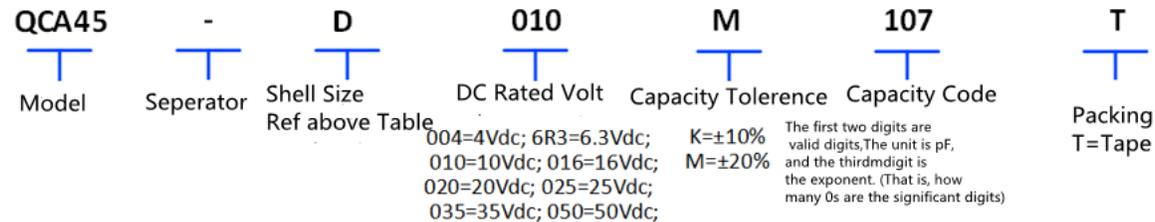
| technical parameter | All technical parameters are measured at 1 atmosphere pressure and +25°C | | | | | | | | | |
|--------------------------------|--|-----|-----|-----|-----|----|----|----|----|----|
| Capacity range | 0.47μF ~ 2200μF | | | | | | | | | |
| Capacity tolerance | ±10%; ±20%; | | | | | | | | | |
| Rated volt(V _R) | ≤+85°C | 2.5 | 4 | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
| Category volt(V _C) | ≤+125°C | 1.7 | 2.7 | 4 | 6.3 | 10 | 15 | 17 | 23 | 33 |
| Surge volt (V _S) | ≤+85°C | 3.3 | 5.2 | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| Surge volt(V _S) | ≤+125°C | 2.2 | 3.4 | 5 | 8 | 13 | 16 | 20 | 28 | 40 |
| Temperature range | -55°C to +125°C | | | | | | | | | |
| Lead plating | Tin plating (standard), gold plating or tin-lead plating are required separately | | | | | | | | | |

QCA45 Automotive Grade Chip Solid Electrolytic Tantalum Capacitor

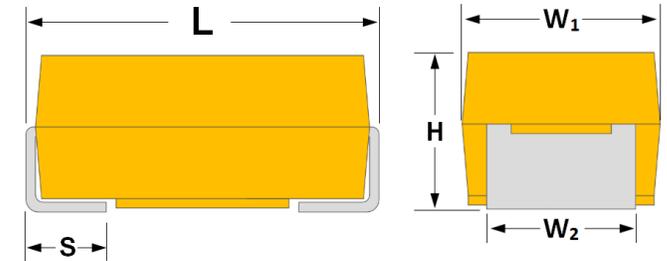
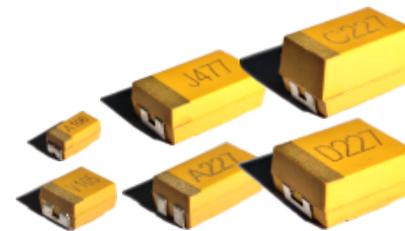
Product Features:

- ◆ Epoxy resin molded package, chip shape, easy to integrate, polarity, all aspects are better than conventional chip tantalum capacitors;
- ◆ Small size and light weight, which can save the circuit board space required for large capacitance, energy storage, filtering and decoupling;
- ◆ Stable electrical and storage performance, up to 125°C under voltage derating, long working life, high reliability;
- ◆ Typical applications include terminal decoupling and filtering applications in automobiles, such as DC/DC converters, portable electronic equipment, communication electronic equipment, and control units;
- ◆ Executive Standard: QJ/XY06-2015.

Product Naming



Product Size:



| Case Code | EIA Code | EIA Metric | L | W ₁ | H | S | W ₂ |
|-----------|----------|------------|-----------|----------------|-----------|-----------|----------------|
| A | 1206 | 3216-16 | 3.20±0.20 | 1.60+0.20 | 1.60±0.20 | 0.80±0.20 | 1.20±0.20 |
| B | 1210 | 3528-19 | 3.50±0.20 | 2.80±0.20 | 1.90±0.20 | 0.80±0.20 | 2.20±0.20 |
| C | 2312 | 6032-25 | 6.00±0.30 | 3.20±0.30 | 2.50±0.30 | 1.30±0.30 | 2.20±0.30 |
| H | 2917 | 7343-20 | 7.30±0.30 | 4.30±0.30 | 2.00±0.30 | 1.30±0.30 | 2.40±0.30 |
| D | 2917 | 7343-28 | 7.30±0.30 | 4.30±0.30 | 2.80±0.30 | 1.30±0.30 | 2.40±0.30 |
| E | 2917 | 7343-43 | 7.30±0.30 | 4.30±0.30 | 4.10±0.30 | 1.30±0.30 | 2.40±0.30 |
| F | 2924 | 7361-19 | 7.30±0.30 | 6.10±0.30 | 1.90±0.30 | 1.35±0.30 | 4.00±0.30 |
| V | 2924 | 7361-36 | 7.30±0.30 | 6.10±0.30 | 3.60±0.30 | 1.35±0.30 | 3.00±0.30 |

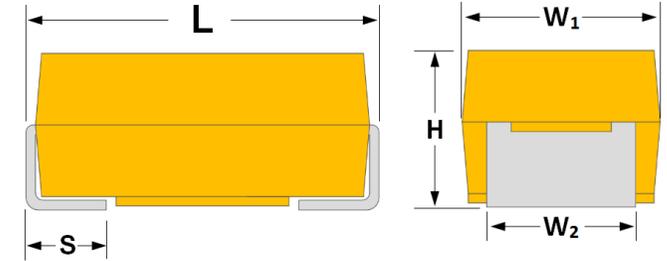
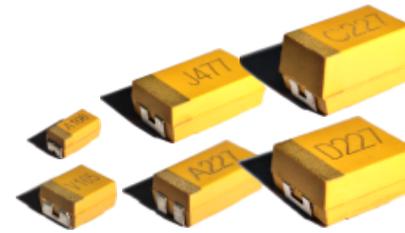
| technical parameter | All technical parameters are measured at 1 atmosphere pressure and +25°C | | | | | | | | |
|---|--|-----|-----|-----|----|----|----|----|----|
| Capacity range | 0.1μF ~ 680μF | | | | | | | | |
| Capacity tolerance | ±10%; ±20%; | | | | | | | | |
| Rated volt(V _R) (V _R) | ≤+85°C | 4 | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
| Category volt(V _C) | ≤+125°C | 2.7 | 4 | 6.3 | 10 | 15 | 17 | 23 | 33 |
| Surge volt (V _S) | ≤+85°C | 5.2 | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| Surge volt (V _S) | ≤+125°C | 3.4 | 5 | 8 | 13 | 16 | 20 | 28 | 40 |
| Temperature range | -55°C to +125°C | | | | | | | | |
| Lead plating | Tin plating (standard), gold plating or tin-lead plating are required separately | | | | | | | | |

CA45L Low ESR Chip Solid Electrolytic Tantalum Capacitor

Product Features:

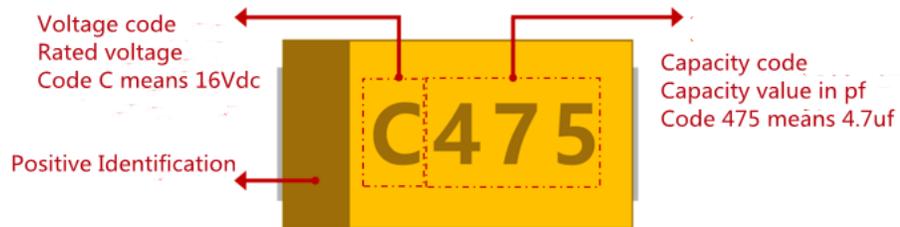
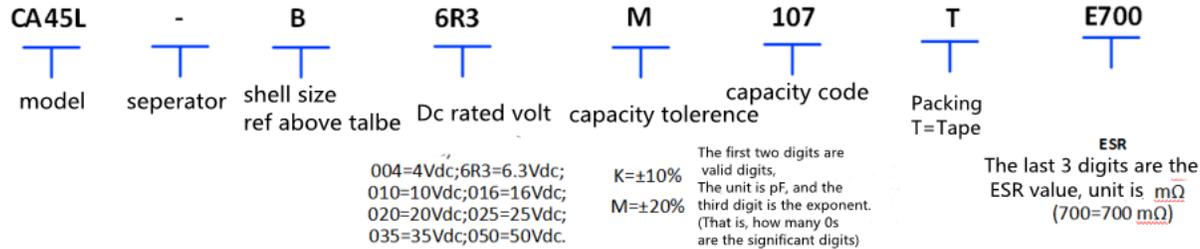
- ◆ Epoxy resin molded package, chip shape, small size, light weight, easy to integrate, and polarity;
- ◆ Compared with conventional chip tantalum capacitors, the ESR is lower, the electrical performance and storage performance are stable, and the working life is long;
- ◆ Typical applications include terminal decoupling and filtering applications in industrial automation and automotive electronics, such as DC/DC converters, portable electronic equipment, communication electronic equipment, and control units;
- ◆ Executive standard: QJ/PWV305-2008.

Product Size:



| Case Code | EIA Code | EIA Metric | L | W ₁ | H | S | W ₂ |
|-----------|----------|------------|-----------|----------------|-----------|-----------|----------------|
| A | 1206 | 3216-16 | 3.20±0.20 | 1.60+0.20 | 1.60±0.20 | 0.80±0.20 | 1.20±0.20 |
| B | 1210 | 3528-19 | 3.50±0.20 | 2.80±0.20 | 1.90±0.20 | 0.80±0.20 | 2.20±0.20 |
| C | 2312 | 6032-25 | 6.00±0.30 | 3.20±0.30 | 2.50±0.30 | 1.30±0.30 | 2.20±0.30 |
| H | 2917 | 7343-20 | 7.30±0.30 | 4.30±0.30 | 2.00±0.30 | 1.30±0.30 | 2.40±0.30 |
| D | 2917 | 7343-28 | 7.30±0.30 | 4.30±0.30 | 2.80±0.30 | 1.30±0.30 | 2.40±0.30 |
| E | 2917 | 7343-43 | 7.30±0.30 | 4.30±0.30 | 4.10±0.30 | 1.30±0.30 | 2.40±0.30 |
| F | 2924 | 7361-19 | 7.30±0.30 | 6.10±0.30 | 1.90±0.30 | 1.35±0.30 | 4.00±0.30 |
| V | 2924 | 7361-36 | 7.30±0.30 | 6.10±0.30 | 3.60±0.30 | 1.35±0.30 | 3.00±0.30 |

Product Naming



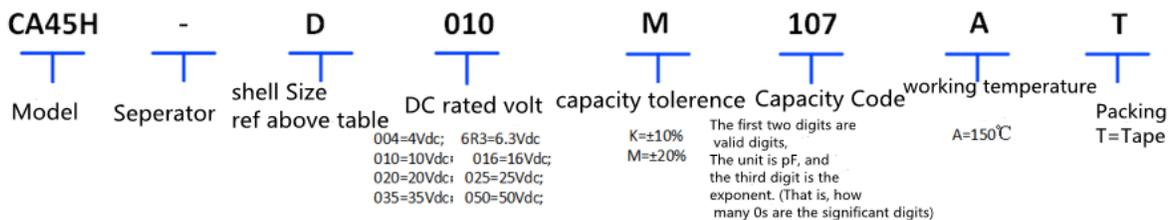
| technical parameter | All technical parameters are measured at 1 atmosphere pressure and +25°C | | | | | | | | |
|---|--|-----|-----|-----|----|----|----|----|----|
| Capacity range | 0.1μF ~ 680μF | | | | | | | | |
| Capacity tolerance | ±10%; ±20%; | | | | | | | | |
| Rated volt(V _R) (V _R) | ≤+85°C | 4 | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
| Category volt(V _C) | ≤+125°C | 2.7 | 4 | 6.3 | 10 | 15 | 17 | 23 | 33 |
| Surge volt (V _S) | ≤+85°C | 5.2 | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| Surge volt (V _S) | ≤+125°C | 3.4 | 5 | 8 | 13 | 16 | 20 | 28 | 40 |
| Temperature range | -55°C to +125°C | | | | | | | | |
| Lead plating | Tin plating (standard), gold plating or tin-lead plating are required separately | | | | | | | | |

CA45H High Temperature Resistant Chip Solid Electrolytic Tantalum Capacitor

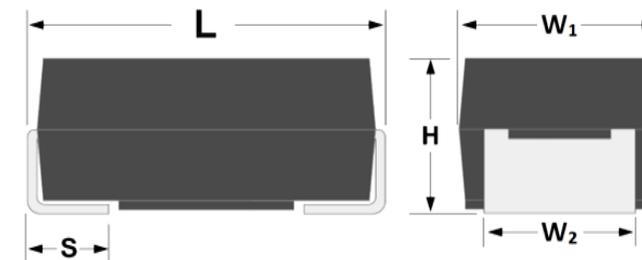
Product Features:

- ◆ Epoxy resin molded package, chip shape, small size, light weight, easy to integrate, polarity;
- ◆ Working temperature can reach 150°C, stable electrical and storage performance, long working life, high reliability;
- ◆ Typical applications include terminal decoupling and filtering applications in industry and automobiles, such as DC/DC converters, portable electronic equipment, communication electronic equipment and control units equal to 150°C high temperature environment;
- ◆ Executive standard: QJ/PWV326-2010.

Product Naming



Product Size:

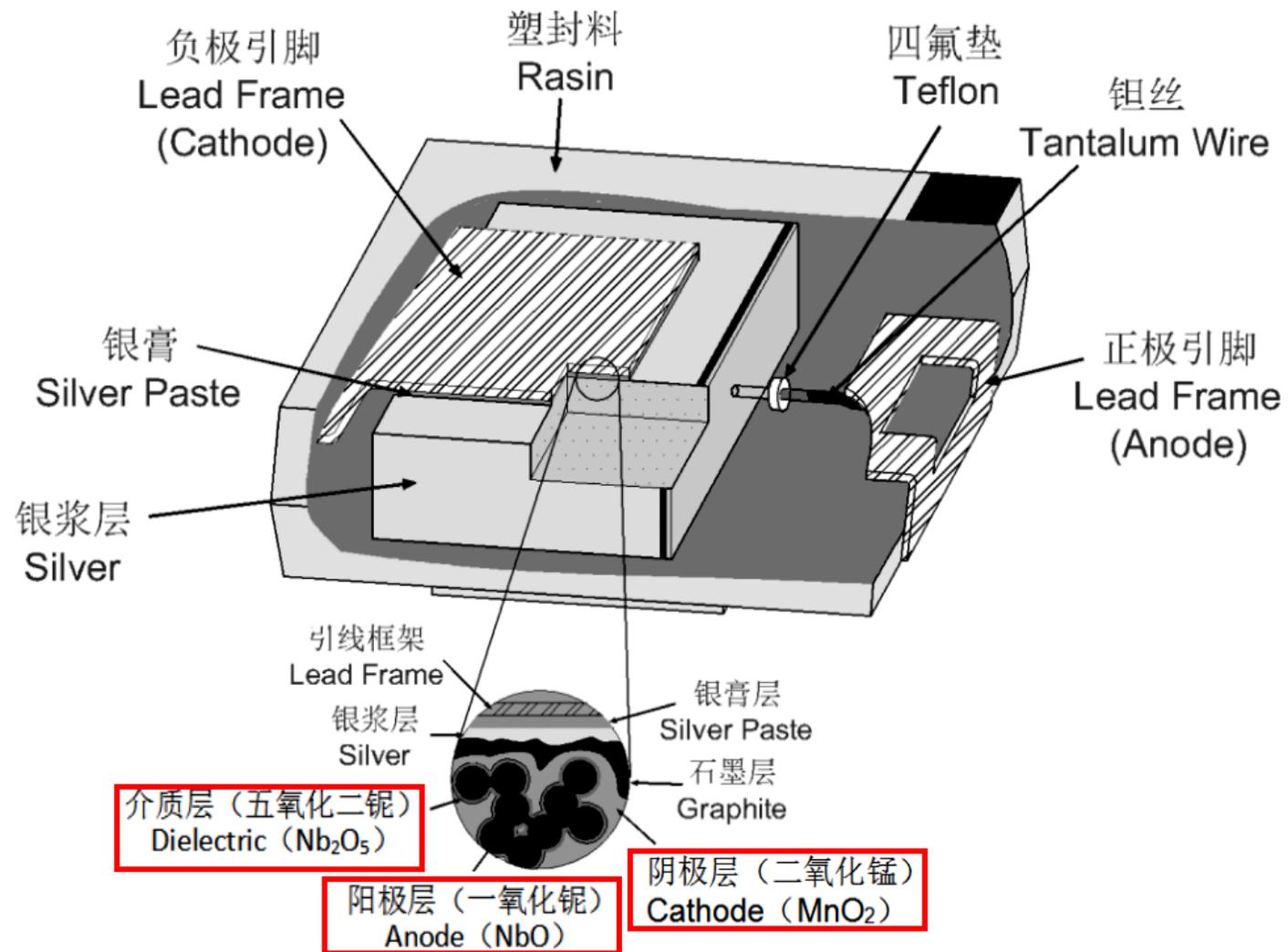
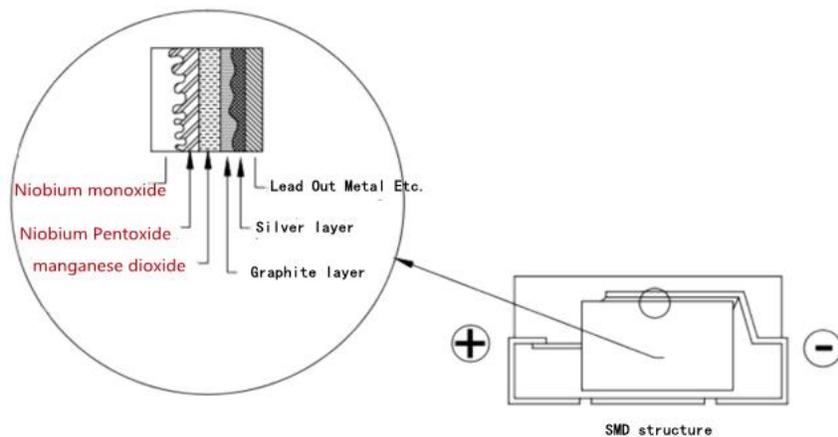


| Case Code | EIA Code | EIA Metric | L | W ₁ | H | S | W ₂ |
|-----------|----------|------------|-----------|----------------|-----------|-----------|----------------|
| A | 1206 | 3216-16 | 3.20±0.20 | 1.60+0.20 | 1.60±0.20 | 0.80±0.20 | 1.20±0.20 |
| B | 1210 | 3528-19 | 3.50±0.20 | 2.80±0.20 | 1.90±0.20 | 0.80±0.20 | 2.20±0.20 |
| C | 2312 | 6032-25 | 6.00±0.30 | 3.20±0.30 | 2.50±0.30 | 1.30±0.30 | 2.20±0.30 |
| H | 2917 | 7343-20 | 7.30±0.30 | 4.30±0.30 | 2.00±0.30 | 1.30±0.30 | 2.40±0.30 |
| D | 2917 | 7343-28 | 7.30±0.30 | 4.30±0.30 | 2.80±0.30 | 1.30±0.30 | 2.40±0.30 |
| E | 2917 | 7343-43 | 7.30±0.30 | 4.30±0.30 | 4.10±0.30 | 1.30±0.30 | 2.40±0.30 |
| F | 2924 | 7361-19 | 7.30±0.30 | 6.10±0.30 | 1.90±0.30 | 1.35±0.30 | 4.00±0.30 |
| V | 2924 | 7361-36 | 7.30±0.30 | 6.10±0.30 | 3.60±0.30 | 1.35±0.30 | 3.00±0.30 |

| technical parameter | All technical parameters are measured at 1 atmosphere pressure and +25°C | | | | | | | | |
|---|--|-----|-----|-----|----|----|----|----|----|
| Capacity range | 0.1μF ~ 680μF | | | | | | | | |
| Capacity tolerance | ±10%; ±20%; | | | | | | | | |
| Rated volt(V _R) (V _R) | ≤+85°C | 4 | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
| Category volt(V _C) | ≤+125°C | 2.7 | 4 | 6.3 | 10 | 15 | 17 | 23 | 33 |
| Surge volt (V _S) | ≤+85°C | 5.2 | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| Surge volt (V _S) | ≤+125°C | 3.4 | 5 | 8 | 13 | 16 | 20 | 28 | 40 |
| Temperature range | -55°C to +125°C | | | | | | | | |
| Lead plating | Tin plating (standard), gold plating or tin-lead plating are required separately | | | | | | | | |

CN45 chip solid electrolyte niobium oxide capacitor

| XiangYee | AVX | KEMET | VISHAY |
|----------|-------------------|-------|--------|
| CN45 | NOJ NLJ NOS | / | / |

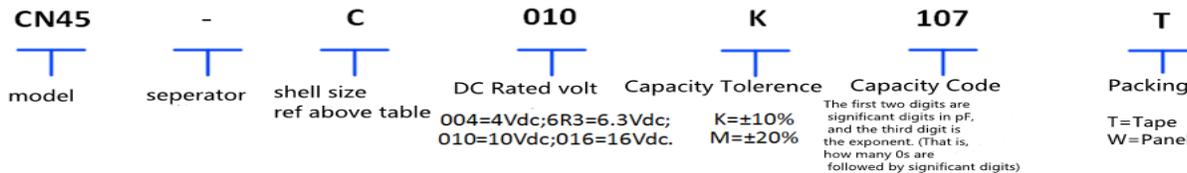


CN45 chip solid electrolyte niobium oxide capacitor

Product Features:

- ◆ The anode of this product uses niobium monoxide as the anode substrate, which has a sense of shock to the DC surge impact of the switching power supply circuit;
- ◆ It has strong resistance to DC surges, does not burn and explode, and has an order of magnitude higher reliability than tantalum capacitors, which is close to the level of safety capacitors, which can meet the high safety requirements of highly reliable power circuits;
- ◆ With excellent resistance to DC surge and higher AC ripple resistance, it is suitable for circuits with high ripple AC signals and large DC surge currents;
- ◆ When using a low-impedance switching power supply circuit, compared with tantalum capacitors, there is no need to apply more derating voltage, only 10% derating can meet the high reliability and safety requirements, and accidental breakdown requires very large Current, and will show a resistance mode above 1K, will not cause continuous breakdown, used in switching power supply circuits with high surge voltage and current, because there is almost no need to derate, 10V products can replace tantalum capacitors below 25V for safe use;
- ◆ The size and capacity series are the same as chip tantalum capacitors, which can replace chip tantalum capacitors and ceramic capacitors with a working voltage less than or equal to 10V. It can be used in primary and secondary power circuits as filtering and energy storage charging and discharging, with perfect safety;
- ◆ Executive standard: QJ/XY122-2019.

Product Naming



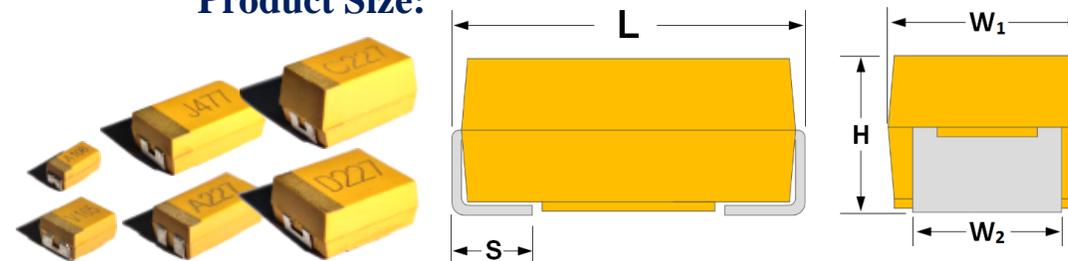
Voltage code
Rated voltage
Code C means 16Vdc

Capacity code
Capacity value in pf
Code 475 means 4.7uf

Positive Identification



Product Size:



| Case Code | EIA Code | EIA Metric | L | W ₁ | H | S | W ₂ |
|-----------|----------|------------|-----------|----------------|-----------|-----------|----------------|
| C | 2312 | 6032-25 | 6.00±0.40 | 3.20±0.40 | 2.50±0.40 | 1.30±0.20 | 2.20±0.20 |
| D | 2817 | 7343-28 | 7.30±0.40 | 4.30±0.40 | 2.80±0.40 | 1.30±0.20 | 2.40±0.20 |
| H | 2817 | 7343-21 | 7.30±0.40 | 4.30±0.40 | 2.10±0.40 | 1.30±0.20 | 2.40±0.20 |
| E | 2817 | 7343-40 | 7.30±0.40 | 4.30±0.40 | 4.10±0.40 | 1.30±0.20 | 2.40±0.20 |
| V | 2823 | 7360-36 | 7.30±0.40 | 6.10±0.40 | 3.60±0.40 | 1.35±0.20 | 3.00±0.20 |

| Nominal capacitance CR (μF) | Range of capacitance change (%) | | | Maximum value | | | | | |
|-----------------------------|---------------------------------|------|-------|---------------------------------|------|------|-------|----------------------|------------------|
| | | | | Tangent value of loss angle (%) | | | | Leakage current (μA) | |
| | -55°C | 85°C | 125°C | -55°C | 25°C | 85°C | 125°C | 85°C | 125°C |
| ≤1.0 | | | | 6 | 4 | 6 | | 20I ₀ | 25I ₀ |
| 1.5 ~ 68 | - 12 | + 10 | + 15 | 10 | 6 | 10 | | | |
| 100 ~ 1000 | | | | 12 | 8 | 12 | | | |
| Rated voltage (V) | | | | 4 | 6.3 | 10 | | 16 | |
| Voltage code | | | | G | J | A | | C | |
| Derating voltage (V) | | | | 2.5 | 4 | 6.3 | | 10 | |

Company Profile

Product Introduction

Market Application

Development Plan

Development Trend



01

Miniaturization:The continuous development of surface mount technology and people's demand for short, small, light and thin electronic complete machines. It has put forward higher requirements for the miniaturization of electronic components. Chip tantalum capacitors have been further reduced in size. It not only adapts to the trend of miniaturization of electronic products, but also saves expensive tantalum powder raw materials.

02

High Frequency:

High capacity and low ESR in order to obtain greater energy transmission speed and minimum energy loss. For chip tantalum capacitors, the ESR reduction can be optimized from the physical structure of the capacitor, the cathode material and the bonding strength between different materials.

03

High Reliability:

The current market has put forward higher requirements for the quality of electronic complete machines. With electronic products deepening people's lives, many safety applications have been involved, and higher requirements have been placed on the reliability of electrical components. Chip tantalum capacitors Reliability can be improved in terms of material selection, processing technology, screening method, etc.



XIANGYEE

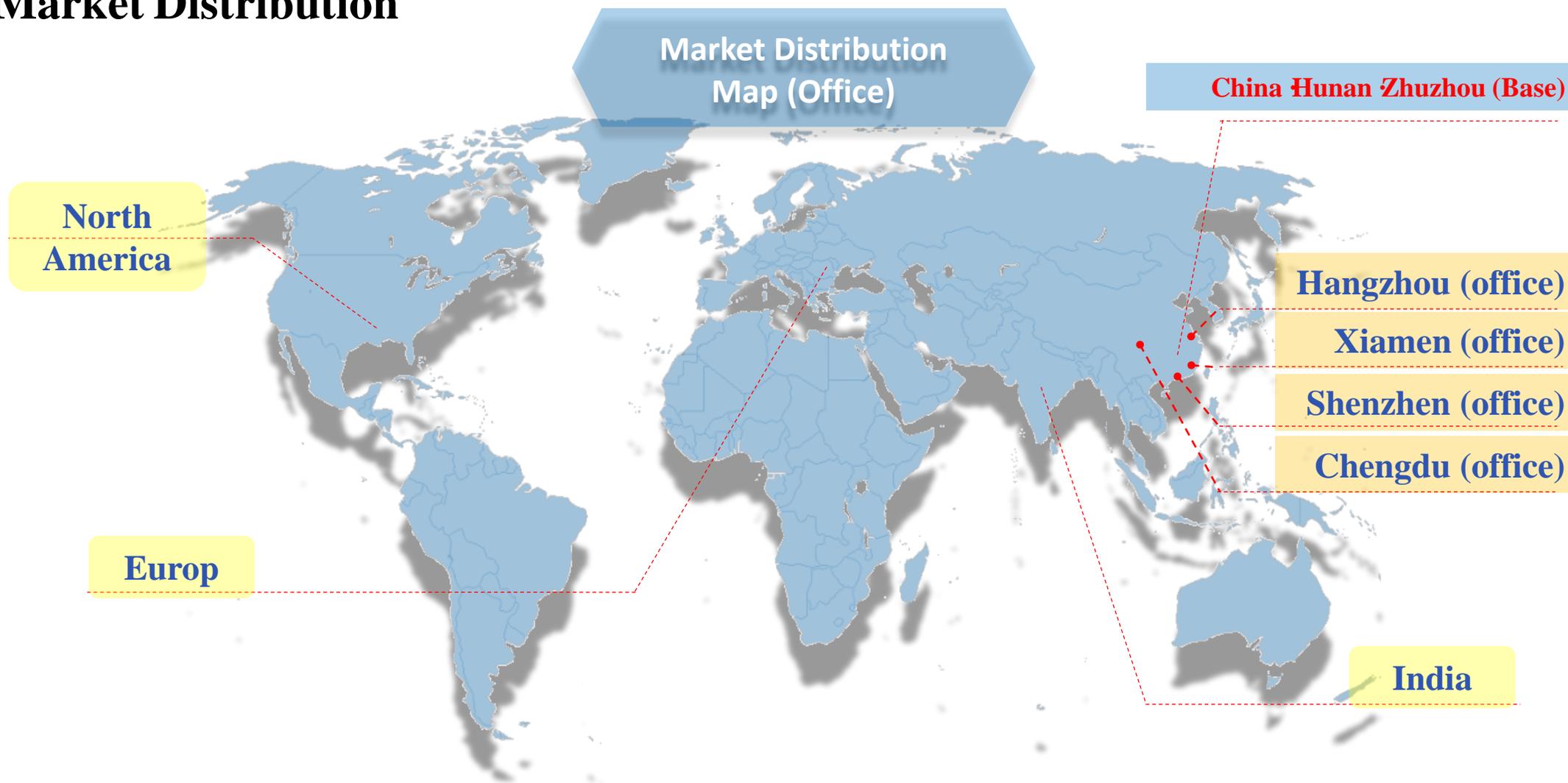
HUNAN XIANGYEE ZHONGYUAN TECHNOLOGY CO. LTD

03

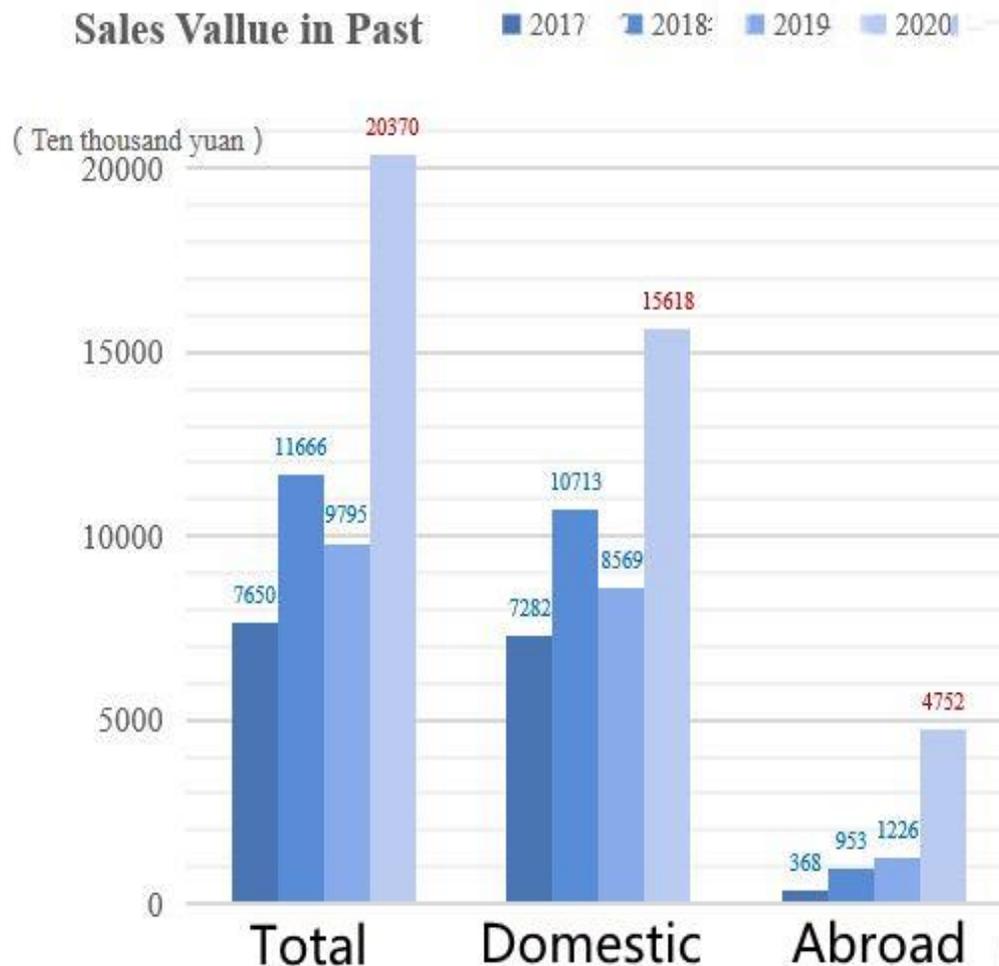
Part

Market Application

Market Distribution



Sales Status



| Year | Total (Ten thousand yuan) | Domestic (Ten thousand yuan) | Abroad (Ten thousand yuan) |
|------|---------------------------|------------------------------|----------------------------|
| 2017 | 7650 | 7282 | 368 |
| 2018 | 11666 | 10713 | 953 |
| 2019 | 9795 | 8569 | 1226 |
| 2020 | 20370 | 15618 | 4752 |

01

Sales market (domestic)

From 2018 to mid-2019, the global market, especially the Chinese mainland market, was in a saturated state, resulting in a decline in domestic orders relative to 2018.

The highest sales in 2018 was refreshed, reaching 200 million yuan in 2020.

02

Sales market (abroad)

The proportion of export orders has increased year by year, and the company's production capacity has gradually become internationalized, and expanded its production capacity to 1 billion units per year from 2017 to 2020,

Main Customers



KONKE 控客



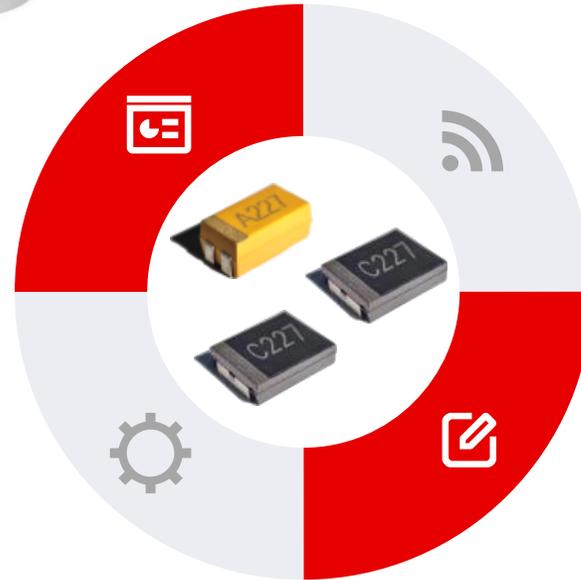
Application Scope

Computer storage



Communication Electronics

Medical electronics



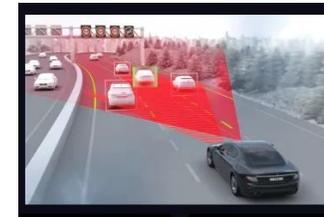
Instrumentation



Audio speaker



Automobile electronics



Consumer electronics



Company Profile

Product Introduction

Market Application

Development Plan



XIANGYEE

HUNAN XIANGYEE ZHONGYUAN TECHNOLOGY CO. LTD

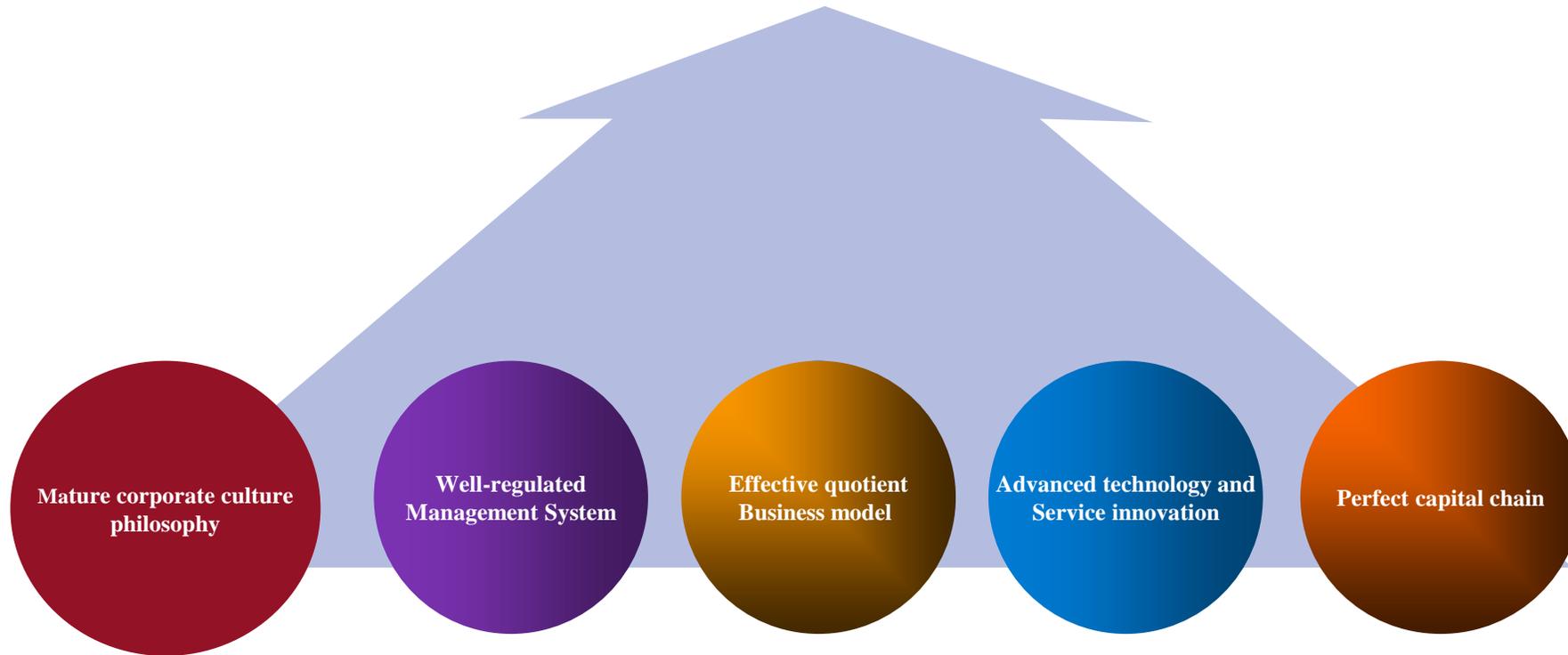
04

Part

Development Vision

Company vision

Become a world-class R&D manufacturer of tantalum capacitors



Company Profile

Product Introduction

Market Application

Development Plan



XIANGYEE

HUNAN XIANGYEE ZHONGYUAN TECHNOLOGY CO. LTD

THANK YOU FOR WATCHING

Hunan Xiangyee Zhongyuan Technology Co. Ltd