

Company Profile

- **Construction area:** covers an area of 68 mu, construction area of 90340 m²
- **Investment amount:** 1 billion yuan (RMB)
- **Products:** chip tantalum capacitor
- **Scale layout:** Build a world-class chip tantalum capacitor R & D and production base

Nest to attract phoenix: the introduction of advanced talents and equipment, committed to high-tech research and development and innovation.

Product Development: Polymer tantalum capacitor, manganese dioxide tantalum capacitor, porcelain capacitor,

Film capacitors, inductors, resistors, integrated circuits, etc.;

We are committed to providing customers with overall electronic component supply solutions.

Application fields: Communication electronics, security monitoring, medical electronics, automotive electronics, educational equipment,

Industrial control instrument, consumer electronics, power tools and other industries,

Custom fields: civil explosion industry, drilling instruments and other fields.



Throughput



Company profile

Product description

Application

Development planning

Throughput



Company profile

Product description

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Throughput

Continuous 9 chamber sintering furnace:
(The only domestic & technology leader)

1. Benefit forecast:
 - 1.1 Bottleneck capacity breakthrough: capacity increased to 150-200 million/month;
 - 1.2. Operation improvement breakthrough: annual output value increased to more than 600-1.2 million yuan/year;
 - 1.3. Improvement of new sintering equipment: covering tooling improvement, process improvement, technical improvement, quality improvement, productivity improvement, etc.



R&d capability - Zhuzhou Hongda ISO/IEC17025 accredited Laboratory



Company profile

Product description

Application

Development planning

R&d capability - Zhuzhou Hongda ISO/IEC17025 accredited Laboratory



Company profile

Product description

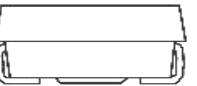
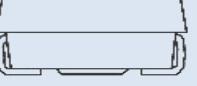
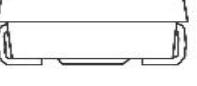
Application

Development planning

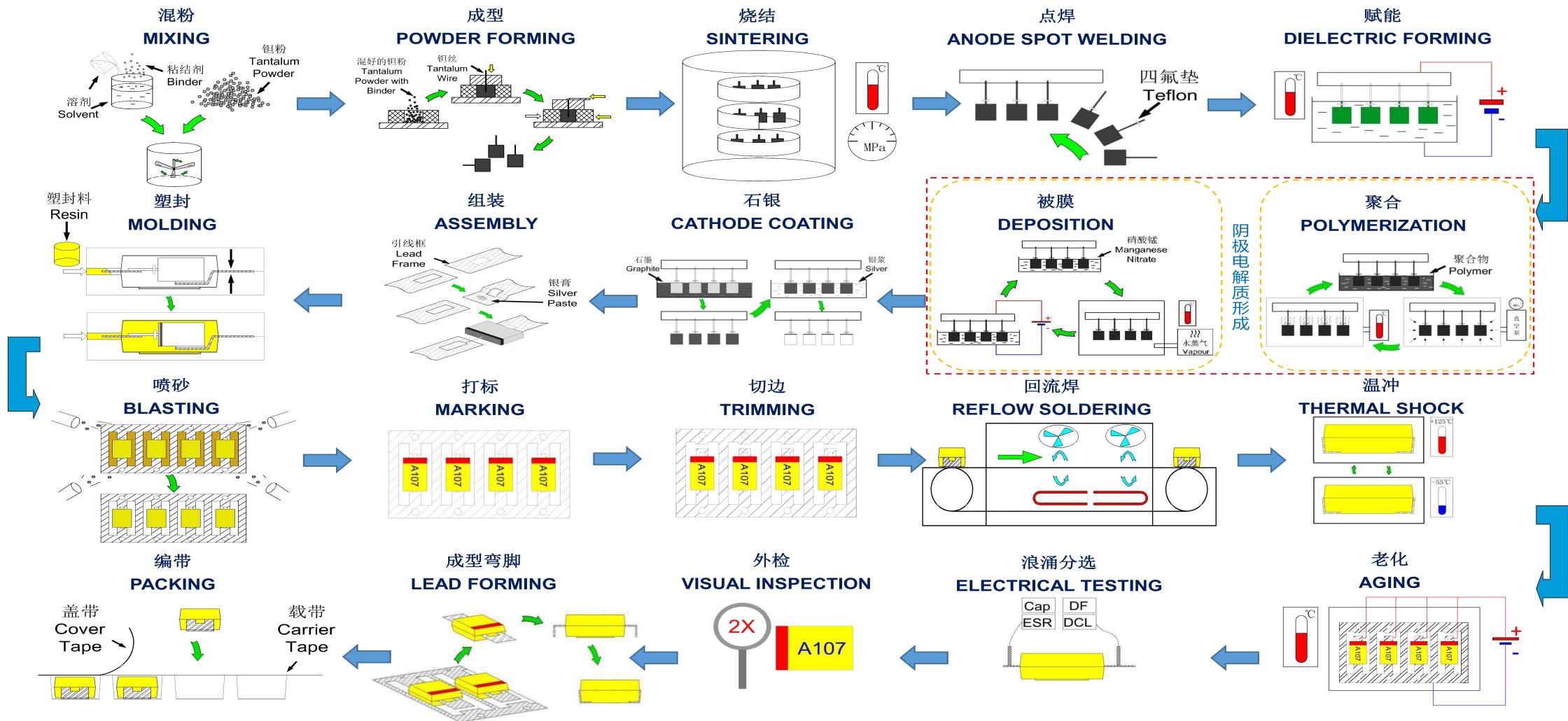
Product case

	EIA & Shell Number & Size Table (Metric: mm)							
	AVX		KEMET		PANASONIC (SANYO)		* * * * Xiang Yee * * * *	
	K	3216-10						
	S	3216-12						
	A	3216-18	A	3216-18	A14	3216-14	A	3216-16
	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 3528-25
	W	6032-15	U	6032-15				
	F	6032-20	L	6032-19				
	C	6032-28	C	6032-25			C	6032-25
			T	7343-12	D12	7343-1.15		
	X	7343-15	W	7343-15	D15E、D15S、D15	7343-14	H1	7343-15
	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				
			J	7360-15				
			H	7360-20			F	7361-19
	V	7361-38					V	7361-36
	U	7361-43						

Product Category

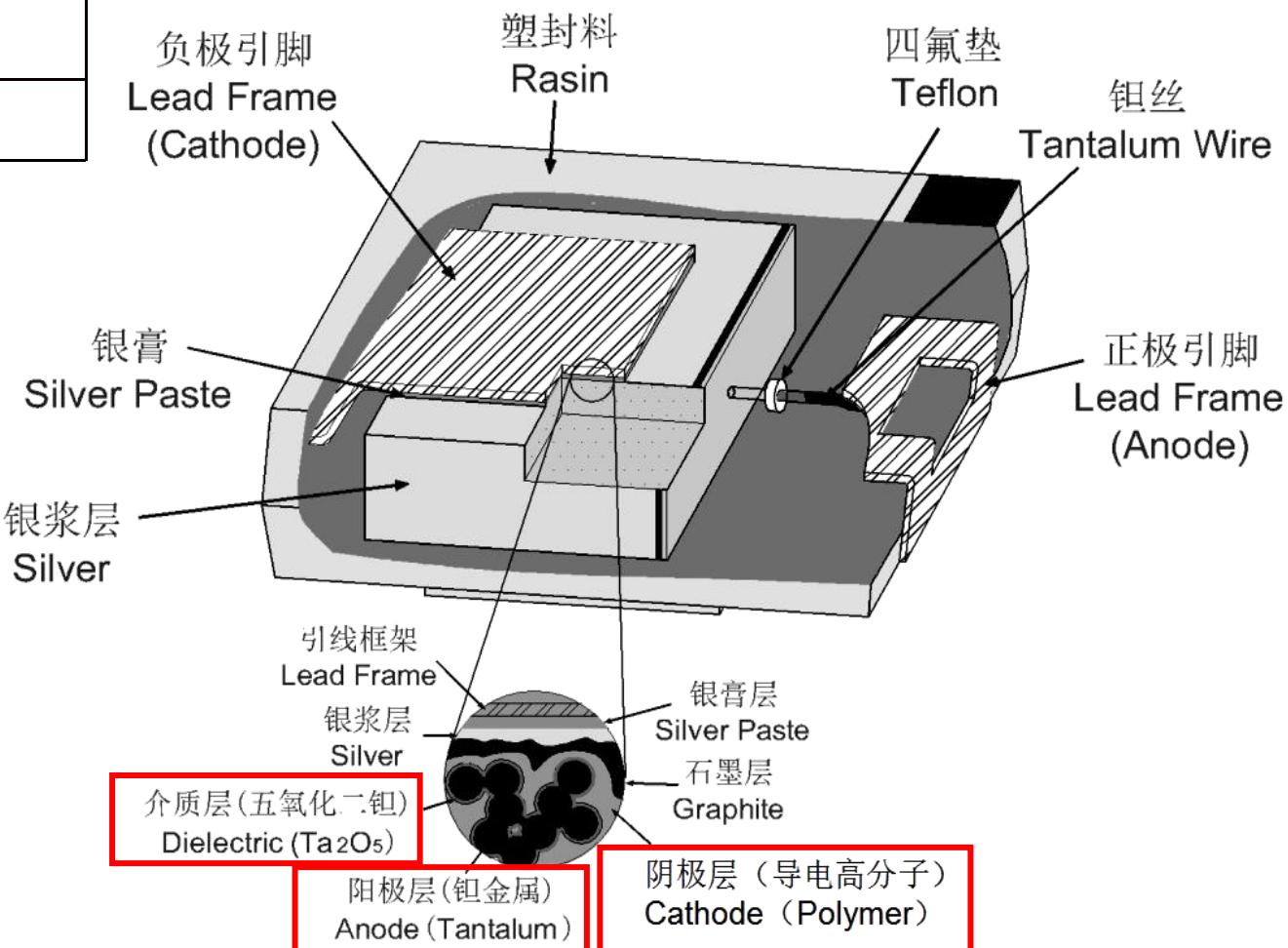
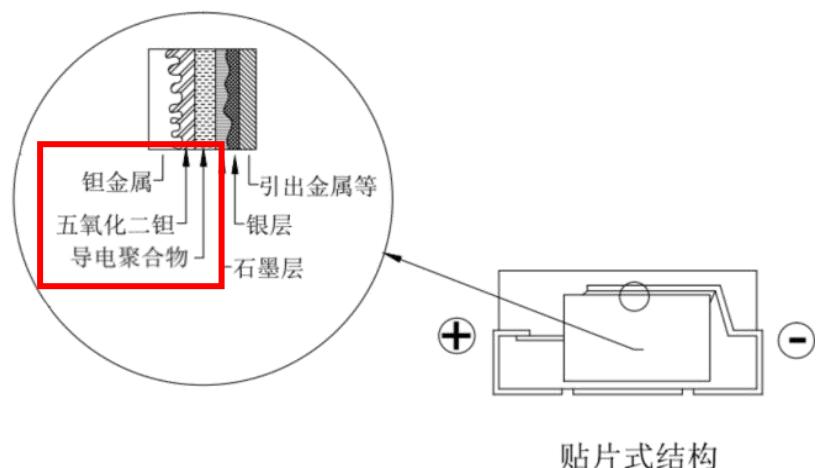
series	Executive standard	External drawing	Capacity range(μF)	Voltage range(V)	Dimension shell number
CA55	QJ/PWV517-2013		0.68 ~ 1000	2.5 ~ 50	A、B、C、H、H1、D、E、F、V
CA55H	QJ/PWV527-2019		0.47 ~ 220	2.5 ~ 50	A、B、C、H、H1、D、E、F、V
CA45	QJ/PWV109-2003		0.1 ~ 2200	2.5 ~ 50	A、B、C、D、E、V
QCA45	QJ/XY-2015		0.1 ~ 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

Production process flow



CA55 chip conductive polymer solid tantalum capacitor

Xiang Yee	AVX	KEMET	VISHAY
CA55	TCJ / TCM	T520 / T525 / T530	T55
CA55H	TCJ / TCM	T520 / T525 / T530	T55



CA55 chip conductive polymer solid tantalum capacitor

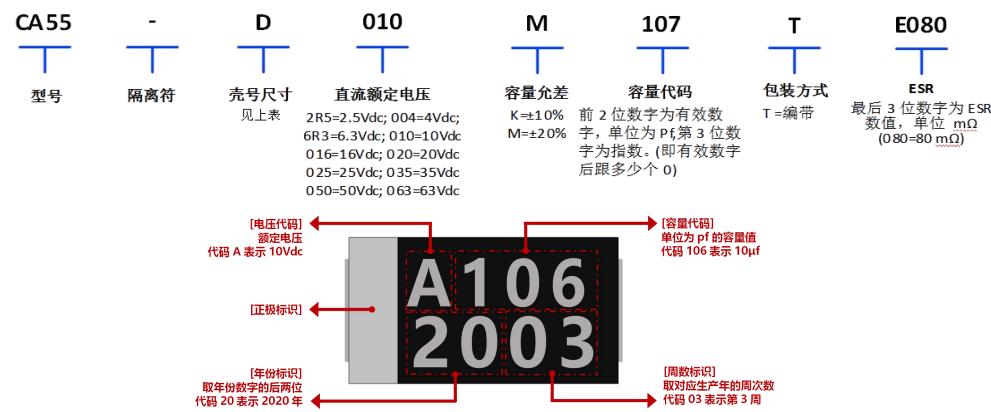
Product characteristics:

- ◆ Has very low ESR and low ESL[equivalent series inductance], can be used in higher frequency filter circuit;
- ◆ Accidental breakdown does not burn or explode, will not cause fire and secondary breakdown effect, excellent safety;
- ◆ Used in low-impedance switching power supply circuit, insensitive to surge current and voltage, only need to derate 10-20% use,
It can ensure high safety and lower failure rate;
- ◆ Low internal resistance, higher ripple resistance, greatly reduce the heat generated during filtering and high-power discharge.

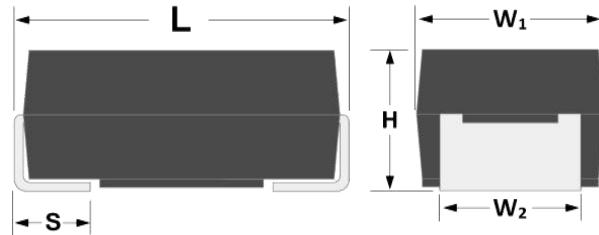
The filtering effect is better, and the radio emission type is easier to meet the technical requirements;

- ◆ Reliability is an order of magnitude higher than that of chip tantalum capacitors with manganese dioxide cathode;
- ◆ Can be used in high-ripple filter circuit and high-power high-frequency discharge circuit without large derating;
- ◆ Implementation 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

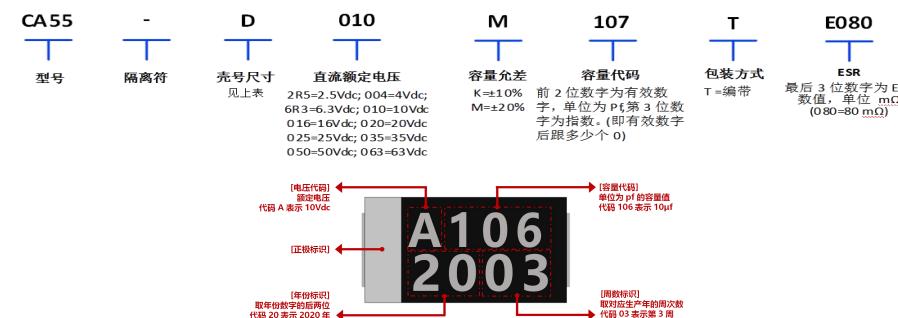
Technical parameter	All technical parameters were measured at 1 atmosphere at +25 °C
Service temperature range	-55°C ~ +125°C
Nominal capacity range	0.68 ~ 1000 μF at 100 Hz
Capacity tolerance	M 级(±20%);
Dc leakage current DCL	$C_R \leq 16V$, $DCL = 0.1CV$ (μA); $C_R \geq 20V$, $DCL = 0.01CV$, Rated voltage charge 5 minutes measurement
Equivalent series resistance ESR	See the table "Product Codes and Specifications"
Pin coating	Pure tin coating (standard), gold coating or tin lead coating to separate requirements
Resistance to welding heat	No more than 3×260°C, 10s reflow welding

CA55H high temperature resistant chip conductive polymer tantalum capacitor

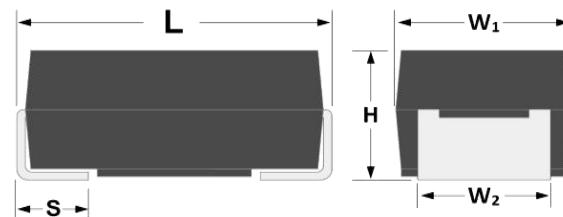
Product characteristics:

- ◆ Due to the use of high temperature resistant anode and cathode materials, the maximum allowable use temperature can reach 150°C, small leakage current;
- ◆ Has very low ESR and low ESL[equivalent series inductance], can be used in higher frequency filter circuit;
- ◆ Accidental breakdown does not burn or explode, will not cause fire and secondary breakdown effect, excellent safety;
- ◆ Used in low-impedance switching power supply circuit, insensitive to surge current and voltage, only need to derate 10-20% use, It can ensure high safety and lower failure rate;
- ◆ Low internal resistance, higher ripple resistance, greatly reduce the heat generated during filtering and high-power discharge. The filtering effect is better, and the radio emission type is easier to meet the technical requirements;
- ◆ Reliability is an order of magnitude higher than that of chip tantalum capacitors with manganese dioxide cathode;
- ◆ Can be used in high-ripple filter circuit and high-power high-frequency discharge circuit without large derating;
- ◆ Implementation 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 were measured at 1 atmosphere at +25 °C
Service temperature range	-55°C ~ +125°C
Nominal capacity range	0.68 ~ 1000 μF at 100 Hz
Capacity tolerance	M 级(±20%);
Dc leakage current DCL	$C_R \leq 16V$, $DCL = 0.1CV$ (μA); $C_R \geq 20V$, $DCL = 0.01CV$, Rated voltage charge 5 minutes measurement
Equivalent series resistance ESR	See the table "Product Codes and Specifications"
Pin coating	Pure tin coating (standard), gold coating or tin lead coating to separate requirements
Resistance to welding heat	No more than 3×260°C, 10s reflow welding

Company profile

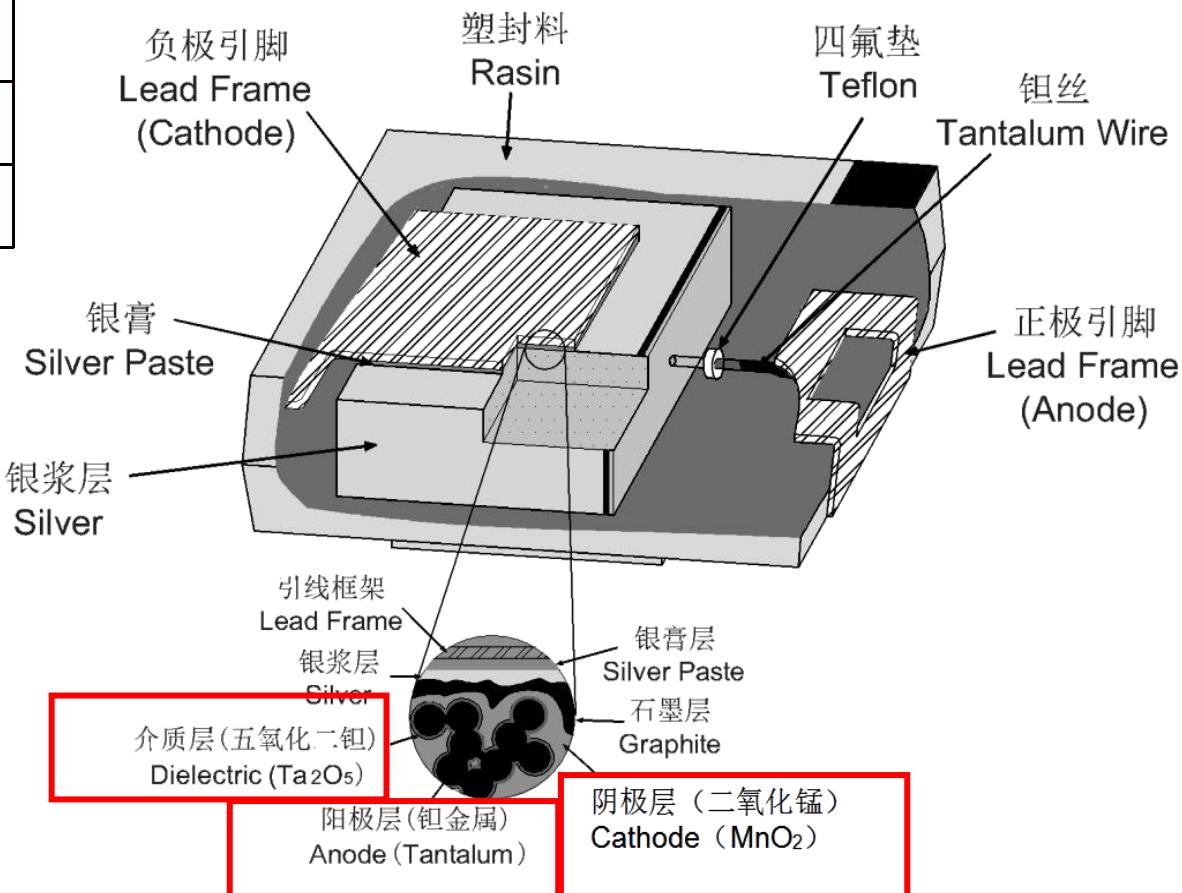
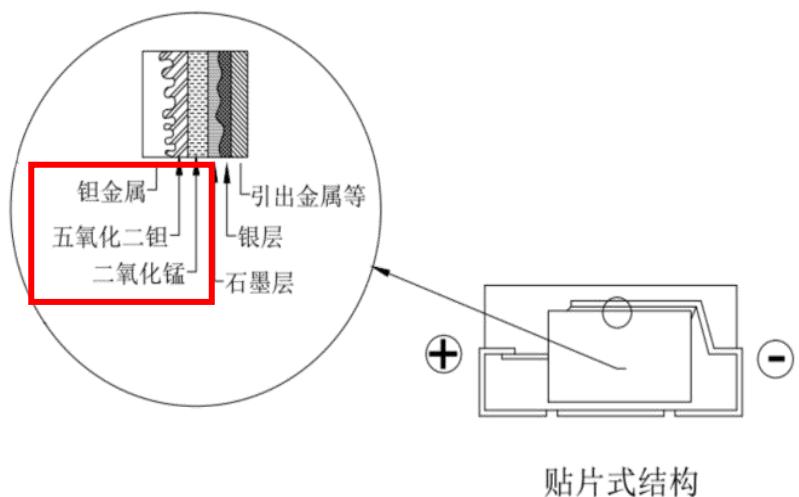
Product description

Application

Development planning

CA45 type chip solid electrolyte tantalum capacitor

Xiang Yee	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 type chip solid electrolyte tantalum capacitor

Product characteristics:

- ◆ It has a very high working electric field strength and is larger than any type of capacitor to ensure its miniaturization;
- ◆ It is very convenient to obtain large capacitance, and there are few competitors in power filtering, AC bypass, and other applications;
- ◆ It has a single conductivity, which is known as "polarity". When applying, current and capacitance should be connected in the positive and negative directions of the power supply

The anode (positive pole) of the device is connected to the "+" pole of the power supply, and the cathode (negative pole) is connected to the "-" pole of the power supply. If the connection is incorrect, it not only affects the capacitance

The device cannot function, and the leakage current is large. In a short period of time, the core will heat up, causing damage to the oxide film and then fail;

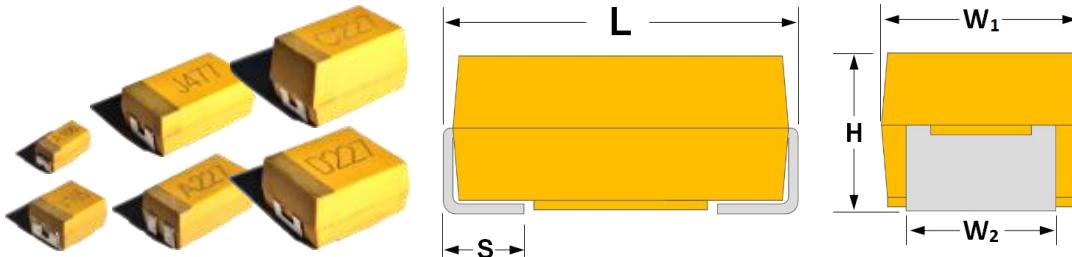
There is a certain upper limit of the working voltage, but this disadvantage can be compensated by combining it with transistor or integrated circuit power supply;

- ◆ Capable of storing electricity, charging and discharging, etc;
- ◆ Executive standard: QJ/PWV109-2003

Product naming:

CA45	-	D	010	M	107	T
型号	隔离符	壳号尺寸 见上表	直流通电电压 2R5=2.5Vdc; 004=4Vdc;6R3=6.3Vdc; 010=10Vdc;016=16Vdc; 020=20Vdc;025=25Vdc; 035=35Vdc;050=50Vdc.	容量允差 K=±10% M=±20%	容量代码 前 2 位数字为有效数 字, 单位为 pF, 第 3 位 数字为指数。(即有效 数字后跟多少个 0)	包装方式 T = 编带 W = 盘装
[电压代码] 额定电压 代码 C 表示 16 Vdc			C475	[容量代码] 单位为 pF 的容量值 代码 475 表示 4.7μF		
			[正极标识]			

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 atmospheric pressure and +25 °C										
Capacity range	0.47μF ~ 2200μF										
Capacity tolerance	±10%; ±20%;										
Rated voltage (V _R)	≤+85°C:	2.5	4	6.3	10	16	20	25	35	50	
Category voltage(V _C)	≤+125°C:	1.7	2.7	4	6.3	10	15	17	23	33	
Surge voltage (V _S)	≤+85°C:	3.3	5.2	8	13	20	26	32	46	65	
Surge voltage (V _S)	≤+125°C:	2.2	3.4	5	8	13	16	20	28	40	
Temperature range	-55°C to +125°C										
Lead out coating	Tin coating (standard), gold coating or tin lead coating requires additional requirements										

QCA45 Automotive Grade Chip Solid Electrolyte Tantalum Capacitor

Product characteristics:

- ◆ Epoxy resin molded packaging, sheet shape, easy to integrate, polarity, superior in all aspects to conventional chip tantalum capacitors;
- ◆ Small size and light weight, which can save circuit board space required for large capacitors, energy storage, filtering, and decoupling;
- ◆ Stable electrical and storage performance, with a voltage drop of up to 125 °C, long working life, and high reliability;

Typical applications include terminal decoupling and filtering applications in automobiles, such as DC/DC converters, portable electronic devices, Communication electronic equipment and control units, etc;

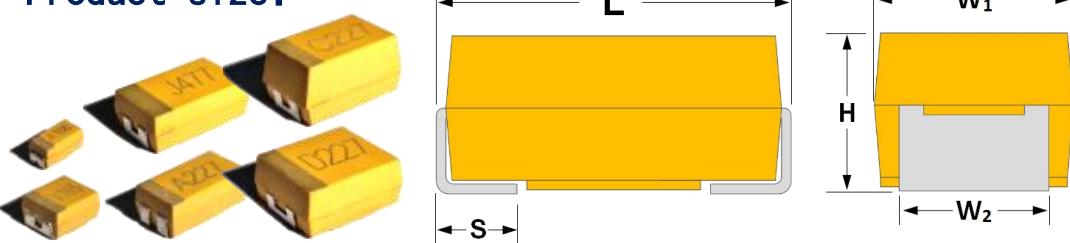
- ◆ Executive standard: QJ/XY06-2015

Product Naming:

QCA45	-	D	010	M	107	T
型号	隔离符	壳号尺寸 见上表	直流额定电压 004=4Vdc; 0R3=6.3Vdc; 010=10Vdc; 016=16Vdc; 020=20Vdc; 025=25Vdc; 035=35Vdc; 050=50Vdc;	容量允差 K=±10% M=±20%	容量代码 前 2 位数字为有效数 字, 单位为 pF, 第 3 位 数字为指数。(即有效 数字后跟多少个 0)	包装方式 T = 编带



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 atmospheric pressure and +25 °C									
Capacity range	0.1μF ~ 680μF									
Capacity tolerance	±10%; ±20%;									
Rated voltage (V _R)	≤+85°C:	4	6.3	10	16	20	25	35	50	
Category voltage(V _C)	≤+125°C:	2.7	4	6.3	10	15	17	23	33	
Surge voltage (V _S)	≤+85°C:	5.2	8	13	20	26	32	46	65	
Surge voltage (V _S)	≤+125°C:	3.4	5	8	13	16	20	28	40	
Temperature range	-55°C to +125°C									
Lead out coating	Tin coating (standard), gold coating or tin lead coating requires additional requirements									

CA45L Low ESR Chip Solid Electrolyte Tantalum Capacitor

Product characteristics:

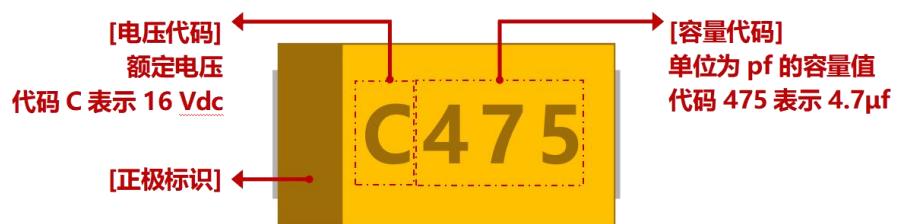
- ◆ Epoxy resin molded packaging, sheet shape, small size, light weight, easy integration, polarity;
- ◆ Compared to conventional chip tantalum capacitors, the ESR is lower, with stable electrical and storage performance, and long working life;
- ◆ Typical applications include terminal decoupling and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

Product Naming:

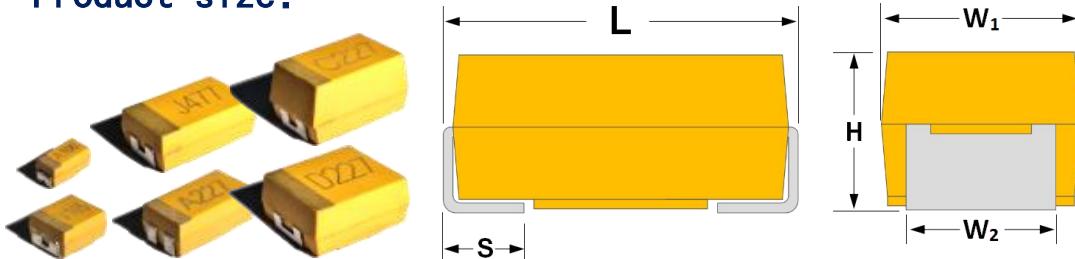
CA45L - B 6R3 M 107 T E700

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型号	隔离符	壳号尺寸 见上表	直流额定电压 004=4Vdc;6R3=6.3Vdc; 010=10Vdc;016=16Vdc; 020=20Vdc;025=25Vdc; 035=35Vdc;050=50Vdc.	容量允差 K=±10% M=±20%	容量代码 前 2 位数字为有效数 字, 单位为 pF, 第 3 位 数字为指数。(即有效 数字后跟多少个 0)	包装形式 T=编带	ESR 最后 3 位数字为 ESR 数值, 单位 mΩ (700=700 mΩ)
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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 atmospheric pressure and +25 °C								
Capacity range	0.1μF ~ 680μF								
Capacity tolerance	±10%; ±20%;								
Rated voltage (V _R)	≤+85°C:	4	6.3	10	16	20	25	35	50
Category voltage(V _C)	≤+125°C:	2.7	4	6.3	10	15	17	23	33
Surge voltage(V _S)	≤+85°C:	5.2	8	13	20	26	32	46	65
Surge voltage(V _S)	≤+125°C:	3.4	5	8	13	16	20	28	40
Temperature range	-55°C to +125°C								
Lead out coating	Tin coating (standard), gold coating or tin lead coating requires additional requirements								

CA45H high-temperature resistant chip solid electrolyte tantalum capacitor

Product characteristics:

- ◆ Epoxy resin molded packaging, sheet shape, small size, light weight, easy integration, polarity;
- ◆ Working temperature can reach 150 °C, stable electrical and storage performance, long working life, and high reliability;
- ◆ Typical applications include decoupling and filtering applications in industrial and automotive terminals, such as DC/DC converters and portable electronics

Equipment, communication electronic equipment, and control units are equivalent to a high temperature environment of 150 °C;

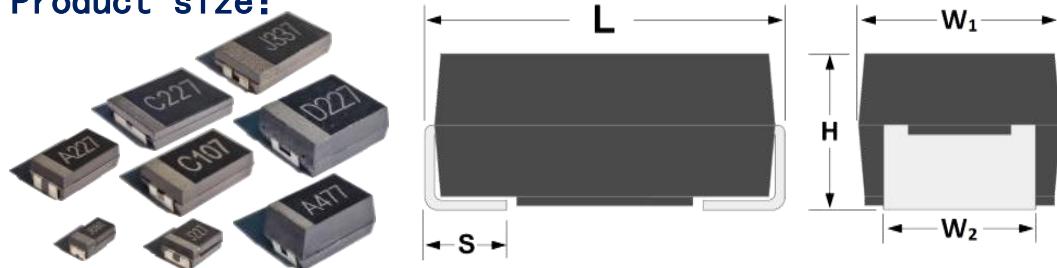
- ◆ Executive standard: QJ/PWV326-2010

Product Naming:

CA45H	-	D	010	M	107	A	T
型号	隔离符	壳号尺寸 见上表	直流额定电压 004=4Vdc; 010=6.3Vdc; 016=10Vdc; 025=16Vdc; 035=20Vdc; 050=25Vdc; 070=35Vdc; 050=50Vdc;	容量允差 K=±10% M=±20%	容量代码 前 2 位数字为有效数 字, 单位为 pf, 第 3 位 数字为指数。(即有效数 字后跟多少个 0)	工作温度 A=150°C	包装方式 T=编带



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 atmospheric pressure and +25 °C							
Capacity range	0.1μF ~ 680μF							
Capacity tolerance	±10%; ±20%;							
rated voltage (V _R)	≤+85°C:	4	6.3	10	16	20	25	35
category voltage (V _C)	≤+125°C:	2.7	4	6.3	10	15	17	23
surge voltage (V _S)	≤+85°C:	5.2	8	13	20	26	32	46
surge voltage (V _S)	≤+125°C:	3.4	5	8	13	16	20	28
temperature range	-55°C to +125°C							
Lead out coating	Tin coating (standard), gold coating or tin lead coating requires additional requirements							

Development



01

miniaturization :

The continuous development of surface mount technology, as well as people's demand for short, small, light and thin electronic machines, put forward higher requirements for the miniaturization of electronic components, and the further reduction of chip tantalum capacitors in the external size 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 for greater energy transfer speed and minimal energy loss, the ESR reduction of chip tantalum capacitors can be optimized from the physical structure of the capacitor, cathode material, and bond strength between different materials.

03

High reliability :

The current market puts forward higher requirements for the quality of electronic machines, along with electronic products and deep into people's lives, has involved many safety applications, the reliability of electrical components also put forward higher requirements, chip tantalum capacitors can improve reliability from material selection, processing technology, screening methods and other aspects.

Scope of application

Medical electronics



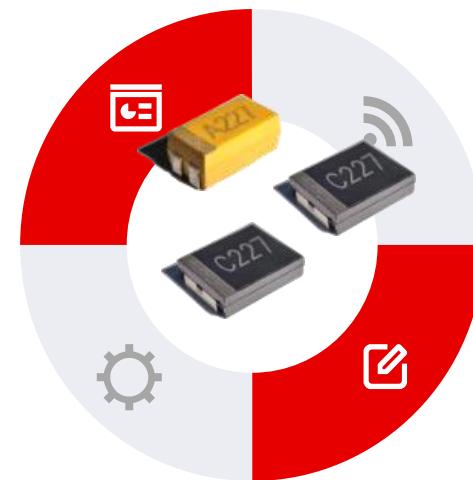
Audio sound



Consumer electronics



Computer storage



Communication electronics



Instrumentation



Automotive electronics



Main customers



ahua
TECHNOLOGY



中国·人民电器集团

DELIXI
ELECTRIC
德力西电气

Panasonic



FOXCONN
富士康



NWM

美的

Haier 海尔



海康威视®

HIKVISION

Honeywell
霍尼韦尔

H3C

mindray 迈瑞

LUXSHARE ICT



T&W

菲菱科思
Phoenix

