

CA42型树脂包封固体电解质钽电容器

CA42 Series Epoxy--Coated Solid Electrolytic Tantalum Capacitor



产品简介:

CA42型系列电容器是烧结阳极、树脂包封固体电解质钽电容器,产品采用优质的抗潮、阻燃性黄色环氧树脂粉末封装,激光打印标志,其性能符合并优于IEC384-15-3及IECQC300201/US0003以及SJ/T10856-96技术规范,是为电视机、录像机、计算机、程控交换机、电话、仪器、仪表等民用电子整机配套的理想产品。

产品符合无铅化,对应RoHS法规。

主要技术性能:

- 使用温度范围: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (大于85, 以降额电压使用)
- 漏电流: $I_0 \leq 0.02 C_R U_R$ 或 $1 \mu\text{A}$ (取大者) (25°C 时)
- 容量范围: $0.047 \mu\text{F} \sim 680 \mu\text{F}$ 见表3
- 容量偏差: $\pm 20\%$; $\pm 10\%$; $\pm 5\%$ (特殊订购)
- 壳型尺寸: 见表1
- 温度特性: 见表2

壳型尺寸一览表

DIMENSIONS-Millimeters

表1 table1

单位: mm

Unit: mm

壳号 Case size	D(max)	H(max)	h(±0.5mm)	d(±0.5mm)
A	4.5	7.0	2.5	0.5
B	5.0	8.0	2.5	0.5
C	5.5	9.5	2.5	0.5
D	6.5	11.0	2.5	0.5
E	8.5	13.0	5.0	0.5
F	9.5	16.5	5.0	0.5

温度特性

TEMPERATURE CHARACTERISTICS

表2 table2

容量 Capacitance (μF)	容量变化(%) Capacitance Change			损耗最大值(%) DF Max.				漏电流最大值(μA) DCL Max.		
	-55 $^{\circ}\text{C}$	+85 $^{\circ}\text{C}$	+125 $^{\circ}\text{C}$	-55 $^{\circ}\text{C}$	+20 $^{\circ}\text{C}$	+85 $^{\circ}\text{C}$	+125 $^{\circ}\text{C}$	+20 $^{\circ}\text{C}$	+85 $^{\circ}\text{C}$	+125 $^{\circ}\text{C}$
≤ 1.0	± 10	± 15	± 25	6	4	6	6	$I_0 \leq 0.02 C_R U_R$ 或 (or) $1 \mu\text{F}$ (取大者 whichever is greater)	101 $\%$	12.5 $\%$
1.5~6.8				8	6	8	8			
10~68				10	8	10	10			
100~680				12	10	12	12			



Brief Introduction:

CA42 Series sinter-anode, epoxy-coated solid electrolyte tantalum capacitors are encapsulated with flame-retardant yellow epoxy powder, marked with laser.

CA42 Series meets and exceeds the requirements of IEC Specification 384-15-3, IECQ Specification QC300201/US0003 and Technical Specification SJ/T10856-96, used in military and civil applications such as TV sets, camcorders, computers, Program--controlled electronic telephone switching systems, telephones, instruments and meters.

RoHS Compliance & Lead Free Terminations.

Features:

- Operating temperature Range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$; $> 85^{\circ}\text{C}$ With rated voltage derating.
- DC leakage at 25°C : $10 \leq 0.01 C_R U_R$ or $0.5 \mu\text{A}$ (Whichever is greater).
- Capacitance range: $0.047 \mu\text{F} \sim 680 \mu\text{F}$, see table 3
- Capacitance tolerance: $\pm 20\%$; $\pm 10\%$; $\pm 5\%$: (for special order);
- Case Sizes and dimensions, Please see table 2
- Temperature Characteristics: See table 1

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CA42系列编码体系： CA42 Series Numbering System:

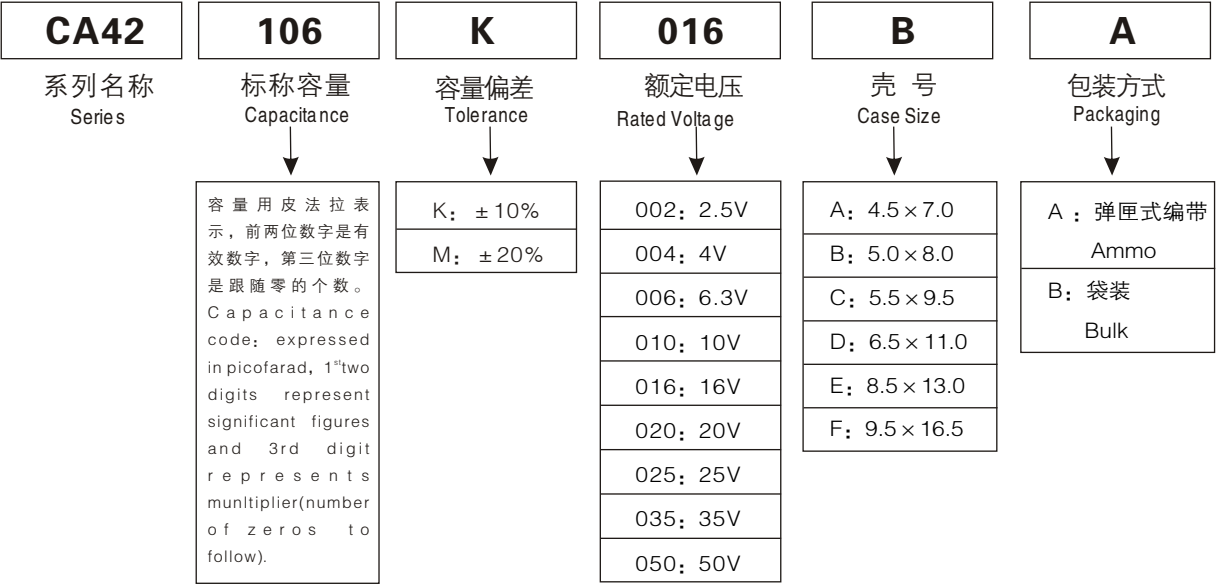


表3: CA42系列标称容量、额定电压、壳号对照表 Table3:CA42 Series Case Size by Capacitance and Voltage

额定电压 U _R (V) Rated Voltage	3(e)	4(G)	6.3(J)	10(A)	16(C)	20(D)	25(E)	35(V)	50(T)
降额电压 U _C (V) Voltage Derating	2	2.7	4	7	10	15	17	23	33
浪涌电压 U _S (V) Surge Voltage	4	5	8	13	20	26	32	46	65
标称电容量 Nominal Capacitance C _R (μF)	容量代码 Code	壳号代号kcase size							
0.01	104							A	A
0.15	154							A	A
0.22	224							A	A
0.33	334							A	A
0.47	474							A	A
0.68	684							A	A
1.0	105				A	A	A	A	B
1.5	155				A	A	A	A	C
2.2	225			A	A	A	A	B	C
3.3	335		A	A	A	B	B	B	D
4.7	475	A	A	A	A	B	B	B	D
6.8	685	A	A	A	B	B	C	C	E
10	106	A	A	B	B	B	C	C	E
15	156	A	A	B	C	C	D	D	F
22	226	B	B	C	C	C	D	D	F
33	336	B	B	C	D	D	E	E	
47	476	C	C	D	D	D	E	E	
68	686	D	D	D	D	E	F	F	
100	107	D	D	E	E	E	F	F	
150	157	D	E	E	E	F			
220	227	E	E	E	F				
330	337	E	F	F					
470	477	F							
680	687	F							
1000	108	F							

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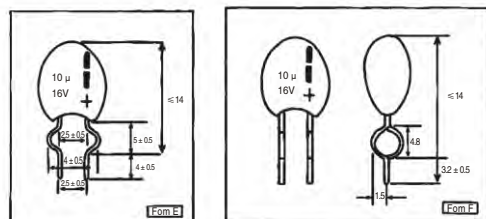
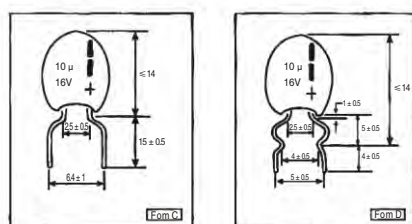
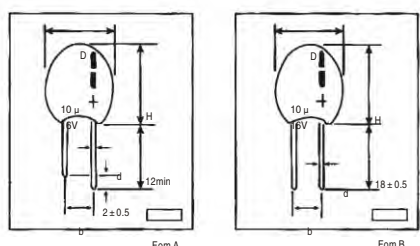
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引线形式 (允许有其它引线形式)

单位: mm

Lead Styles (Other lead styles are available)

Unit:mm m



名称	Designation	符合 Symbol	尺寸 Dimensions(mm)	
无件间距	Pitch of component	P	12.7 ± 1.0	
给进孔间距	Feed hole pitch	po	12.7 ± 0.3	
基带宽度	Tape width	w	+1 18 -0.5	
粘胶带宽度	Hold down tape width	wo	12 ± 0.5	
给进孔位置	Hole position	H3	0.75 9 -0.5	
粘胶带位置	Hold down tape position	W2	3.0max	
元件顶部到给进孔心距离	Overall component height	H1	32.5max	
元件偏差	Component alignment	△P	± 1.3max	
给进孔直径	Feed hole diameter	D	4.0 ± 0.2	
基带厚度	Tape thickness	T	0.5 ± 0.2	
元件偏差	Component alignment	△h	± 2.0max	
引线切屑长度	Length of snipped leads	L	11max	
引线脚切铆高度	Lead clinch height	H	16 ± 0.5	
引线脚间距	Lead wire spacing	S	25 ± 0.5	5.0 ± 0.7
给进孔心至引线脚间距	Feed hole center to wire center	P1	5.10 ± 0.5	3.85 ± 0.7
给进孔心至元件中心间距	Hole center to component center	P2	6.35 ± 0.4	
元件引线根部到给进孔心距离	Component height	H2	+2 18 -0	
引线直径	Lead diameter	d	0.5 ± 0.05	

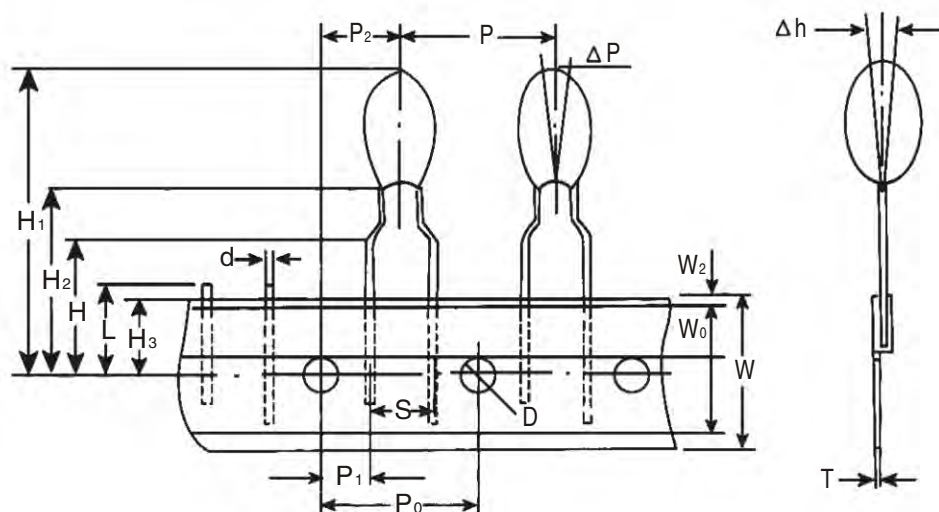
包装 Packaging information

B: 袋装

A: 弹匣式编带 (符合IEC286-2标准)

B: Bulk pack

A: Ammo pack(per Specification IEC286-2)



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额定电压 Rated Voltage U _R (V)	标称电容量 Nominal Capacitance C _R (μF)	壳号 Case Size	漏电流 DCL (μA) Max.	损耗角正切 tg δ (%) Max.	代码 Part Number
3 volt 85°C(2 volt 125°C)					
3	4.7	A	0.5	6	CA42475*003#
3	6.8	A	0.5	6	CA42685*003#
3	10	A	0.5	8	CA42106*003#
3	15	A	0.5	8	CA42156*003#
3	22	B	0.7	8	CA42226*003#
3	33	B	1	8	CA42336*003#
3	47	C	1.4	8	CA42476*003#
3	68	D	2	8	CA42686*003#
3	100	D	3	10	CA42107*003#
3	150	D	4.5	10	CA42157*003#
3	220	E	6.6	10	CA42227*003#
3	330	E	9.9	10	CA42337*003#
3	470	F	14.1	10	CA42477*003#
3	680	F	20.4	12	CA42687*003#
3	1000	F	30	14	CA42108*003#
4 volt 85°C (2.5 volt 125°C)					
4	4.7	A	0.5	6	CA42475*004#
4	6.8	A	0.5	6	CA42685*004#
4	10	A	0.5	8	CA42106*004#
4	15	A	0.6	8	CA42156*004#
4	22	B	0.9	8	CA42226*004#
4	33	B	1.3	8	CA42336*004#
4	47	C	1.9	8	CA42476*004#
4	68	D	2.7	8	CA42686*004#
4	100	D	4	10	CA42107*004#
4	150	E	6	10	CA42157*004#
4	220	E	8.8	10	CA42227*004#
4	330	F	13.2	10	CA42337*004#
4	470	F	18.8	10	CA42477*004#
4	680	F	27.2	12	CA42687*004#
6.3 volt 85°C (4 volt 125°C)					
6.3	3.3	A	0.5	6	CA42335*006#
6.3	4.7	A	0.5	6	CA42475*006#
6.3	6.8	A	0.5	6	CA42685*006#
6.3	10	B	0.6	8	CA42106*006#
6.3	15	B	0.9	8	CA42156*006#
6.3	22	C	1.4	8	CA42226*006#
6.3	33	C	2.1	8	CA42336*006#
6.3	47	D	3	8	CA42686*006#
6.3	68	D	4.3	8	CA42107*006#
6.3	100	E	6.3	10	CA42157*006#
6.3	150	E	9.5	10	CA42227*006#
6.3	220	E	13.9	10	CA42227*006#
6.3	330	F	20.8	10	CA42337*006#
6.3	470	F	29.6	10	CA42477*006#
6.3	680	F	42.8	12	CA42687*006#
10 volt 85°C (6.3 volt 125°C)					
10	2.2	A	0.5	6	CA42225*010#
10	3.3	A	0.5	6	CA42335*010#
10	4.7	A	0.5	6	CA42475*010#
10	6.8	B	0.7	6	CA42685*010#
10	10	B	1	8	CA42106*010#
10	15	C	1.5	8	CA42156*010#
10	22	C	2.2	8	CA42226*010#
10	33	D	3.3	8	CA42336*010#
10	47	D	4.7	8	CA42476*010#
10	68	D	6.8	8	CA42686*010#
10	100	E	10	10	CA42107*010#
10	150	E	15	10	CA42157*010#
10	220	F	22	10	CA42227*010#
10	330	F	33	10	CA42337*010#
10	470	F	47	10	CA42477*010#
16 volt 85°C (10 volt 125°C)					
16	1	A	0.5	4	CA42105*016#
16	1.5	A	0.5	6	CA42155*016#
16	2.2	A	0.5	6	CA42225*016#
16	3.3	A	0.5	6	CA42335*016#
16	4.7	B	0.8	6	CA42475*016#
16	6.8	B	1.1	6	CA42685*016#
16	10	B	1.6	8	CA42106*016#
16	15	C	2.4	8	CA42156*016#
16	22	C	3.5	8	CA42226*016#
16	33	D	5.3	8	CA42336*016#
16	47	D	7.5	8	CA42476*016#
16	68	E	10.9	8	CA42686*016#
16	100	E	16	10	CA42107*016#
16	150	F	24	10	CA42157*016#
16	220	F	35.2	10	CA42227*016#
20 volt @ 85°C(13 volt @ 125°C)					
20	1	A	0.5	4	CA42105*020#
20	1.5	A	0.5	6	CA42155*020#
20	2.2	A	0.5	6	CA42225*020#
20	3.3	B	0.7	6	CA42335*020#
20	4.7	B	0.9	6	CA42475*020#
20	6.8	C	1.4	6	CA42685*020#
20	10	C	2	8	CA42106*020#
20	15	D	3	8	CA42156*020#
20	22	D	4.4	8	CA42226*020#
20	33	E	6.6	8	CA42336*020#
20	47	E	9.4	8	CA42476*020#
20	68	F	13.6	8	CA42686*020#
20	100	F	20	10	CA42107*020#
20	150	F	30	10	CA42157*020#

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额定电压 Rated Voltage U _R (V)	标称电容量 Nominal Capacitance C _R (μF)	壳号 Case Size	漏电流 DCL (μA) Max.	损耗角正切 tg δ (%) Max.	Part Number	额定电压 Rated Voltage U _R (V)	标称电容量 Nominal Capacitance C _R (μF)	壳号 Case Size	漏电流 DCL (μA) Max.	损耗角正切 tg δ (%) Max.	Part Number
25 volt 85°C(16volt 125°C)						50 volt 85°C (33 volt 125°C)					
25	1	A	0.5	4	CA42105*025#	50	0.1	A	0.5	4	CA42104*050#
25	1.5	A	0.5	6	CA42155*025#	50	0.15	A	0.5	4	CA42154*050#
25	2.2	A	0.6	6	CA42225*025#	50	0.22	A	0.5	4	CA42224*050#
25	3.3	B	0.8	6	CA42335*025#	50	0.33	A	0.5	4	CA42334*050#
25	4.7	B	1.2	6	CA42475*025#	50	0.47	A	0.5	4	CA42474*050#
25	6.8	C	1.7	6	CA42685*025#	50	0.68	A	0.5	4	CA42684*050#
25	10	C	2.5	8	CA42106*025#	50	1	B	0.5	4	CA42105*050#
25	15	D	3.8	8	CA42156*025#	50	1.5	C	0.8	6	CA42155*050#
25	22	D	5.5	8	CA42226*025#	50	2.2	C	1.1	6	CA42225*050#
25	33	E	8.3	8	CA42336*025#	50	3.3	D	1.7	6	CA42335*050#
25	47	E	11.8	8	CA42476*025#	50	4.7	D	2.4	6	CA42475*050#
25	68	F	17	8	CA42686*025#	50	6.8	E	3.4	6	CA42685*050#
25	100	F	25	10	CA42107*025#	50	10	E	5	8	CA42106*050#
35 volt 85°C (23 volt 125°C)						50	15	F	7.5	8	CA42156*050#
35	0.1	A	0.5	4	CA42104*035#	50	22	F	11	8	CA42226*050#
35	0.15	A	0.5	4	CA42154*035#	50	33	F	16.5	8	CA42336*050#
35	0.22	A	0.5	4	CA42224*035#						
35	0.33	A	0.5	4	CA42334*035#						
35	0.47	A	0.5	4	CA42474*035#						
35	0.68	A	0.5	4	CA42684*035#						
35	1	A	0.5	4	CA42105*035#						
35	1.5	A	0.5	6	CA42155*035#						
35	2.2	B	0.8	6	CA42225*035#						
35	3.3	B	1.2	6	CA42335*035#						
35	4.7	C	1.6	6	CA42475*035#						
35	6.8	D	2.4	6	CA42685*035#						
35	10	D	3.5	8	CA42106*035#						
35	15	E	5.3	8	CA42156*035#						
35	22	E	7.7	8	CA42226*035#						
35	33	F	11.6	8	CA42336*035#						
35	47	F	16.5	8	CA42476*035#						
35	68	F	23.8	8	CA42686*035#						

- ※ 所有技术数据以25°C条件为准。All technical data relates to an ambient temperature of +25°C.
 ※ 电容量、损耗角正切测试条件Capacitance and DF measured at: U_R=2.2^{0.9}V, U_L=1.0^{2.1}0V (有效值 RMS) ; 测量频率 frequency: 120Hz。
 ※ 漏电流应在施加额定电压5分钟后测量, +125°C时应施加降额电压。DCL is measured at rated voltage after 5 minutes, and voltage derating is applied at +125°C
 ※ *代表容量偏差 represents tolerance K: ±10%, M: ±20%。#代表包装方式 represents packaging A:Ammo,B:Bulk。

注: 以上所提供的性能参数仅供参考作用, 任何修改不作预先通知。如果在使用上有疑问, 请在采购前与我们联系, 以便提供技术上的协助。
 Note:The data contained in this brochure is only for your reference,any change or modification is made without previous notification.If any question in application, please feel free to contact us prior to purchase so that we provide further technical assistance.