

Epoxy-coated Solid Electrolytic tantalum Capacitor

AN018C—CA42 Series--dipped type



Brief Introduction:

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

*meets and exceeds the requirements of IEO Specification 384-15-3, IECQ Specification QC3002011U50003 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.

Features:

- Operating temperature Range:
-55°C~+1 25°C; >85°C With rated voltage derating.
- Rated Voltage:See table 1
- DC leakage at 20C: $I_o \leq 0.02 C_R U_R$ Or $1\mu F$ (Whichever is greater).
- Dissipation factor at 20°C Please see table 3
- Capacitance range:0.047uF~680uF, see table 1
- Capacitance tolerance: $\pm 20\%$; $\pm 10\%$; $\pm 5\%$; (for special order);
- Case sizes and dimensions, Please see table 2
- Temperature characteristics: See table 3
- We can meet lead-free requirements requested by our customers who will stated specially when placing an order.

DIMENSIONS-Millimeters

table2 Unit: mm

Capacitance(uF)	Capacitance Change			DF Max.				DCL Max.		
	-55°C	+85°C	+125°C	-55°C	+20°C	+85t	+125°C	+20°C	+85°C	+125°C
≤ 1.0	10	15	25	6	4	6	6	$I_o \leq 0.02 C_R U_R$ Or $1\mu F$ (Whichever is greeter)	10I _o	12.5I _o
1.5 ~ 6.8				8	6	8	8			
10 ~ 68				10	8	10	10			
100 ~ 680				12	10	12	12			

TEMPERATURE CHARACTERISTICS

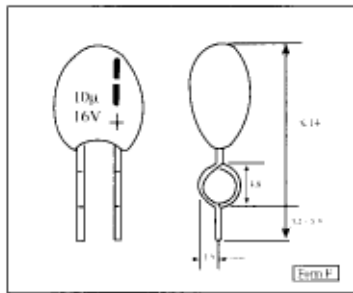
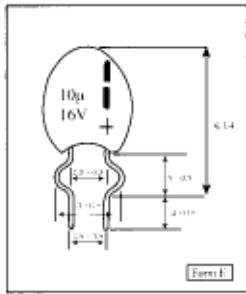
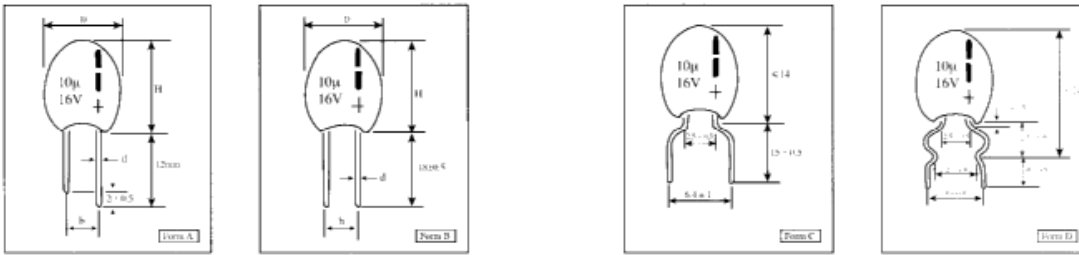
table3

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

CA42 Series Epoxy-Coated solid Electrolytic Tantalum Capacitor

Lead Styles (Other lead styles are available)

Unit. mm



Rated Voltage, Nominal Capacitance and Case Sizes

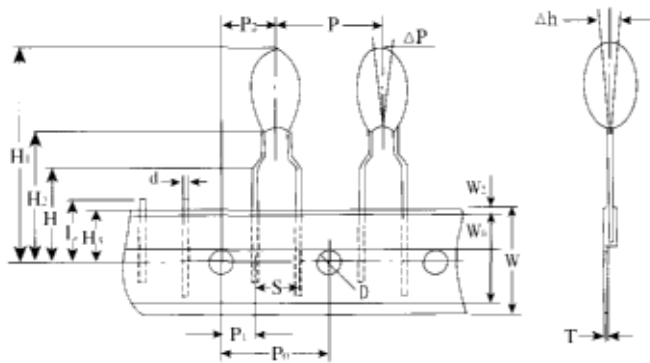
table 1-1

Rated Voltage	3	4	6.3	10	16	20	25	35	50
Voltage Derat~ng	2	2.5	4	6.3	10	13	16	20	32
(V)+85°C	4	5.2	8	13	20	26	33	46	65
Surge Voltage									
(uF) Capacitance	Case size								
0.047								A	A
0.068								A	A
0.1								A	A
0.15								A	A
0.22								A	A
0.33								A	A
0.47								A	A
0.68								A	A
1.0					A	A	A	A	B
1.5					A	A	A	A	C
2.2				A	A	A	A	B	C
3.3			A	A	A	B	B	B	D
4.7	A	A	A	A	B	B	B	C	0
6.8	A	A	A	B	B	C	C	D	E
10	A	A	B	B	B	C	C	B	F
15	A	A	B	C	C	D	D	E	F
22	B	B	C	C	C	D	0	E	F
33	B	B	C	0	B	E	E	F	
47	C	C	D	D	D	E	F	F	
68	D	D	D	D	E	F	F		
100	D	D	E	E	E	F	F		
150	D	E	F	F	F				
220	E	E	E	F					
330	E	F	F						
470	F								
680	F								

Packaging information

B: Bulk Pack

A: Ammo pack (per specification IEC286-2)



Designation	Symbol	Dimensions(mm)	
Pitch of component	P	12.7±10	
Feed hole pitch	P ₀	12.7±0.3	
Tape width	W	+1 18 -0.5	
Hold downe tape width	W ₀	12±0.5	
Hole position	H ₃	+0.75 9 -0.5	
Hold down tape position	W ₂	3.0max	
Overall component height	H _i	32.5max	
Component sligmeet	ΔP	±1.3max	
Feed hole diameter	D	4.0± 0.2	
Tape thickeess	T	0.5±0.2	
Component alignment	Δh	±2.0max	
Length of snipped leads	L	11 max	
Lead clinch height	H	16±0.5	
Lead wire spacing	S	2.5± 0.5	5.0±0.7
Feed hole center to wire center	P ₁	5.10± 0.5	3.85±0.7
Hole center to component center	P ₂	6.35±0.4	
Component height	H ₂	+2 18 -0	
Lead diameter	d	0.5±0.05	

How to order

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- ① Company logo
- ② series
- ③ Capacitance Code
- ④ Tolerance
- ⑤ Rated DC Voltage
- ⑥ Case Size
- ⑦ Packaging

Note:

1. For type recognition, series is expressed by three digits, that is : the first letters CA represent tantalum capacitors, 3rd digit represent series No. in case of no 3rd digit for specific product series, it is expressed by symbol “_”

2. Capacitance code: expressed in picofarad, 1st two digits represent significant figures and 3rd digit represents multiplier (number of zeros to follow).

3. Capacitance tolerance code is listed as follows:

4. Rated DC Voltage Code is expressed in three digits. if voltage value is only two digits, 1st digit is expressed in ‘0’.

5. Case Code is specified in specification sheets of the individual product series.

6. Packaging Code:

B: Bulk

T: Tape and Reel

A: Ammo

EX: Series CA45Δc/c ± 20%, 35V10μF, Taped and Reeled,

CA451 06M035DT

Series CAΔc/c ± 20%, 10V10μF, Bulk, CA-106M01 02B

Series CA301Δc/c ± 20%, 100V10μF, Bulk, CA301106M1001 B

7. For special order, other part number can be specified by users.

Allowable Tolerance Code of the Capacitance:

Allowable Tolerance %	Tolerance Code	Allowable Tolerance %	Tolerance Code
±0.1	B	+100 -10	H
±0.25	C	+100 -10	R
±0.5	D	+50 -10	T
±1	F	+30 -10	Q
±2	G	+50 -20	S
±5	J	+20 -20	Z
±10	K	Not Specified	N/A
		-20	
±20	M		