

# COATED SOLID ELECTROLYTIC TANTALUM CAPACITOR

## CA 42 Series

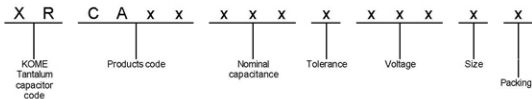
### Brief Introduction.

The CA42 Series sinter-anode, epoxy-coated solid electrolytic 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/T 10856-96, used in military and civil applications such as TV sets, camcorders, computers, Program-controlled electronic telephone switching system, telephone, instruments and meters.

### Features:

- Operating temperature Range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  >  $85^{\circ}\text{C}$  with rated voltage derating
- Rated voltage: see table 1
- DC leakage at  $20^{\circ}\text{C}$ :  $I_L \leq 0.01C_R V_R$  or  $0.5\mu\text{A}$  (whichever is greater)
- Dissipation factor at  $20^{\circ}\text{C}$ : Please see table 3
- Capacitance range:  $0.047\mu\text{F}$  –  $680\mu\text{F}$ , see table 1
- Capacitance tolerance:  $\pm 20\%$ ,  $\pm 10\%$  (for special order)
- Case sizes and dimensions, see table 2
- Temperature characteristics, see table 3

### HOW TO ORDER



### Example:

CA 42 Series:  $\Delta C/C \pm 20\%$ ,  $35\text{V}10\mu\text{F}$ , Tape packing; XRCA42106M035DT  
CA Series:  $\Delta C/C \pm 20\%$ ,  $10\text{V}10\mu\text{F}$ , Bulk packing; XRCA-106M0102B  
CA 301 Series:  $\Delta C/C \pm 20\%$ ,  $100\text{V}10\mu\text{F}$ , Bulk packing; XRCA301106M1001B

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### Rated Voltage, Nominal Capacitance, Case Sizes

Rated Voltage	3	4	6.3	10	16	20	25	35	50
Voltage Derating	2	2.5	4	6.3	10	13	16	20	32
Surge Voltage	4	5.2	8	13	20	26	33	46	65
Nominal Capacitor	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	D
6.8	A	A	A	B	B	C	C	D	E
10	A	A	B	B	B	C	C	D	E
15	A	A	B	C	C	D	D	E	F
22	B	B	C	C	C	D	D	E	F
33	B	B	C	D	D	E	E	F	
47	C	C	D	D	D	E	E	F	
68	D	D	D	D	E	F	F		
100	D	D	E	E	E	F	F		
150	D	E	E	E	F				
220	E	E	E	F					
330	E	F	F						
470	F								
680	F								

Table 1

### Dimensions-mm

Case Size	D (max)	H (max)	h (+0.5mm)	d
A	4.0	6	2.5	0.5
B	4.8	7.2	2.5	0.5
C	5.5	8	2.5	0.5
D	6.0	9.4	2.5	0.5
E	7.2	11.5	5.0	0.5
F	8.2	12.5	5.0	0.5

Table 2

### Temperature characteristics

Capacitance (uF)	Capacitance change (%)			Dissipation factor Max (%)				Current leakage Max (uA)		
	-55°C	+85°C	+125°C	-55°C	+20°C	+85°C	+125°C	+20°C	+85°C	+125°C
<=1.0	±10	±15	±25	4	2	4	6	$I_L \leq 0.02C_0V_R$ or 1uA	10 I <sub>0</sub>	12 I <sub>0</sub>
1.5 ~ 6.8				6	4	6	8			
10 ~ 68				8	6	8	10			
100 ~ 680				10	8	10	12			

Table 3

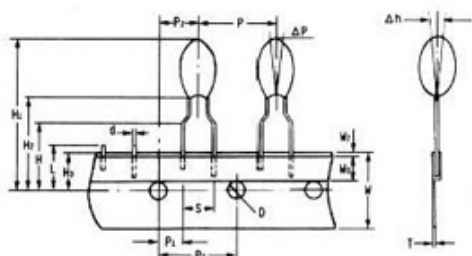
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### Packaging information

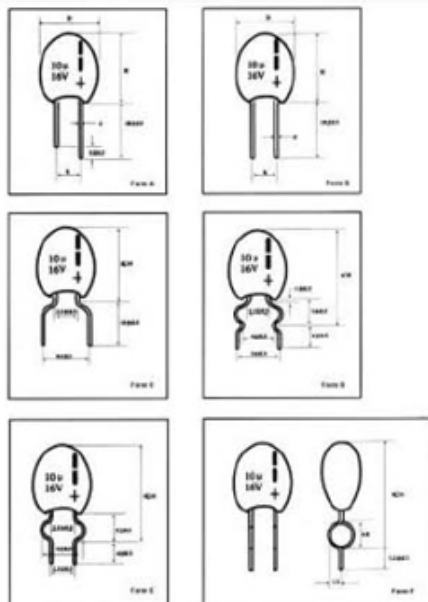
B = Bulk pack

A = Ammo pack (per Specification IEC286-2)



Symbol	Dimensions (mm)	Symbol	Dimensions (mm)
P	12.7 + 1.0	T	0.5 + 0.2
P <sub>0</sub>	12.7 + 0.3	Δh	2.0 max
W	+1 18 -0.5	L	11 max
W <sub>0</sub>	12 + 0.5	H	16 + 0.5
H3	+0.75 9 -0.5	S	2.5 + 0.5   5 + 0.7
W2	1.0 max	P1	5.10 + 0.5   3.85 + 0.7
H1	32.5 max	P2	6.35 + 0.4
ΔP	+1.3 max	H2	+2 18 -0
D	4.0 + 0.3	d	0.5 + 0.05

### Lead Styles



### Typical Characteristic curve

