

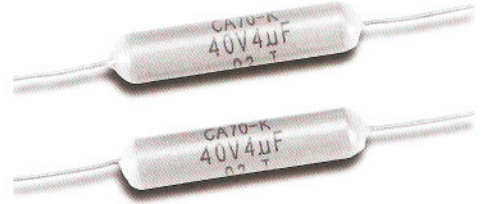
# Series CTN (CA70)

## Metal Case Tantalum Capacitors Axial Type Nonpolar Solid Electrolytic



### Features:

- Solid electrolytic.
- Nonpolar Type.
- Hermetically sealed metal cases.
- Axial leads.
- General purpose-extended range.



### SPECIFICATION:

Item	Performance Characteristics					
Operating Temperature Range	-55 to + 125°C					
Rated Working Voltage Range	6.3 to 35 V DC					
Nominal Capacitance Range	0.22 to 100 μF					
Capacitance Tolerance	±20% (120Hz, +20°C) ± 10%					
Leakage Current	Not more than 0.01CV [μA] or 0.5μA whichever is greater					
tan δ (120Hz, +20°C)	0.04 max. for ≤ 0.47μF					
	0.06 max. for 0.68~33μF					
	0.08 max. for ≥ 47 μF					
Characteristics at High and Low Temperature	-55°C	Capacitance change	±10% of initial measured value at +20°C			
	+125°C	Leakage current	≤ 0.1 CV or 5 [μF] whichever is greater			
		Capacitance change	±15% of initial measured value at +20°C			
Moisture Resistance	Test conditions					
	Relative humidity : 90 to 95% without load Ambient temperature : +60°C Duration : 1000 hours Post test requirements at + 20°C Leakage current : ≤ 0.1 CV or 5[μA], whichever is greater Capacitance change : ± 10% of initial measured value tan δ : ≤ 200% of initial specified value					
Endurance	Test conditions					
	Item \ Conditions	Derating	Rating			
	Duration	2000 hours	2000 hours			
	Ambient temperature	+ 125°C	+ 85°C			
	Applied voltage	Derated working voltage	Rated working voltage			
	Source impedance	1Ω/V	1Ω/V			
	Derating voltage + 125°C					
	Working voltage [V] DC	6.3	10	16	25	35
	Derating voltage [V] DC	4	6.3	10	16	22
	Post test requirements at +20°C					
Leakage current : ≤ 125% of initial specified value						
Capacitance change : ± 10% of initial measured value						
tan δ : ≤ Initial specified value						
Impedance : ≤ 200% of initial specified value						
Shelf Life	Test conditions		Post test requirements at +20°C			
	Duration	: 2000 hours	Same lots of "Endurance".			
	Ambient temperature	: +125°C				
	Applied voltage	: (none)				

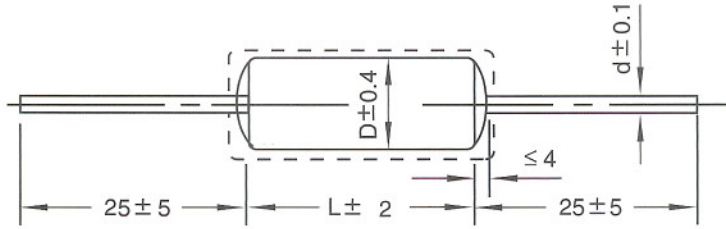
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## Metal Case Tantalum Capacitors Explanation of Part Numbers



CTN  
Series Code
1 V  
Rated Voltage
3 3 5  
Nominal Capacitance
M  
Capacitance Tolerance
B  
Case Size
B  
Packing

### TANTALUM CAPACITOR METAL CASE OUTLINE DRAWING



### Dimensions Millimeters mm

Case Size	A	B	C	D
D x L	4 x 16	6 x 25	7 x 30	9 x 30
d ± 0.1	0.4	0.6	0.6	0.8

### Rated Voltage, Capacitance of Capacitors.

Rated Voltage (V)	6.3	10	16	25	35
Code	0J	1A	1C	1E	1V
Capacitance (µF)	Case Size				
0.22 (224)					A
0.33 (334)					A
0.47 (474)					A
0.68 (684)					A
1.0 (105)			A	A	A
1.5 (155)			A	A	A
2.2 (225)		A	A	B	A
3.3 (335)		A	A	B	B
4.7 (475)	A	A	B	B	B
6.8 (685)	A	B	B	B	C
10 (106)	B	B	B	B	C
15 (156)	B	B	B	C	
22 (226)	B	B	B	C	
33 (336)	B	B	C	D	
47 (476)	B	C	C		
68 (686)	C	C	D		
100 (107)	C				