

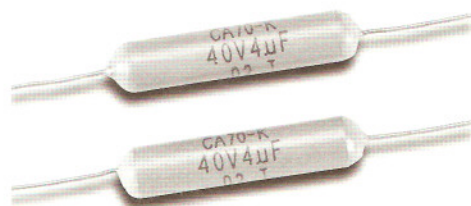
# Series CTN (CA70)



## 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 $\mu$ F																	
Capacitance Tolerance	$\pm$ 20% (120Hz, +20°C) $\pm$ 10%																	
Leakage Current	Not more than 0.01CV [ $\mu$ A] or 0.5 $\mu$ A whichever is greater																	
tan $\delta$ (120Hz, +20°C)	0.04 max. for $\leq$ 0.47 $\mu$ F																	
	0.06 max. for 0.68~33 $\mu$ F																	
	0.08 max. for $\geq$ 47 $\mu$ F																	
Characteristics at High and Low Temperature	-55°C	Capacitance change	$\pm$ 10% of initial measured value at +20°C															
	+125°C	Leakage current	$\leq$ 0.1 CV or 5 [ $\mu$ F] whichever is greater															
		Capacitance change	$\pm$ 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 : $\leq$ 0.1 CV or 5 $\mu$ A], whichever is greater Capacitance change : $\pm$ 10% of initial measured value tan $\delta$ : $\leq$ 200% of initial specified value																	
Endurance	Test conditions																	
	<table border="1"> <thead> <tr> <th>Item \ Conditions</th> <th>Derating</th> <th>Rating</th> </tr> </thead> <tbody> <tr> <td>Duration</td> <td>2000 hours</td> <td>2000 hours</td> </tr> <tr> <td>Ambient temperature</td> <td>+ 125°C</td> <td>+ 85°C</td> </tr> <tr> <td>Applied voltage</td> <td>Derated working voltage</td> <td>Rated working voltage</td> </tr> <tr> <td>Source impedance</td> <td>1<math>\Omega</math>/V</td> <td>1<math>\Omega</math>/V</td> </tr> </tbody> </table>			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	1 $\Omega$ /V	1 $\Omega$ /V
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	Applied voltage	: (none)																

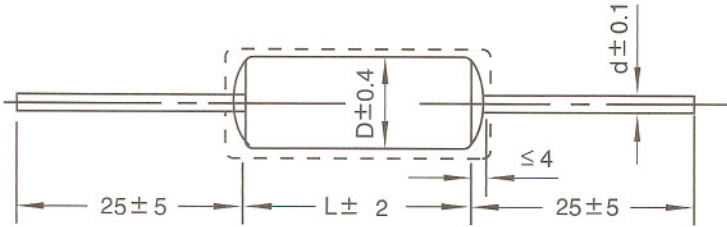
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## Metal Case Tantalum Capacitors Explanation of Part Numbers

$\frac{CTN}{\text{Series Code}}$        $\frac{1\ V}{\text{Rated Voltage}}$        $\frac{3\ 3\ 5}{\text{Nominal Capacitance}}$        $\frac{M}{\text{Capacitance Tolerance}}$        $\frac{B}{\text{Case Size}}$        $\frac{B}{\text{Packing}}$

### 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				