

# Series CTW (CA30S)



## Metal Case Tantalum Capacitors Axial Type Wet Electrolytic

### FEATURES:

- Wet electrolytic.
- Polar 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 125 V DC																
Nominal Capacitance Range	1.0 to 1000 μF																
Capacitance Tolerance	±20% (120Hz, +20°C) ± 10%																
Leakage Current	Not more than 0.001CV [μA] or 1.0μA whichever is greater																
tan δ (120Hz, +20°C)	See Next Page																
Characteristics at High and Low Temperature	-55°C	Capacitance change	±10% of initial measured value at +20°C														
	+125°C	Leakage current	≤ 0.01 CV or 10 [μA] whichever is greater														
	+125°C	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 : ≤ 0.01 CV or 10[μF], whichever is greater Capacitance change : ± 10% of initial measured value tan δ : ≤ 200% of initial specified value																
	Test conditions																
	<table border="1"> <thead> <tr> <th>Conditions Item</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>1Ω/V</td><td>1Ω/V</td></tr> </tbody> </table>			Conditions Item	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
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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 32 40 63 75 100 125																
Derating voltage [V] DC	4 6.3 10 16 20 25 40 50 63 80																
Endurance	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																
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Shelf Life	Post test requirements at +20°C  Same litits for "Endurance".																
	Duration	2000 hours															
	Ambient temperature	+ 125°C															
	Applied voltage	(none)															

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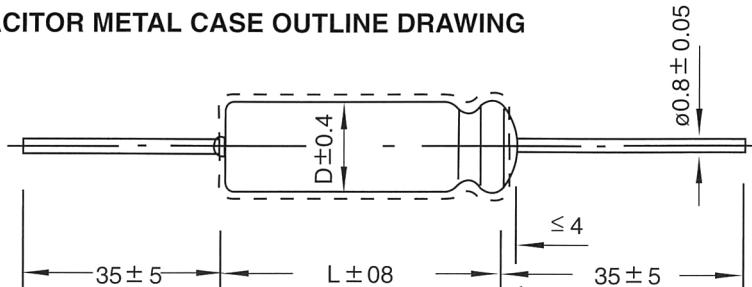


CTW(CA30S)

## Metal Case Tantalum Capacitors Explanation of Part Numbers

C T W Series Code	1 J Rated Voltage	3.3 5 Nominal Capacitance	M Capacitance Tolerance	A Case Size	B Packing
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### TANTALUM CAPACITOR METAL CASE OUTLINE DRAWING



### Dimensions Millimeters mm

Case Size	A	B	C	D	E
D x L	4 x 12	5 x 14	6 x 16	8 x 16	8 x 22
d ± 0.05	0.8	0.8	0.8	0.8	0.8

### Rated Voltage, Capacitance of Capacitors.

Rated Voltage (V)	10	16	25	40	63	100	125
Code	1A	1C	1E	1G	1J	2A	2E
Capacitance ( $\mu$ F)							
1.0 (105)						A	A
1.5 (155)						A	A
2.2 (225)						A	A
3.3 (335)						A	B
4.7 (475)						B	B
6.8 (685)						B	C
10 (106)					A	B	C
15 (156)					B	C	C
22 (226)					B	C	D
33 (336)				B	C	D	
47 (476)				B	D	D	
68 (686)			B	C	D		
100 (107)			B	C	E		
150 (157)		B	C	D	E		
220 (227)	B	C	C	D	E		
330 (337)	C	D	D				
470 (477)	D	D					
680 (687)							
1000 (108)							

Rated voltage UR (V)	10	16	25	40	63	100	125
Rated capacitor ( $\mu$ F)	$\tan \delta$ (120 Hz) %						
1.0~4.7						6	6
6.8						8	8
10					8	10	15
15					10	18	15
22					18	15	20
33				12	12	25	
47				25	25	28	
68			30	20	25		
100			25	35	20		
150		35	50	35	28		
220	45	60	50	30			
330	70	70	40				
470	75	50					
680							
1000							