

## CA70 Series Bipolar solid Electrolytic Tantalum Capacitor

Executive Standard: Q/MM28-98

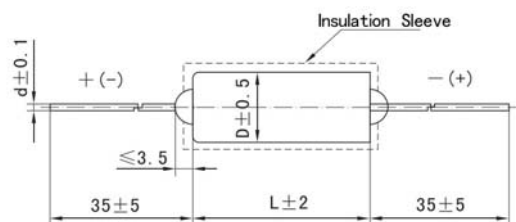
### Characteristics and Application

- Metal case encapsulation, Hermitically-sealed, Cylindrical, Axial-leaded, With Insulation Sleeve, Bipolar capacitor;
- Excellent in electrical performances, High stabilization, Low DF&DCL;
- Applicable to DC&Pulse current of communications-equipments and instruments which have polarity change.



### Main Features

- Operating Temperature Range:  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$  ( $> 85^{\circ}\text{C}$  with rated voltage derating)
- Rated Voltage, Derating Voltage, Nominal Capacitance: See table 1
- Capacitance tolerance: K:  $\pm 10\%$ ; M:  $\pm 20\%$
- DC leakage At  $+25^{\circ}\text{C}$ :  $I_0 \leq 0.02 C_R U_R$  ( $\mu\text{A}$ ) or  $1 \mu\text{A}$  (which is greater)
- Dissipation Factors ( $\text{tg}\delta$ ) at  $25^{\circ}\text{C}$ : Not exceed the parameter in table 2
- Temperature Characteristics: Not exceed the parameter in table 2
- Dimensions and Max Weight: See figure 1 and table 1



**Table1 Rated Voltage, Derating Voltage, Nominal Capacitance, Dimensions and Max Weight**

Rated Voltage $U_R$ (V)			6.3	10	16	25	32	40	63	
Derating Voltage $U_c$ (V)			4	6.3	10	16	20	25	40	
Dimensions (mm)			Max Weight (g)	Nominal Capacitance $C_R$ ( $\mu$ F)						
D	L	d								
3.2	13	0.4	1.5	0.47	0.33	0.15	0.15	0.10	0.10	0.10
				0.68	0.47	0.22	0.22	0.15	0.15	0.15
				1.0	0.68	0.33	0.33	0.22	0.22	0.22
				1.5	1.0	0.47	0.47	0.33	0.33	
				2.2	1.5	0.68	0.68	0.47	0.47	
				3.3	2.2	1.0	1.0	0.68		
				4.7	3.3	1.5				
4.5	22	0.6	4.5	6.8	4.7	2.2	1.5	1.0	0.68	0.33
				10	6.8	3.3	2.2	1.5	1.0	0.47
				15	10	4.7	3.3	2.2	1.5	0.68
				22	15	6.8	4.7	3.3	2.2	1.0
				33	22	10	6.8	4.7	3.3	1.5
6	28	0.6	6	47	33	22	10	6.8	4.7	2.2
				47	33	15	6.8	6.8		
8	28	0.8	8	68	68	47	22	10	10	3.3
				100	68	47	33	15	15	4.7
8	44	0.8	15	150	100	68	47	22	22	6.8
				220	150	100	47	33	22	10
10	44	0.8	32	330	220	150	68	47	33	15
				470	330	220	100	68	47	22

P.S. With insulation sleeve, D could be 0.3mm more at most, and L could be 1mm more at most.

**Table 2 Temperature Characteristics**

Nominal Capacitance $C_R$ ( $\mu$ F)	Range of Capacitance (%)			Max					
				$tg\delta$ (%)				DCL ( $\mu$ A)	
	-55 $^{\circ}$ C	85 $^{\circ}$ C	125 $^{\circ}$ C	-55 $^{\circ}$ C	25 $^{\circ}$ C	85 $^{\circ}$ C	125 $^{\circ}$ C	85 $^{\circ}$ C	125 $^{\circ}$ C
$\leq 0.47$	$\pm 8$	$\pm 8$	$\pm 10$	3	3		8 I。	10 I。	
0.68~33				5	5				
47~150				6	6				
220~470				8	8				