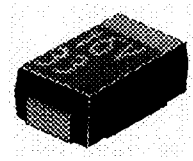
CHIP TYPE TANTALUM SOLID ELECTROLYTIC CAPACITORS

MCS Series

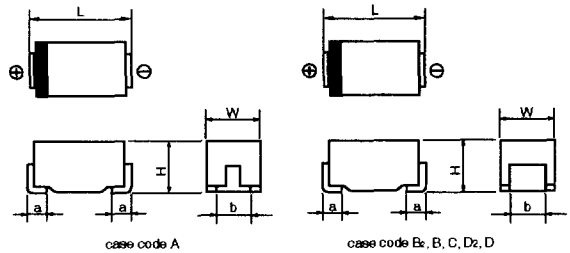


- Resin molded chip type
- Smaller than MC series
- Low profile, small-sized and large capacitance series
- Suitable for flow and reflow soldering methods
- Adapted resin passed UL94, V-0

◆SPECIFICATIONS

Items	Requirements				Test Conditions
Category temperature range	-55 ~ +85℃(Without voltage derating) to +125℃(With voltage derating)				
Rated Voltage range	4~35Vdc				
Rated Capacitance range	0.68 ~ 150μF				
Rated Capacitance tolerance	±20%(M), ±10%(K Partially)				
Leakage current (L.C.)	I≦0.01CV or 0.5(μA) Whichever is greater. I : Leakage current (μA), C : Rated Capacitance (μF), V : Rated voltage (Vdc)				Refer JIS C 5102. 7.7 . After 5 minutes of applying rated voltage at 20℃
Dissipation factor (D.F.)	4%(6%) max. (C≦4.7μF) 6%(8%) max. (C=6.8~68μF) 8%(11%) max. (C≧100μF)				Refer JIS C 5102. 7.9 . f=120Hz, 20 ( ) : Applies for R.V. 4Vdc
Stability at low and high temperature	Temperature (℃)	-55	+85	+125	Shall meet the table values. Refer JIS C 5102. 7.12 . ( ) : Applies for R.V. 4Vdc
	Cap. change(%)	±10	±10	±15	
	D.F. (%) max.				
	C≦4.7μF	6(8)	4(6)	4(6)	
	C=6.8~68μF	8(10)	6(8)	6(8)	
	C≦100μF	10(13)	8(11)	8(11)	
	Leakage current (μA) max.		≦0.1CV or 5(μA) Whichever is greater.	≦0.125CV or 6.25(μA) Whichever is greater.	
Humidity test	Cap. change	less than ±10%			Refer JIS C 5102. 9.5. 40℃ 90~95%RH 500hrs.
	D.F.	Shall not exceed the value in Dissipation factor			
	Leakage current	Shall not exceed the value in Leakage current			
Surge voltage	Cap. change	less than ±5%			Refer JIS C 5102. 7.14 . 85℃ Surge voltage 1000cycles (30sec-on, 330sec-off).
	D.F.	Shall not exceed the value in Dissipation factor			
	Leakage current	Shall not exceed the value in Leakage current			
Rated ripple voltage	See Rated ripple voltage page, please.				
Resistance to soldering heat	Cap. change	less than ±5%			Refer JIS C 5143 Appendix 1. 260℃ 5 sec.
	D.F.	Shall not exceed the value in Dissipation factor			
	Leakage current	Shall not exceed the value in Leakage current			
Endurance	Cap. change	less than ±10%			Refer JIS C 5102. 9.10 page. 85℃, Rated voltage, 1,000hrs.
	D.F.	Shall not exceed the value in Dissipation factor			
	Leakage current	Shall not exceed the value in Leakage current			
Failure rate	1%/1000h				85℃, Rated voltage, 1Ω/V (power source impedance)
Standard	JIS C 5143 characteristics LB				

◆DIMENSIONS



Unit : mm

Case code	L	W	H	a	b
A	3.2±0.2	1.6±0.2	1.6±0.2	0.8±0.3	1.2±0.2
B2	3.5±0.2	2.8±0.2	1.9±0.2	0.8±0.3	2.2±0.2
B	4.7±0.2	2.6±0.2	1.8±0.2	0.9±0.3	1.8±0.2
C	6.0±0.2	3.2±0.2	2.5±0.2	1.3±0.3	2.2±0.2
D2	5.8±0.2	4.6±0.2	3.2±0.2	1.3±0.3	2.4±0.2
D	7.3±0.2	4.3±0.2	2.8±0.2	1.3±0.2	2.4±0.2

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MCS Series

◆PART NUMBERING SYSTEM

10 MCS 106 M B TER

- TER: Taping code : TER is standard
- B: Case code : A, B2, B, C, D2, D
- M: Rated Capacitance tolerance M : ±20% K(partially) : ±10%
- 106: Rated Capacitance code : Code 1 of Rated Capacitance code table
- MCS: Series name : MCS
- 10: Rated voltage code : Code 1 of Rated voltage code table

●Rated voltage code table

Rated voltage(V=)	2.5	4	6.3	10	16	20	25	35
code 1	2R5	4	6	10	16	20	25	35
code 2	e	G	J	A	C	D	E	V

●Lot No. table

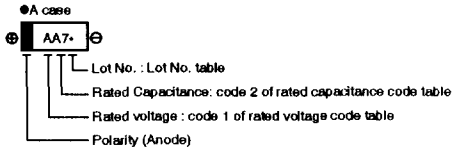
Decade year \ month	1	2	3	4	5	6	7	8	9	10	11	12
1990, 2010	A	B	C	D	E	F	G	H	J	K	L	M
2000	N	P	Q	R	S	T	U	V	W	X	Y	Z

◆STANDARD RATINGS

μF \ V=	4	6.3	10	16	20	25	35
0.68 (684)						A	
1.0 (105)					A	A	
1.5 (155)				A	A		B, B2
2.2 (225)			A	A		B, B2	
3.3 (335)		A	A	A		B, B2	
4.7 (475)	A	A	A	B, B2	B, B2		C
6.8 (685)	A	A	B, B2	B, B2		C	
10 (106)	A	B, B2	B, B2		C		D, D2
15 (156)	B, B2	B, B2		C		D, D2	
22 (226)	B, B2		C		D, D2		
33 (336)		C	C	D, D2			
47 (476)	C	C	D, D2				
68 (686)	C	D, D2	D, D2				
100.0 (107)	D, D2	D, D2					
150.0 (157)	D, D2						

◆MARKING

●A case



●B1, B2, C, D2, D case