

TMCP Series (0805 Size Tantalum Chip Capacitors)

Features

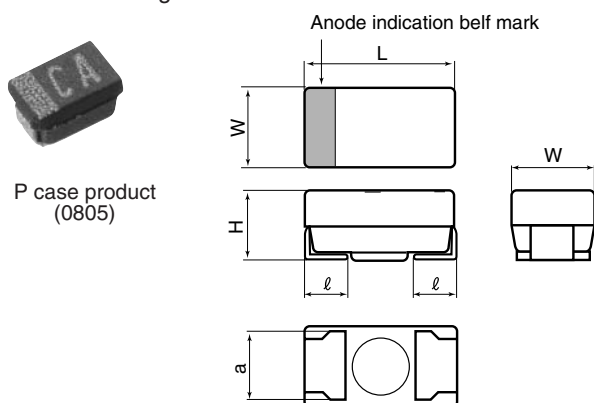
- Rendered even smaller-sized thanks to the accumulated technological knowhow (reduced to about 1/3 the cubic volume of the TMCS type).
- Suitable for high-density packaging essential to Audio Visual and other equipment downsizing.

Product symbol : (Example) TMC Series P case 6.3V 10 μ F $\pm$ 20%

TMC P 0J 106 M T R E

Terminal code
Packing polarity code
Packing method code (T:carrier tape)
Capacitance tolerance code (M: $\pm$ 20%)
Capacitance code
Rated voltage code
Case size code

Outline of drawings and dimensions



Dimensions (Unit : mm)

Case code	Case size				
	L $\pm$ 0.2	W $\pm$ 0.2	H $\pm$ 0.2	l $\pm$ 0.2	a $\pm$ 0.1
P	2.0	1.25	1.2	0.5	0.9

Standard value and case size

Capacitance	μ F	Code	Rated voltage (V.DC)						
			2.5	4	6.3	10	16	20	25
			0E	0G	0J	1A	1C	1D	1E
0.10	104							P	P
0.15	154							P	
0.22	224							P	
0.33	334							P	
0.47	474							P	P
0.68	684							P	
1.0	105						P	P	P
1.5	155					P	P	P	
2.2	225					P	P	P	
3.3	335					P	P		
4.7	475				P	P	P		
6.8	685				P	P			
10	106				P	P			
15	156	P	P	P					
22	226	P	P	P					
33	336	P	P						
47	476	P	P						

For ratings not covered the table, consult Hitachi AIC.

Product specifications	TMCP	Test conditions JIS C5101-1:1998
Operating temperature range	-55°C ~ +125°C	
Rated voltage	DC2.5 ~ 25V	85°C
Surge voltage	DC3.2 ~ 32V	85°C
Derated voltage	DC1.6 ~ 16V	125°C
Capacitance	0.1 ~ 47 μ F	
Capacitance tolerance	$\pm$ 10% or 20%	Paragraph 4.7, 120 Hz
Leakage current	Refer to table standard product table	Paragraph 4.9, in 5 minutes after the rated voltage is applied.
tan δ	Refer to table standard product table	Paragraph 4.8, 120Hz
Surge withstanding voltage	Δ C/C $\pm$ 20% or less tan δ Specified initial value or less LC Specified initial value or less	Paragraph 4.26
Temperature characteristics	Specified initial value	-55 85 125
	Δ C/C	- -20 ~ 0% 0 ~ +20% 0 ~ +20%
	tan δ	0.06 0.10 0.08 0.10
	Value down table or less	0.08 0.12 0.10 0.12
		0.10 0.14 0.12 0.14
		0.12 0.16 0.14 0.16
		0.20 0.24 0.22 0.24
LC	Refer to standard product table	1000% or less specified initial value or less
		1200% or less specified initial value or less
Solder heat resistance	Δ C/C	$\pm$ 20% or less
	tan δ	Specified initial value or less
	LC	Specified initial value or less
Moisture resistance no load	Δ C/C	$\pm$ 20% or less
	tan δ	150% Specified initial value or less
	LC	Specified initial value or less
High-temperature load	Δ C/C	$\pm$ 20% or less
	tan δ	Specified initial value or less
	LC	200% Specified initial value or less
Thermal shock	Δ C/C	$\pm$ 20% or less
	tan δ	Specified initial value or less
	LC	Specified initial value or less
Moisture resistance load	Δ C/C	$\pm$ 20% or less
	tan δ	150% Specified initial value or less
	LC	200% Specified initial value or less
Failure rate	1% / 1000hours	85°C. The rated voltage is applied (through a protective resistor of 1 Ω /V).

※ This catalog is designed for providing general information. Please inquire of our Sales Department to confirm specifications prior to use.

Standard product table - TMCP series

Rated voltage V. DC	Capacitance μF	$\tan\delta$	Leakage current μA	Case code	Product name
2.5	15	0.08	0.5	P	TMCP0E156
	22	0.10	0.6	P	TMCP0E226
	33	0.20	0.8	P	TMCP0E336
	47	0.30	11.8	P	TMCP0E476
4	15	0.08	0.6	P	TMCP0G156
	22	0.10	0.9	P	TMCP0G226
	33	0.30	13.2	P	TMCP0G336
	47	0.30	18.8	P	TMCP0G476
6.3	4.7	0.08	0.5	P	TMCP0J475
	6.8	0.08	0.5	P	TMCP0J685
	10	0.08	0.7	P	TMCP0J106
	15	0.12	1.9	P	TMCP0J156
	22	0.30	13.9	P	TMCP0J226
10	1.5	0.08	0.5	P	TMCP1A155
	2.2	0.08	0.5	P	TMCP1A225
	3.3	0.08	0.5	P	TMCP1A335
	4.7	0.08	0.5	P	TMCP1A475
	6.8	0.20	6.8	P	TMCP1A685
	10	0.20	10.0	P	TMCP1A106
16	1.0	0.06	0.5	P	TMCP1C105
	1.5	0.08	0.5	P	TMCP1C155
	2.2	0.08	0.5	P	TMCP1C225
	3.3	0.08	0.6	P	TMCP1C335
	4.7	0.08	0.8	P	TMCP1C475
20	0.1	0.06	0.5	P	TMCP1D104
	0.15	0.06	0.5	P	TMCP1D154
	0.22	0.06	0.5	P	TMCP1D224
	0.33	0.06	0.5	P	TMCP1D334
	0.47	0.06	0.5	P	TMCP1D474
	0.68	0.06	0.5	P	TMCP1D684
	1.0	0.08	0.5	P	TMCP1D105
	1.5	0.08	0.5	P	TMCP1D155
	2.2	0.08	0.5	P	TMCP1D225
25	0.1	0.06	0.5	P	TMCP1E104
	0.47	0.06	0.5	P	TMCP1E474
	1.0	0.06	0.5	P	TMCP1E105

TMCP * △△□□□○○○F

(Example 1) 6.3V1μF

① Anode indication belt mark

② Simplified code of nominal capacitance (A6: 1μF)

(Example 2) 10V1μF

① Anode indication belt mark

② Simplified code of rated voltage (A: 10V)

③ Simplified code of nominal capacitance (A: 1μF)

*When indicating both rated voltage and nominal capacitance by code, omit the multiplier of the capacitance code.