

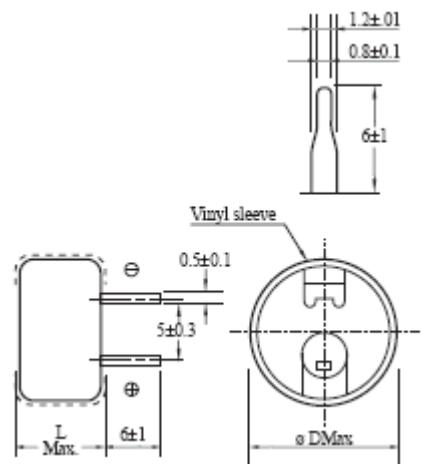
TS12

FEATURES

- Small-size, large capacity, excellent voltage holding.
- For all ratings, uniform 5 mm pitch of terminal spacing.
- Wider temperature range(-25~+70°C) than battery makes periodic change unnecessary.
- Ø13.5x7.5 size can encase up to 0.33F.
- Ideal for backing up of CMOS's, microcomputers, RAM's and the like used in VCR's, tuners, TV sets, telephone sets and other.



S P E C I F I C A T I O N S							
Operating temperature range (°C)	-25 to + 70						
Capacitance tolerance (%)	-20 to + 80						
Internal resistance	Capacitance (F)	0.047	0.1	0.22	0.33	0.47	
	Internal resistance (Ω)	120	75	75	73	30	
Stability at low & high temperature	Percentage of capacitance change		Within ±30% of the value at °C				
	Internal resistance		Less than five times of the value at 20 °C				
Load life (70°C)	Test time		1000 hours				
	Percentage of capacitance change		Within ±30% of the initial measured value				
	Internal resistance		Within four times the initial specified value				
Shelf life (70°C)	Test time: 1000 hours : Same as those for the load life.						

**Standard Ratings**

Rated voltage (V)	Capacitance (F)	Ø D x L (mm)
5.5	0.047	13.5 x 7.5
5.5	0.1	13.5 x 7.5
5.5	0.22	13.5 x 7.5
5.5	0.33	13.5 x 7.5
5.5	0.47	21.5 x 8
5.5	1	21.5 x 8

Coin Cell

Rated voltage (V)	Capacitance (F)	Ø D x L (mm)
2.4	0.33	11 x 1.6
2.4	2.2	18.3 x 2
2.5	0.18	6.8 x 2.1

High-Temperature -20 + 85°C

Rated voltage (V)	Capacitance (F)	ØD x L (mm)
5.5	0.033	13.5 x 9.5
5.5	0.047	13.5 x 9.5
5.5	0.1	13.5 x 9.5
5.5	0.47	21.5 x 9.5
5.5	0.68	21.5 x 9.5
5.5	1	21.5 x 9.5

High Power

Rated voltage (V)	Capacitance (F)	Real ESR (mΩ)	Ø D x L (mm)
2.5	0.047	300	8 x 22
2.5	0.047	100	12.5 x 23
2.5	0.047	80	12.5 x 31.5
2.5	0.047	60	18 x 35
2.5	0.047	60	18 x 40
2.5	0.047	30	25 x 40
2.5	0.047	300	35 x 50

Miniaturized

Rated voltage (V)	Capacitance (F)	Ø D x L (mm)
5.5	0.047	11.5 x 13
		11.5 x 5
		11.5 x 12.4
5.5	0.1	11.5 x 13
		11.5 x 5
		11.5 x 12.4
5.5	0.22	11.5 x 13
		11.5 x 5
		11.5 x 12.4
5.5	0.33	11.5 x 13
		11.5 x 5
		11.5 x 12.4
5.5	1.0	19 x 20.5

Coin Cell High Voltage

Rated voltage (V)	Capacitance (F)	Ø D x L (mm)
6.3	0.047	13.5 x 9.5
6.3	0.1	13.5 x 9.5
6.3	0.47	21.5 x 9.5
6.3	0.68	21.5 x 9.5
6.3	1	21.5 x 9.5

Note: Specification are subject to change without notice. For more detail and update, please visit our website.