

Aluminum Electrolytic Capacitor
Type ESM - 7mm Height 85°C Standard Series

△ Features

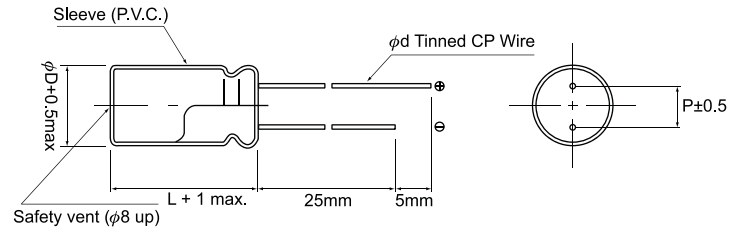
- 7m Height Subminiature Standard Series
- Highly reliable electrical performance
- Guaranteed long life (1,000 hours at 85° C)

△ Applications

- Excellent spacing favor with 7mm height
- Expected life (1,000 hours at 85° C)



△ Dimensions



	DØ x L (mm)			
ØD	4	5	6	8
P	1.5	2.0	2.5	3.5
Ød	0.45	0.45	0.45	0.5

△ Specifications

Item	Performance Characteristics							
Operating Temperature	-40 + 85°C							
Rated Voltage	4V ~ 50V							
Capacitance Range	0.1 ~ 470 µF							
Capacitance Tolerance	±20% (120Hz, 20°C)							
Leakage Current	I ≤ 0.01CV or 3 µA, whichever is greater after 2 minutes application of rated voltage.							
Dissipation Factor (120Hz, 20°C)	Rated voltage (V)	4	6.3	10	16	25	35	50
	Tan δ (max.)	0.35	0.24	0.20	0.16	0.14	0.12	0.10
Temperature Characteristics (120Hz)	Stability at Low Temperature							
	Rated voltage (V)	4	6.3	10	16	25	35	50
	Z (-25°C) / Z (20°C)	7	4	3	2	2	2	2
	Z (-40°C) / Z (20°C)	15	8	6	4	4	3	3
Load Life	After 1,000 hours application of WV at 85°C, capacitor shall meet the characteristics requirements.							
	Capacitance change	Within ±20% of initial value						
	Tan δ	200% or less of initial specified value						
	Leakage current	Initial specified value or less						
Shelf Life	After leaving capacitors under no load at 85°C for 1,000 hours and applying voltage according to JIS C5102 and C5141, they meet the specified value for load life characteristics listed above.							

NOTE: Part Numbering System
(1) (2) (3) (4)
ESM 106 M 1H

- 1 Series
- 2 Capacitance
- 3 Tolerance
- 4 Working Voltage



Fixed Component Capacitors

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Δ Dimensions

WV(SV) Cap (μF)	Dφ x L (mm)													
	4 (5)		6.3 (10)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)	
0.1													4 x 7	1
0.22													4 x 7	2.3
0.33													4 x 7	3.5
0.47													4 x 7	5
1													4 x 7	10
2.2													4 x 7	19
3.3													4 x 7	24
4.7													4 x 7	28
10							4 x 7	28	4 x 7	28	5 x 7	36	5 x 7	38
22			4 x 7	34	4 x 7	35	4 x 7	39	4 x 7	43	5 x 7	52	6.3 x 7	58
33	4 x 7	33	4 x 7	40	4 x 7	43	5 x 7	55	5 x 7	58	6.3 x 7	65	8 x 7	75
47	4 x 7	39	4 x 7	48	4 x 7	51	5 x 7	65	6.3 x 7	71	6.3 x 7	76	8 x 7	95
100	4 x 7	55	5 x 7	78	5 x 7	82	6.3 x 7	98	6.3 x 7	106	8 x 7	130		
220	6.3 x 7	110	6.3 x 7	120	6.3 x 7	126	6.3 x 7	132						
330	6.3 x 7	140	8 x 7	180	8 x 7	188	8 x 7	196						
470	8 x 7	240											Case Size	Ripple

Ripple current (mA) at 85°C 120Hz