



Aluminum Electrolytic Capacitor
Type ESH - 7mm Height 105°C Standard Series

△ Features

- 7mm Height Standard Series
- Highly reliable electrical performance
- Expected life (1,000 hours at 105°C)

△ Applications

- For general purpose use with 7mm height
- Wide temperature range and miniature size

△ Specifications

Item	Performance Characteristics							
Operating Temperature Range	-40 + 105°C							
Rated Voltage	6.3V ~ 50V							
Capacitance Range	0.1 ~ 470 μF							
Capacitance Tolerance	±20% (120Hz, 20°C)							
Leakage Current	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	0.21	0.18	0.15	0.13	0.12
Temperature Characteristics (120Hz)	Impedance Ratio / Stability at Low Temperature							
	Rated voltage (V)	4	6.3	10	16	25	35	50
	Z (-25°C) / Z (20°C)	6	3	2	2	2	2	2
	Z (-40°C) / Z (20°C)	12	6	5	4	3	3	3
Load Life	After 1,000 hours application of WV at 105°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 105°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.							

△ 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	18
3.3													4 x 7	23
4.7											4 x 7	24	4 x 7	26
10						4 x 7	29	4 x 7	31	5 x 7	36	6.3 x 7	44	
22			4 x 7	34	4 x 7	36	4 x 7	38	5 x 7	46	6.3 x 7	55	6.3 x 7	58
33			4 x 7	38	4 x 7	40	5 x 7	48	6.3 x 7	60	6.3 x 7	62	8 x 7	70
47	4 x 7	38	4 x 7	44	5 x 7	50	5 x 7	59	6.3 x 7	68	6.3 x 7	72	8 x 7	88
100	4 x 7	48	5 x 7	72	5 x 7	80	6.3 x 7	92	8 x 7	112	8 x 7	120		
220	6.3 x 7	90	6.3 x 7	112	6.3 x 7	120	8 x 7	146						
330	8 x 7	142	8 x 7	150	8 x 7	162	8 x 7	180						
470	8 x 7	210	8 x 7	230									Case Size	Ripple

NOTE: Part Numbering System
 (1) (2) (3) (4) 1 Series 3 Tolerance
 ESH 106 M 1H 2 Capacitance 4 Working Voltage
 Ripple current (mA) at 105°C 120Hz

Fixed Component Capacitors