



**LIBERTY**  
Components

Aluminum Electrolytic Capacitor

Type ENA

Fixed Component  
Capacitors

## Aluminum Electrolytic Capacitor Type ENA - Axial Non-Polar 85°C Series

### Features

- Exhibits reliable performance
- Guaranteed long life (2,000 hours at 85° C)

### Applications

- In circuits where the polarity is reversed or not constant

### Specifications

Item	Performance Characteristics							
Operating Temperature Range	-40 + 85°C							
Rated Voltage			6.3V ~ 100V					
Capacitance Range			0.1 ~ 2,200 µF					
Capacitance Tolerance			±20% (120Hz, 20°C)					
Leakage Current	0.03CV or 3 µA, whichever is greater after 5 minutes application of rated voltage.							
	Rated voltage (V)	6.3	10	16	25	35	50	63
	Tan δ (max.)	0.26	0.24	0.22	0.20	0.16	0.14	0.12
Dissipation Factor (120Hz, 20°C)	For capacitance of more than 1,000 µF, add 0.02 for every increase of 1,000 µF.							
	Rated voltage (V)	6.3	10	16	25	35	50	63
	Z (-25°C) / Z (20°C)	4	3	2	2	2	2	2
Temperature Characteristics (120Hz)	Z (-40°C) / Z (20°C)	10	8	6	5	4	4	3
	After 2,000 hours application of WV at 85°C, capacitor shall meet the characteristics requirements mentioned below.							
	Capacitance change	Within ±20% of initial value						
	Tan δ	200% or less of initial specified value						
Load Life	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.							

### Dimensions

WV(SV) Cap (µF)	Dφ x L (mm)															
	6.3 (10)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (75)	100 (125)								
0.1 - 0.47									6.3 x 13	15	6.3 x 16	15				
1									6.3 x 13	22	6.3 x 16	22				
2.2									6.3 x 13	32	6.3 x 16	32				
3.3									6.3 x 13	38	6.3 x 16	38				
4.7									6.3 x 13	45	6.3 x 16	40				
10						6.3 x 13	55	8 x 16	75	8 x 16	50	10 x 21	100			
22			6.3 x 13	75	8 x 16	90	8 x 16	100	10 x 21	130	10 x 21	85	10 x 26	180		
33		6.3 x 13	83	8 x 16	100	8 x 16	115	8 x 16	125	10 x 21	140	10 x 21	120	13 x 26	230	
47	6.3 x 13	90	6.3 x 13	110	8 x 16	120	8 x 16	140	8 x 20	160	10 x 21	180	10 x 26	150	13 x 26	290
100	8 x 16	140	8 x 20	175	8 x 20	200	10 x 21	230	10 x 26	280	13 x 26	360	13 x 26	210	16 x 38	520
220	8 x 20	200	10 x 21	290	10 x 26	360	13 x 26	430	13 x 26	510	13 x 31	590	16 x 38	410		
330	10 x 21	320	10 x 26	405	13 x 26	480	13 x 26	520	13 x 31	600	16 x 31	720				
470	10 x 26	385	13 x 26	510	13 x 26	540	13 x 31	660	16 x 31	770						
1000	13 x 26	690	13 x 31	760	16 x 31	980										
2200	16 x 31	1240	16 x 38	1400											Case Size	Ripple

Ripple current (mA) at 85°C 120Hz

NOTE:

Part Numbering System

- |     |     |     |     |   |                 |
|-----|-----|-----|-----|---|-----------------|
| (1) | (2) | (3) | (4) | 1 | Series          |
| ENA | 106 | M   | 1H  | 2 | Capacitance     |
|     |     |     |     | 3 | Tolerance       |
|     |     |     |     | 4 | Working Voltage |