

**ROS Aluminum Electrolytic Capacitors For Audio**

**SILMIC Series Silk Fiber Using Audio Purpose Capacitor**

- ELNA developed new low material for the separate paper which use silk fibers. Therefore, this capacitor can give you high grade sound for your audio design.
- Due to the silk fiber's pliability, the capacitor makes a dream of the high quality sound.

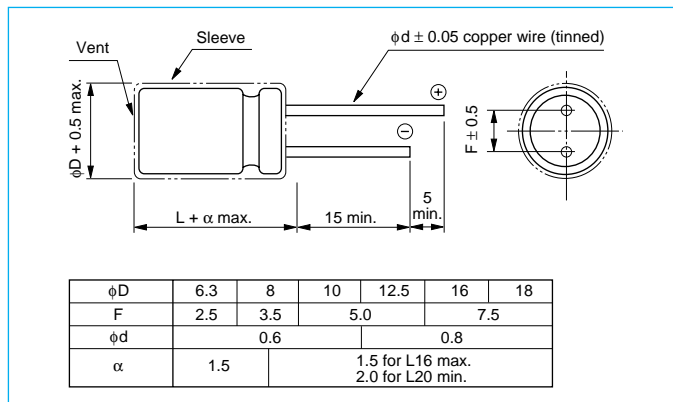
For example;

- To relieve the music's vibration energy.
- To decrease the peak feeling sound at high compass and rough quality sound at middle compass.
- To increase massive sound at low compass.
- For bipolar capacitors, consult with us.

**High Grade Capacitors for Audio (SILMIC) Series ROS**

- All lead wires oxygen-free copper for extremely low distortion. (Third high frequency distortion 10kHz, 0.1A,-120dB or less)
- Vinyl sleeve is of brown finish gold "SILMIC" mark.

**Outline Drawing**



**Photo**



• The SILMIC series capacitors can be manufactured in larger sizes for power supply smoothing; consult with us.

**Specifications**

No.	Item	Performance														
1	Temperature range (°C)	-40 to +85														
2	Leakage current (μA)	Less than 0.01 CV or 3 whichever is larger (after 5 minutes), C: Capacitance (μF), V: Rated Voltage (V) (20°C)														
3	Capacitance tolerance (%)	±20 (20°C, 120 Hz)														
4	Tangent of loss angle (tan δ)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>tan δ</td> <td>0.13</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.08</td> </tr> </table> <p>0.02 is added to every 1000μF increase over 1000μF (20°C, 120Hz)</p>	Rated voltage (V)	16	25	35	50	63	100	tan δ	0.13	0.10	0.10	0.08	0.08	0.08
Rated voltage (V)	16	25	35	50	63	100										
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5	Endurance (85°C) (Applied ripple current)	<table border="1"> <tr> <td>Test time</td> <td>1000 hours</td> </tr> <tr> <td>Leakage current</td> <td>The initial specified value or less</td> </tr> <tr> <td>Change in capacitance</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Tan δ</td> <td>150% or less of initial specified value</td> </tr> </table>	Test time	1000 hours	Leakage current	The initial specified value or less	Change in capacitance	Within ±20% of initial value	Tan δ	150% or less of initial specified value						
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6	Max. storage temp. (85°C)	Test time: 500 hrs. Others have same as endurance. Voltage application treatment.														
7	Applicable Standards	JIS C 5101-1, 5101-4 1998 (IEC 60384-1 1992, 60384-4 1985)														

**Coefficients for the Allowable Ripple Current**

Frequency (Hz) \ Rated Voltage (V)	50 • 60	120	1 k	10 k	100 k
	16	0.80	1	1.1	1.2
25 to 35	0.80	1	1.5	1.7	1.7
50 to 100	0.80	1	1.6	1.9	1.9

**Coefficients of Temperature for Ripple Current**

Ambient temperature (°C)	+70	+85
Correction Coefficients	1.35	1

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Case size by working voltage & capacitance (in mm)

(mm)

WV(V) Cap.(μF)	16	25	35	50	63	100
2.2						6.3 x 11
3.3						8 x 11.5
4.7				6.3 x 11	6.3 x 11	10 x 12.5
10			6.3 x 11	8 x 11.5	8 x 11.5	10 x 16
22	6.3 x 11	6.3 x 11	8 x 11.5	10 x 12.5	10 x 16	10 x 20
33	6.3 x 11	8 x 11.5	10 x 12.5	10 x 16	10 x 20	12.5 x 20
47	8 x 11.5	8 x 11.5	10 x 12.5	10 x 16	10 x 20	12.5 x 25
100	10 x 12.5	10 x 16	10 x 20	12.5 x 20	12.5 x 25	16 x 25
220	10 x 20	12.5 x 20	12.5 x 25	16 x 25	16 x 31.5	18 x 40
330	12.5 x 20	12.5 x 25	16 x 25	16 x 31.5	16 x 35.5	
470	12.5 x 25	16 x 25	16 x 31.5	16 x 35.5	18 x 35.5	
1000	16 x 31.5	16 x 35.5	18 x 35.5	18 x 40		
2200	18 x 40					

### Standard Ratings

ELNA PART NO. / WV (V)	CAP. (μF)	SIZE (φx L) (mm)	tan δ	Ripple Current (mArms)
<b>16 V</b>				
ROS-16V220M	22	6.3 x 11	0.13	70
ROS-16V330M	33	6.3 x 11	0.13	90
ROS-16V470M	47	8 x 11.5	0.13	125
ROS-16V101M	100	10 x 12.5	0.13	215
ROS-16V221M	220	10 x 20	0.13	385
ROS-16V331M	330	12.5 x 20	0.13	545
ROS-16V471M	470	12.5 x 25	0.13	710
ROS-16V102M	1000	16 x 31.5	0.13	1315
ROS-16V222M	2200	18 x 40	0.15	2150
<b>25 V</b>				
ROS-25V220M	22	6.3 x 11	0.10	80
ROS-25V330M	33	8 x 11.5	0.10	120
ROS-25V470M	47	8 x 11.5	0.10	140
ROS-25V101M	100	10 x 16	0.10	270
ROS-25V221M	220	12.5 x 20	0.10	505
ROS-25V331M	330	12.5 x 25	0.10	675
ROS-25V471M	470	16 x 25	0.10	940
ROS-25V102M	1000	16 x 35.5	0.10	1575

ELNA PART NO. / WV (V)	CAP. (μF)	SIZE (φx L) (mm)	tan δ	Ripple Current (mArms)
<b>35 V</b>				
ROS-35V100M	10	6.3 x 11	0.10	55
ROS-35V220M	22	8 x 11.5	0.10	95
ROS-35V330M	33	10 x 12.5	0.10	140
ROS-35V470M	47	10 x 12.5	0.10	170
ROS-35V101M	100	10 x 20	0.10	295
ROS-35V221M	220	12.5 x 25	0.10	550
ROS-35V331M	330	16 x 25	0.10	785
ROS-35V471M	470	16 x 31.5	0.10	1030
ROS-35V102M	1000	18 x 35.5	0.10	1690
<b>50 V</b>				
ROS-50V4R7M	4.7	6.3 x 11	0.08	40
ROS-50V100M	10	8 x 11.5	0.08	75
ROS-50V220M	22	10 x 12.5	0.08	130
ROS-50V330M	33	10 x 16	0.08	175
ROS-50V470M	47	10 x 16	0.08	210
ROS-50V101M	100	12.5 x 20	0.08	380
ROS-50V221M	220	16 x 25	0.08	720
ROS-50V331M	330	16 x 31.5	0.08	965
ROS-50V471M	470	16 x 35.5	0.08	1210
ROS-50V102M	1000	18 x 40	0.08	1985

Note: Allowable Ripple Current 120 Hz at 85°C

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**Standard Ratings**

ELNA PART NO. / WV (V)	CAP. (μF)	SIZE (φx L) (mm)	tan δ	Ripple Current (mArms)
<b>63 V</b>				
ROS-63V4R7M	4.7	6.3 x 11	0.08	40
ROS-63V100M	10	8 x 11.5	0.08	75
ROS-63V220M	22	10 x 16	0.08	140
ROS-63V330M	33	10 x 20	0.08	190
ROS-63V470M	47	10 x 20	0.08	225
ROS-63V101M	100	12.5 x 25	0.08	415
ROS-63V221M	220	16 x 31.5	0.08	785
ROS-63V331M	330	16 x 35.5	0.08	1010
ROS-63V471M	470	18 x 35.5	0.08	1295
<b>100 V</b>				
ROS-100V2R2M	2.2	6.3 x 11	0.08	25
ROS-100V3R3M	3.3	8 x 11.5	0.08	35
ROS-100V4R7M	4.7	10 x 12.5	0.08	60
ROS-100V100M	10	10 x 16	0.08	95
ROS-100V220M	22	10 x 20	0.08	155
ROS-100V330M	33	12.5 x 20	0.08	220
ROS-100V470M	47	12.5 x 25	0.08	285
ROS-100V101M	100	16 x 25	0.08	485
ROS-100V221M	220	18 x 40	0.08	930

Note: Allowable Ripple Current 120 Hz at 85°C

Radial Type

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