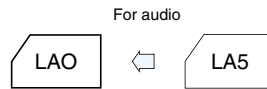


Power Supply Smoothing Use, Standard Capacitors (Common name : TONEREX)

GREEN CAP For audio

- Adopting the newly developed formation method and composite electrolytic paper for audio application has reduced distortion, achieving high-quality sound.
- Best suited as power supply filters for sound quality priority audio equipment.
- Printed circuit board terminal snap-in type.

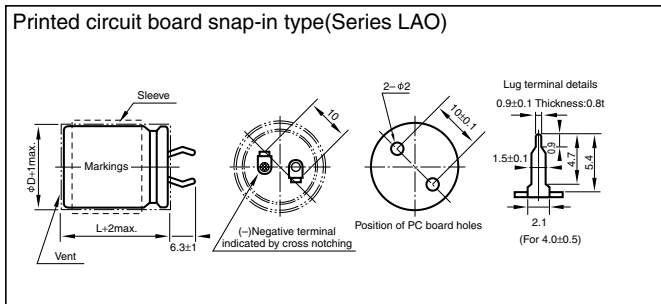


Specifications

Item	Performance														
Category temperature range (°C)	-40 to +85														
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)														
Leakage current (µA)	Less than 0.03CV or 5mA whichever is smaller (after 5 minutes) C: Rated capacitance(µF), V: Rated voltage(V) (20°C)														
Tangent of loss angle (tanδ)	<table border="1"> <tr> <th>Rated voltage (V)</th> <td>16</td> <td>25</td> <td>35</td> <td>50 to 100</td> </tr> <tr> <th>tanδ (max.)</th> <td>0.40</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> </tr> </table> <p>(20°C, 120Hz)</p>	Rated voltage (V)	16	25	35	50 to 100	tanδ (max.)	0.40	0.40	0.35	0.30				
Rated voltage (V)	16	25	35	50 to 100											
tanδ (max.)	0.40	0.40	0.35	0.30											
Characteristics at high and low temperature	<table border="1"> <tr> <th>Rated voltage (V)</th> <td>16 to 35</td> <td>50 to 100</td> </tr> <tr> <th rowspan="2">Impedance ratio (max.)</th> <td>Z-25°C / Z+20°C</td> <td>4</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>15</td> </tr> <tr> <td></td> <td></td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>10</td> </tr> </table> <p>(120Hz)</p>	Rated voltage (V)	16 to 35	50 to 100	Impedance ratio (max.)	Z-25°C / Z+20°C	4	Z-40°C / Z+20°C	15			3			10
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		10													
Endurance (85°C) (Applied ripple current)	<table border="1"> <tr> <th>Test time</th> <td>1000 hours</td> </tr> <tr> <th>Leakage current</th> <td>The initial specified value or less</td> </tr> <tr> <th>Percentage of capacitance change</th> <td>Within ±20% of initial value</td> </tr> <tr> <th>Tangent of the loss angle</th> <td>150% or less of the initial specified value</td> </tr> </table>	Test time	1000 hours	Leakage current	The initial specified value or less	Percentage of capacitance change	Within ±20% of initial value	Tangent of the loss angle	150% or less of the initial specified value						
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Leakage current	The initial specified value or less														
Percentage of capacitance change	Within ±20% of initial value														
Tangent of the loss angle	150% or less of the initial specified value														
Shelf life (85°C)	Test time : 1000 hours. Other have same as endurance. Voltage application treatment														
Applicable standards	JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)														

Outline Drawing

Unit: mm



Coefficient of Frequency for Rated Ripple Current

Frequency(Hz)	50	120	1k	10k	20k
Rated voltage(V)					
50 or less	0.95	1	1.10	1.15	1.15
63 to 100	0.95	1	1.16	1.30	1.33

Part numbering system (example: 63V6800µF)

Printed circuit board snap-in type	LAO	—	63V	682	MPD	S4	#
	Series code		Rated voltage symbol	Rated capacitance symbol		Casing symbol	Additional symbol

• The standard ratings are described on the next page.

* There are overseas factory product only on this page.

NOTE
Design, Specifications are subject to change without notice.
Ask factory for technical specifications before purchase and/or use.

Standard Ratings

Rated voltage(V) Item Casing symbol ø xL(mm)	16		25		35		50		63		80		100	
	Rated capacitance μF	Rated ripple current Arms	Rated capacitance μF	Rated ripple current Arms	Rated capacitance μF	Rated ripple current Arms	Rated capacitance μF	Rated ripple current Arms	Rated capacitance μF	Rated ripple current Arms	Rated capacitance μF	Rated ripple current Arms	Rated capacitance μF	Rated ripple current Arms
	22x20	S1	3300	1.2	—	—	—	—	—	—	—	—	—	—
22x25	S1	4700	1.5	2200	1.0	1500	0.8	1000	0.8	680	0.7	—	—	—
22x30	S1	—	—	3300	1.3	2200	1.3	1500	1.1	1000	0.9	680	0.7	—
22x35	S1	6800	2.0	4700	1.7	3300	1.7	—	—	1500	1.2	1000	1.0	680
22x40	S1	—	—	—	—	—	—	2200	1.5	—	—	—	—	—
22x45	S1	10000	2.7	6800	2.2	4700	2.3	—	—	2200	1.6	—	—	—
22x50	S1	—	—	—	—	—	—	3300	2.0	—	—	1500	1.3	1000
25x25	S2	—	—	3300	1.7	2200	1.7	1500	1.4	1000	1.2	680	1.0	—
25x30	S2	6800	2.5	4700	2.1	3300	2.2	2200	1.8	1500	1.5	1000	1.2	680
25x35	S2	10000	3.2	—	—	—	—	—	—	—	—	—	—	—
25x40	S2	—	—	6800	2.7	4700	2.8	3300	2.3	2200	1.9	1500	1.6	1000
25x45	S2	—	—	—	—	—	—	—	—	—	—	—	—	—
25x50	S2	—	—	10000	3.0	6800	2.6	4700	2.4	3300	2.0	2200	2.0	1500
30x25	S3	6800	2.6	4700	2.2	3300	2.3	2200	1.9	1500	1.6	1000	1.3	680
30x30	S3	10000	3.3	6800	2.7	4700	2.8	3300	2.4	2200	1.9	1500	1.6	1000
30x35	S3	—	—	—	—	—	—	—	—	—	—	—	—	—
30x40	S3	—	—	10000	3.1	6800	2.7	4700	2.4	3300	2.1	2200	2.1	1500
30x45	S3	—	—	—	—	—	—	—	—	—	—	—	—	—
30x50	S3	—	—	—	—	10000	3.4	6800	3.1	4700	2.6	3300	2.2	2200
35x25	S4	10000	3.4	6800	2.8	4700	2.9	3300	2.4	2200	2.0	1500	1.7	1000
35x30	S4	—	—	10000	3.1	6800	2.7	4700	2.5	3300	2.1	2200	2.1	1500
35x35	S4	—	—	—	—	—	—	—	—	—	—	—	—	—
35x40	S4	—	—	—	—	10000	3.5	6800	3.1	4700	2.6	3300	2.2	2200
35x45	S4	—	—	—	—	—	—	—	—	—	—	—	—	—
35x50	S4	—	—	—	—	—	—	—	—	6800	3.3	4700	2.7	—

(Note) Rated ripple current : 85°C, 120Hz.

* There are overseas factory product only on this page.