PARTS CONNEXION

Fidelity Components
Electrolytecapacitors Power Supply

M-LYTIC® AG
AUDIO GRADE POWER CAP

The **MLytic® AG • Audio Grade Power Cap** series is especially engineered for use in small power and pre amplifiers.

MLGO • glue-on capacitors offer non-magnetic, straight, tinned copper wires Ø 1.2mm ≈ AWG17. Additionally they are supplied with a vibration-reducing, traction-relieving, self-adhesive MPSA - Mounting Pad

They supersede the well-known MLSI & MLPI series. Drill hole spacing [pitch] of **MLGO • glue-on** remains 10mm/0.39inch. Hence they are snap-in capacitor intermateable and so particularly suitable for repairs and modifications.

NOTE: MLGO Caps are simply the previous MLPI Caps with the MPSA mounting Pads applied, for “Glue-On” Style Mounting.

MLGO
Audio Grade Power Cap, Glue-On, 2Pin

Dielectric strenght [VDC]	Capacity [µF] ±20%	Body Ø * L [mm]	Wire Ø * L [mm]	Nominal ripple current IR~ at 105°C and 100Hz [A]	Pulse voltage handling [VDC]	ESR at 100 Hz [mOhm]	Tan δ at 100Hz	Nominal current IR for 5 minutes [µA]
100	1000	25 * 30	1,2 * 9	1.3	115	90	10	600
100	1500	25 * 35	1,2 * 9	1.8	115	77	10	600
63	2200	25 * 30	1,2 * 9	2.1	72	65	9	830
63	3300	30 * 30	1,2 * 9	2.9	72	43	9	1246
63	4700	30 * 35	1,2 * 9	3.6	72	30	9	1776
63	6800	30 * 40	1,2 * 9	4.6	72	21	9	2570
63	10000	30 * 50	1,2 * 9	6.0	72	14	9	3780
63	15000	35 * 60	1,2 * 9	8.7	72	10	9	5670
63	22000	35 * 70	1,2 * 9	11.2	72	7	9	8316
40	4700	25 * 30	1,2 * 9	2.6	46	41	12	1120
40	10000	30 * 40	1,2 * 9	4.8	46	19	12	2400
40	22000	35 * 50	1,2 * 9	8.5	46	9	12	4800
40	33000	35 * 60	1,2 * 9	11.2	46	6	12	7920
25	10000	25 * 35	1,2 * 9	3.2	29	32	20	1500
25	22000	30 * 40	1,2 * 9	5.4	29	14	20	3300
25	47000	35 * 50	1,2 * 9	9.7	29	7	20	4800

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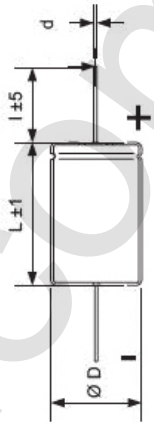
M-LYTIC® AG
AUDIO GRADE POWER CAP

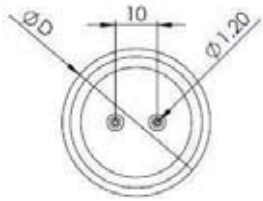
The **MLytic® AG · Audio Grade Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 16 plus the following features:



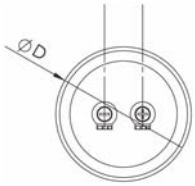
AL

Supply availability	Typically immediately ex stock for all types listed on page 18
	4-6 weeks for your individual combination of features · from 144pcs only
Versatile applicable	RoHS-compliant · lead free REACH compliant Finest UL-listed ingredients only Sectional specification DIN 41332 · IEC 60384-4 Climatic category IEC 60068 40/105/56
Indication of origin	Made in Germany with greatest care
Capacitance range	47µF to 330 000µF
DC voltage range	16· 25 · 35 · 40 · 50 · 63 · 80 · 100 · 160
Temperature range	-40°C/-40°F to 125°C/+255°F for 16V to 63V -25°C/-13°F to 105°C/+220°F for 80V to 160V
Diverse connectors	AL · axial leaded PI · plug-in GO · glue-on SL · solder-lugs SC · screw-terminal clamp mounted SB · screw-terminal bolt mounted
Useful lifetime [U_R · $I_{R\sim}$]	3 000 hours at +125°C/+255°F for 16V to 63V 8 000 hours at +105°C/+220°F for 16V to 160V 16 000 hours at +85°C/+185°F for 16V to 160V
Rated lifetime [U_R]	1 000 hours at +125°C/+255°F for 16V to 63V 2 000 hours at +105°C/+220°F for 16V to 160V
Case diameters [mm]	10 · 12 · 14 · 16 · 18 · 20 · 25 · 30 35 · 40 · 45 · 50 · 65 · 75 · 90
Case heights [mm]	Customized from 25 to 230 [typically in 5mm steps]
Case diameters [inch]	0.39 · 0.47 · 0.55 · 0.63 · 0.71 · 0.79 · 0.98 · 1.18 1.38 · 1.57 · 1.77 · 1.97 · 2.56 · 2.95 · 3.54
Case heights [inch]	Customized from 0.98 to 9.06 [typically in 0.2inch steps]
External insulation	Lead free PVC sleeve with end disk · voltage proof ≥2500 A
Leakage current [I_L]	≤ 0,008 * C_R [µF] * U_R [V] + 6µA after 5 minutes at U_R
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V


PI/GO




SL




SC/SB

Smooth transition to the following Mundorf® product-lines:

Superior series Differentiating factors	**MLytic® AG+ · Audio Grade Power Cap** [see page 19] 4-Pole technology
Superior series Differentiating factors	**MLytic® HV · High Voltage Power Cap** [see page 21] Available DC voltages 250 · 350 · 400 · 450 · 500 · 550

The newest generation of our electrolytic capacitors features a range of distinctive features, which all have one sole objective: **the most authentic music performance possible**. The basic requirement for achieving this goal is the minimisation of unwanted losses [ESR] and inductances [ESL] that occur in the capacitor and affect the signal.

To this end, we have given careful consideration to even the smallest details and have scrutinised and radically reconsidered all existing solutions. You will find the results of our extensive developments below.

The black cathode: The use of special titanium-coated cathode foil has brought about metrologically impressive and tonally spectacular benefits. The matte black polished vacuum-deposited titanium layer thereby substitutes the usual aluminium oxide layer and this then works as an insulator [dielectric] between the aluminium contact foil and the electrolyte, thus forming a second capacitor that negatively influences the overall performance within the capacitor. In this way, the black cathode stops the electrolyte acting simultaneously as a cathode [negative pole] towards the anode foil and as an anode [positive pole] towards the aluminium contact foil.

MUNDORF electrolytic capacitors with black cathodes feature a real cathode foil! This enables extremely fast and almost lossless ion movements, reducing the ESR, distortions and noises it produces itself to an absolute minimum. The positive effects are comparable to when modified electrolytes are used, which are produced for example with the addition of graphite, although the effects of the former are more pronounced. The result is a holographic music playback with a wide and deep on-stage representation and a completely stable focus.

High purity anode foil: Utmost precision during the manufacture and use of high purity materials guarantees a homogeneous etch pattern, as well as a crystalline aluminium oxide layer. Due to this Al_2O_3 layer being the dielectric of the capacitor, it is this balance and precision that also characterises the tone quality of the whole capacitor.

Abaca-esparto paper: The introduction of esparto grass [aka alfa grass] and abaca [also known as Manila hemp or musa textilis] into the capacitor paper simultaneously ensures a high mechanical stability and an extremely soft, open structure. The high internal damping of this special paper has a mechanically-appeasing effect on the capacitor and gives the music playback a high degree of neutrality.

Electrolytes: For capacitors of up to 100VDC we only use GBL [also known as butyro-1,4-lactone or *gamma*-butyrolactone], for higher electrical strengths, however, MEG [also known as ethane-1,2-diol or ethylene glycol] is used. The use of this high purity electrolyte, which is chloride-free and largely free from water, considerably improves the long-term stability and thereby also the lifecycle. These electrolytes also feature a low viscosity [that is, a high flow], which has a positive effect on the electrical conductivity. This results in a fast and precise music playback.

Strong together: Thanks to its large surface area, the open structure of abaca-esparto paper possesses an outstanding electrolyte absorption capacity and in combination with its good formability and the outstanding flow of the used electrolytes, guarantees the best possible contact between the electrolyte and the titanium-coated cathode foil. Together, they form the highly-efficient negative pole of the electrolytic capacitor and ensure the smallest possible physical dimensions and optimal performance.

The renouncement of steel: From now on, steel attachments are a thing of the past at MUNDORF! The use of steel as a material for attachments [worldwide standard for snap-ins] brings about a number of disadvantages. Amongst other things, steel attachments cause unwanted eddy currents as a result of their magnetisability, possess a poor electrical conductivity [$\sigma_{25°C}$ 6,2MS/m = 10,7% IACS = 160mΩ*mm^2/m] and a low thermal conductivity [$\lambda_{25°C}$ 50W/(m*K)]. Furthermore, the high elasticity [200 GPa] and rigidity [7 Mohs] of the steel snap-in claw fasteners put permanent pressure on the soldered joints, which can impair their joining quality.

Highly-conductive contacts: Alongside the familiar, solid aluminium screw terminals [$\sigma_{25°C}$ 36,5MS/m = 63% IACS = 27,5mΩ*mm^2/m · $\lambda_{25°C}$ 235W/(m*K)] for the highest currents, all MLytics® with the most compact design possible possess tin-plated copper attachments[$\sigma_{25°C}$ 58,0MS/m = 100% IACS = 17,2mΩ*mm^2/m $\lambda_{25°C}$ 400W/(m*K) 120 GPA 3 Mohs].In order to establish the best possible electrical connection between the individual components, all contacts are welded together.

All of the remarkable technologies mentioned above come together in the new **MLytic®** series to bring about the least losses and maximum high fidelity. Capacitors with **MLytic®** technology: the best MUNDORF electrolytic capacitors of all time!