#### LARGE CAPACITANCE ALUMINUM ELECTROLYTIC CAPACITORS Inverter-use screw terminal, 85°C CHEMI-CON

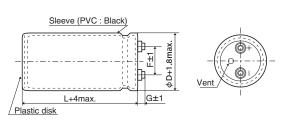


#### SPECIFICATIONS

Items	Characteristics						
Category Temperature Range	-25 to +85℃						
Rated Voltage Range	500 to 650V <sub>dc</sub>						
Capacitance Tolerance	±20% (M)			(at 20℃, 120Hz)			
Leakage Current	I=0.02CV or 5mA, which Where, I : Max. leakage	ever is smaller. current (μΑ), C : Nominal capacitance (μF	F), V : Rated voltage (V)	(at 20℃ after 5 minutes)			
Dissipation Factor $(\tan \delta)$	0.25 max.			(at 20℃, 120Hz)			
Low Temperature Characteristics	Capacitance change $C(-25^{\circ}C)/C(+20^{\circ}C) \ge 0.6$ (at 120F)						
Insulation Resistance	When measured between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of $500V_{dc}$ , the insulation resistance shall not be less than $100M\Omega$ .						
Insulation Withstanding Voltage	When a voltage of 2,000V <sub>ac</sub> is applied for 1 minute between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.						
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 85°C.						
	Capacitance change	$\leq \pm 20\%$ of the initial value					
	D.F. (tan δ )	≦200% of the initial specified value					
	Leakage current	≦The initial specified value					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 hours at 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.						
	Capacitance change	$\leq \pm 20\%$ of the initial value					
	D.F. (tan δ )	$\leq$ 200% of the initial specified value					
	Leakage current	≦The initial specified value					

#### DIMENSIONS (Screw-Mount) [mm]

Terminal Code : LG



φ50 & φ63.5 : G=6 φ76.2 & φ89 : G=5 φ100 : G=10

<Screw specifications> to  $\phi$ 89 Plus hexagon-headed screw :M5×0.8×10 Maximum screw tightening torque :3.23Nm

Cross-recessed head (phillips) screw : M8×1.25×16 φ100 Spring washer, Washer Maximum screw tightening torque :6.31Nm

• Mounting Clamp Code : B

4.5

78.0 64.0 68.0 22.4

90.0 76.0 80.0 28.0

104.5 90.0 93.5 31.5

6

HT HT

1 1 1 1

φD E κ M F . Г

50

63.5

76.2

89 100

A±1 W±1

30°±5°

φD

50

63.5

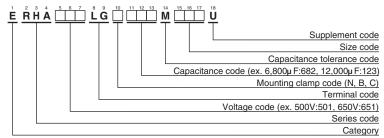
76.2

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Α в W F

\* The screw and the mounting clamp are separately supplied and not attached to the product.

#### PART NUMBERING SYSTEM



Please refer to "Product code guide (screw-mount terminal type)"

 Mounting Clamp Code : C 360°

8 i J. '

32.5 37.0 4.5 22.4 14.0

38.1 43.5 4.5 28.0 14.0

44.5 50.0 4.5 31.5 14.0

50.8 56.5 4.5 31.5 16.0

56.5 63.4 5.5 41.5 18.0

45°±5°

# RHASeries

#### **♦STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85°C,120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85°C,120Hz)	Part No.
	1,200	50×95	0.25	5.90	ERHA501LGC122MC95U		5,600	89×150	0.25	18.2	ERHA551LGC562MFF0U
	1,500	50×115	0.25	7.20	ERHA501LGC152MCB5U	550	6,800	89×170	0.25	21.1	ERHA551LGC682MFH0U
	1,800	50×130	0.25	8.30	ERHA501LGC182MCD0U	550	8,200	100×170	0.25	24.8	ERHA551LGC822MGH0U
	2,200	50×150	0.25	9.80	ERHA501LGC222MCF0U		10,000	100×200	0.25	29.4	ERHA551LGC103MGL0U
	2,700	63.5×120	0.25	11.2	ERHA501LGC272MDC0U		1,200	63.5×95	0.25	6.70	ERHA601LGC122MD95U
	3,300	63.5×140	0.25	13.3	ERHA501LGC332MDE0U		1,500	63.5×110	0.25	8.00	ERHA601LGC152MDB0U
	3,900	63.5×170	0.25	15.7	ERHA501LGC392MDH0U		1,800	63.5×125	0.25	9.30	ERHA601LGC182MDC5U
500	3,900	76.2×130	0.25	15.4	ERHA501LGC392MED0U		1,800	76.2×95	0.25	9.10	ERHA601LGC182ME95U
500	4,700	76.2×150	0.25	18.1	ERHA501LGC472MEF0U		2,200	63.5×145	0.25	11.0	ERHA601LGC222MDE5U
	5,600	76.2×170	0.25	20.8	ERHA501LGC562MEH0U		2,200	76.2×110	0.25	10.8	ERHA601LGC222MEB0U
	5,600	89×130	0.25	17.1	ERHA501LGC562MFD0U	600	2,700	63.5×170	0.25	13.1	ERHA601LGC272MDH0U
	6,800	89×150	0.25	20.0	ERHA501LGC682MFF0U	000	2,700	76.2×125	0.25	12.6	ERHA601LGC272MEC5U
	8,200	89×190	0.25	24.4	ERHA501LGC822MFK0U		3,300	76.2×145	0.25	14.9	ERHA601LGC332MEE5U
	10,000	89×210	0.25	28.2	ERHA501LGC103MFM0U		3,900	76.2×170	0.25	17.3	ERHA601LGC392MEH0U
	12,000	100×210	0.25	32.9	ERHA501LGC123MGM0U		3,900	89×130	0.25	14.2	ERHA601LGC392MFD0U
	15,000	100×250	0.25	39.8	ERHA501LGC153MGR0U		4,700	76.2×190	0.25	20.0	ERHA601LGC472MEK0U
	1,000	50×95	0.25	5.40	ERHA551LGC102MC95U		4,700	89×150	0.25	16.6	ERHA601LGC472MFF0U
	1,200	50×110	0.25	6.30	ERHA551LGC122MCB0U		5,600	89×170	0.25	19.1	ERHA601LGC562MFH0U
	1,500	50×130	0.25	7.60	ERHA551LGC152MCD0U		1,000	63.5×100	0.25	6.30	ERHA651LGC102MDA0U
	1,800	63.5×105	0.25	8.60	ERHA551LGC182MDA5U		1,200	63.5×110	0.25	7.20	ERHA651LGC122MDB0U
	2,200	63.5×120	0.25	10.1	ERHA551LGC222MDC0U		1,500	63.5×130	0.25	8.60	ERHA651LGC152MDD0U
550	2,700	63.5×150	0.25	12.4	ERHA551LGC272MDF0U		1,800	63.5×150	0.25	10.1	ERHA651LGC182MDF0U
550	2,700	76.2×105	0.25	11.7	ERHA551LGC272MEA5U	650	2,200	63.5×170	0.25	11.7	ERHA651LGC222MDH0U
	3,300	63.5×170	0.25	14.5	ERHA551LGC332MDH0U		2,700	76.2×150	0.25	13.6	ERHA651LGC272MEF0U
	3,300	76.2×130	0.25	14.2	ERHA551LGC332MED0U		3,300	76.2×170	0.25	15.8	ERHA651LGC332MEH0U
	3,900	76.2×140	0.25	15.9	ERHA551LGC392MEE0U		3,900	89×155	0.25	15.3	ERHA651LGC392MFF5U
	4,700	76.2×170	0.25	19.1	ERHA551LGC472MEH0U		4,700	89×190	0.25	18.4	ERHA651LGC472MFK0U
	4,700	89×130	0.25	15.6	ERHA551LGC472MFD0U						

### **♦**RATED RIPPLE CURRENT MULTIPLIERS

#### Frequency Multipliers

Frequency (Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.2	1.3	1.4

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.

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Also, for the RHA series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For details, please contact a representative of Nippon Chemi-Con.

### CHEMI-CON ALUMINUM ELECTROLYTIC CAPACITORS

- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.

Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.

- We strongly recommend our customers to purchase Nippon Chemi-Con products only through our official sales channels. We assume no responsibility for any defects or damages caused by using products purchased from outside our official sales channel or of counterfeit goods. In addition, we will ask the customer to pay the investigation cost for products purchased outside our official sales channel.
- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future. The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.

In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

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Part Numbering System Part Numbering System (Appendix) Standardization Available Items by Manufacturing Locations Environmental Measures Technical Note Precautions and Guidelines Recommended Soldering Conditions Taping, Lead-preforming and Packaging Available Terminals for Snap-in and Screw Mount Type

# **Mouser Electronics**

Authorized Distributor

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## Chemi-Con:

ERHA651LGC332MEH0M ERHA551LGC392MEE0M ERHA501LGC182MCD0M ERHA551LGC332MED0M
ERHA651LGC472MFK0M ERHA551LGC822MGH0M ERHA501LGC123MGM0M ERHA501LGC332MDE0M
ERHA551LGC472MEH0M ERHA551LGC122MCB0M ERHA601LGC332MEE5M ERHA501LGC562MEH0M
ERHA551LGC102MC95M ERHA651LGC392MFF5M ERHA601LGC182ME95M ERHA601LGC392MEH0M
ERHA501LGC682MFF0M ERHA601LGC472MFF0M ERHA501LGC103MFM0M ERHA601LGC562MFH0M
ERHA651LGC272MEF0M ERHA651LGC152MDD0M ERHA551LGC103MGL0M ERHA551LGC222MDC0M
ERHA651LGC122MDB0M ERHA551LGC272MDF0M ERHA501LGC122MC95M ERHA651LGC102MDA0M
ERHA551LGC562MFF0M_ERHA501LGC472MEF0M_ERHA651LGC182MDF0M_ERHA651LGC222MDH0M
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ERHA501LGC122MC95U ERHA501LGC392MED0U ERHA651LGC122MDB0U ERHA651LGC182MDF0U
ERHA651LGC332MEH0U ERHA651LGC392MFF5U ERHA651LGC472MFK0U