#### LARGE CAPACITANCE ALUMINUM ELECTROLYTIC CAPACITORS CHEMI-CON



● Endurance with ripple current : 5,000 hours at 105°C Non solvent resistant type

RoHS2 Compliant



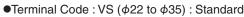


5±0.5

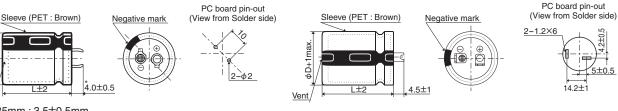
#### SPECIFICATIONS

Items	Characteristics										
Category Temperature Range	-40 to +105℃										
Rated Voltage Range	10 to 100V <sub>dc</sub>										
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)										
Leakage Current	,	I=0.02CV or 3mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)									
Dissipation Factor	Rated voltage (Vdc)	10V	16V	25V	35V	50V	63V	80 & 100V			
$(\tan \delta)$	tanδ (Max.)	0.60	0.45	0.30	0.25	0.20	0.15	0.15	(at 20°C, 120Hz)		
Low Temperature	Capacitance change : Capacitance at the lowest operating temperature shall not be less than 70% of the 20°C value.										
Characteristics	Rated voltage (V <sub>dc</sub> )	10V	16V	25V	35V	50V	63V	80 & 100V			
(Max. Impedance Ratio)	Z(-25℃)/Z(+20℃)	4	4	3	3	2	2	2			
	Z(-40℃)/Z(+20℃)	15	15	10	8	6	6	5	(at 120Hz)		
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 105°C.										
	Capacitance change	≦±ź	25% of	the ini	tial valu	le					
	D.F. (tan δ )	≦25	0% of t	the initi	al spec	ified va					
	Leakage current ≤The initial specified value										
Shelf Life	The following specifications shall be satisfied when the capacitors are voltage applied. Before the measurement, the capacitor shall be prec										
	Capacitance change	bacitance change $\leq \pm 20\%$ of the initial value									
	D.F. (tan δ )	≦15	0% of t	the initi	al spec	ified va	alue				
	Leakage current	≦Th	e initia	l specif	ied val	ue					

### DIMENSIONS [mm]



### •Terminal Code : LI (φ35)



\*φD=35mm : 3.5±0.5mm

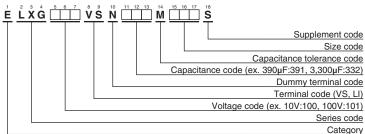
1max.

+0¢

Vent

The standard design has no plastic disc.

### PART NUMBERING SYSTEM



Please refer to "Product code guide (snap-in type)"

### RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
10 to 50V <sub>dc</sub>	0.95	1.00	1.03	1.05	1.08	1.08
63 to 100Vdc	0.92	1.00	1.07	1.13	1.19	1.20

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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### **♦STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.
	6,800	22 × 25	0.60	1.30	ELXG100VSN682MP25S		5,600	$25.4 \times 35$	0.25	1.98	ELXG350VSN562MQ35S
	10,000	22 × 30	0.60	1.65	ELXG100VSN103MP30S		5,600	$30 \times 30$	0.25	1.98	ELXG350VSN562MR30S
	10,000		0.60	1.64	ELXG100VSN103MQ25S		5,600	$35 \times 25$	0.25	2.03	ELXG350VSN562MA25S
	12,000	22 × 35	0.60	1.85	ELXG100VSN123MP35S		6,800	$22 \times 50$	0.25	2.26	ELXG350VSN682MP50S
	12,000	25.4 × 30	0.60	1.85	ELXG100VSN123MQ30S		6,800	25.4 × 40	0.25	2.24	ELXG350VSN682MQ40S
	12,000	$\frac{30 \times 25}{22 \times 40}$	0.60	1.89	ELXG100VSN123MR25S	05	8,200	25.4 × 50	0.25	2.57	ELXG350VSN822MQ50S
	15,000 15,000	22 × 40 25.4 × 35	0.60	2.12 2.16	ELXG100VSN153MP40S ELXG100VSN153MQ35S	35	8,200 8,200	30 × 35 35 × 30	0.25	2.50 2.55	ELXG350VSN822MR35S ELXG350VSN822MA30S
	18,000	23.4 × 55 22 × 50	0.60	2.10	ELXG100VSN183MP50S		10,000	$30 \times 40$	0.25	2.86	ELXG350VSN103MR40S
	18,000		0.60	2.43	ELXG100VSN183MQ40S		10,000	35 × 35	0.25	2.88	ELXG350VSN103MA35S
10	18,000	30 × 30	0.60	2.37	ELXG100VSN183MR30S		12,000	30 × 50	0.25	3.32	ELXG350VSN123MR50S
	18,000	35 × 25	0.60	2.42	ELXG100VSN183MA25S		12,000	35 × 40	0.25	3.30	ELXG350VSN123MA40S
	22,000	30 × 35	0.60	2.73	ELXG100VSN223MR35S		18,000	$35 \times 50$	0.25	4.29	ELXG350VSN183MA50S
	22,000	35×30	0.60	2.79	ELXG100VSN223MA30S		1,500	22 × 25	0.20	1.02	ELXG500VSN152MP25S
	27,000	$25.4 \times 50$	0.60	3.11	ELXG100VSN273MQ50S		1,800	22 × 30	0.20	1.17	ELXG500VSN182MP30S
	27,000	30 × 40	0.60	3.13	ELXG100VSN273MR40S		1,800	$25.4 \times 25$	0.20	1.17	ELXG500VSN182MQ25S
	33,000	35 × 35	0.60	3.49	ELXG100VSN333MA35S		2,200	22 × 35	0.20	1.33	ELXG500VSN222MP35S
	39,000	$30 \times 50$	0.60	3.99	ELXG100VSN393MR50S		2,700	$22 \times 40$	0.20	1.51	ELXG500VSN272MP40S
	39,000	35 × 40	0.60	3.96	ELXG100VSN393MA40S		2,700	$25.4 \times 30$	0.20	1.47	ELXG500VSN272MQ30S
	47,000	35 × 50	0.60	4.62	ELXG100VSN473MA50S		2,700	30×25	0.20	1.50	ELXG500VSN272MR25S
	5,600	22 × 25	0.45	1.44	ELXG160VSN562MP25S		3,300	25.4 × 35	0.20	1.70	ELXG500VSN332MQ35S
	6,800	22 × 30 25.4 × 25	0.45	1.66 1.66	ELXG160VSN682MP30S ELXG160VSN682MQ25S		3,300 3,300	30 × 30 35 × 25	0.20	1.70 1.74	ELXG500VSN332MR30S ELXG500VSN332MA25S
	8,200	23.4 × 25 22 × 35	0.45	1.87	ELXG160VSN822MP35S	50	3,900	22 × 50	0.20	1.74	ELXG500VSN392MP50S
	10,000	22 × 33 22 × 40	0.45	2.12	ELXG160VSN103MP40S		3,900	$22 \times 30$ 25.4 × 40	0.20	1.89	ELXG500VSN392MQ40S
	,	25.4 × 30	0.45	2.07	ELXG160VSN103MQ30S		4,700	30 × 35	0.20	2.11	ELXG500VSN472MR35S
	10,000	30×25	0.45	2.11	ELXG160VSN103MR25S		4,700	35 × 30	0.20	2.16	ELXG500VSN472MA30S
	,	25.4 × 35	0.45	2.37	ELXG160VSN123MQ35S		5,600		0.20	2.38	ELXG500VSN562MQ50S
	12,000	30 × 30	0.45	2.37	ELXG160VSN123MR30S		5,600	30×40	0.20	2.39	ELXG500VSN562MR40S
16	12,000	35×25	0.45	2.42	ELXG160VSN123MA25S		5,600	$35 \times 35$	0.20	2.41	ELXG500VSN562MA35S
10	15,000	$22 \times 50$	0.45	2.74	ELXG160VSN153MP50S		6,800	$30 \times 50$	0.20	2.79	ELXG500VSN682MR50S
	15,000		0.45	2.71	ELXG160VSN153MQ40S		6,800	$35 \times 40$	0.20	2.78	ELXG500VSN682MA40S
	18,000	$25.4 \times 50$	0.45	3.11	ELXG160VSN183MQ50S		10,000	$35 \times 50$	0.20	3.57	ELXG500VSN103MA50S
	18,000	30 × 35	0.45	3.02	ELXG160VSN183MR35S		1,000	22 × 25	0.15	1.00	ELXG630VSN102MP25S
	18,000	35×30	0.45	3.09	ELXG160VSN183MA30S		1,200	22×30	0.15	1.15	ELXG630VSN122MP30S
	22,000	30 × 40	0.45	3.46	ELXG160VSN223MR40S		1,200	25.4 × 25	0.15	1.15	ELXG630VSN122MQ25S
	22,000	35 × 35	0.45	3.49	ELXG160VSN223MA35S		1,500	$22 \times 35$	0.15	1.32	ELXG630VSN152MP35S
	27,000 27,000	30 × 50 35 × 40	0.45	4.07 4.04	ELXG160VSN273MR50S ELXG160VSN273MA40S		1,800	22 × 40 25.4 × 30	0.15	1.49 1.45	ELXG630VSN182MP40S ELXG630VSN182MQ30S
	39,000	$35 \times 40$ $35 \times 50$	0.45	5.16	ELXG160VSN273MA40S ELXG160VSN393MA50S		1,800	25.4 × 30 30 × 25	0.15	1.45	ELXG630VSN182MR25S
	3,900	22 × 25	0.45	1.31	ELXG250VSN392MP25S		2,200	25.4 × 35	0.15	1.40	ELXG630VSN222MQ35S
	4,700	22 × 30	0.30	1.51	ELXG250VSN472MP30S		2,200	30 × 30	0.15	1.68	ELXG630VSN222MR30S
	4,700	25.4 × 25	0.30	1.51	ELXG250VSN472MQ25S		2,200	35 × 25	0.15	1.71	ELXG630VSN222MA25S
	5,600	22 × 35	0.30	1.70	ELXG250VSN562MP35S	63	2,700	22×50	0.15	1.92	ELXG630VSN272MP50S
	6,800	22×40	0.30	1.92	ELXG250VSN682MP40S		2,700	$25.4 \times 40$	0.15	1.90	ELXG630VSN272MQ40S
		$25.4 \times 30$	0.30	1.87	ELXG250VSN682MQ30S		2,700		0.15	1.93	ELXG630VSN272MR35S
	6,800	30 × 25	0.30	1.90	ELXG250VSN682MR25S		3,300	$25.4 \times 50$	0.15	2.20	ELXG630VSN332MQ50S
	8,200	$25.4 \times 35$	0.30	2.14	ELXG250VSN822MQ35S		3,300	$35 \times 30$	0.15	2.18	ELXG630VSN332MA30S
	8,200	30 × 30	0.30	2.15	ELXG250VSN822MR30S		3,900	30×40	0.15	2.41	ELXG630VSN392MR40S
25	8,200	35 × 25	0.30	2.19	ELXG250VSN822MA25S		3,900	$35 \times 35$	0.15	2.43	ELXG630VSN392MA35S
	10,000	22 × 50	0.30	2.45	ELXG250VSN103MP50S		4,700	30 × 50	0.15	2.80	ELXG630VSN472MR50S
	10,000		0.30	2.43	ELXG250VSN103MQ40S		4,700	35 × 40	0.15	2.78	ELXG630VSN472MA40S
	12,000	25.4 × 50	0.30	2.78	ELXG250VSN123MQ50S		6,800	$35 \times 50$	0.15	3.55	ELXG630VSN682MA50S
	12,000 12,000	30 × 35 35 × 30	0.30	2.70	ELXG250VSN123MR35S ELXG250VSN123MA30S		680 820	22 × 25 22 × 30	0.15	0.97	ELXG800VSN681MP25S ELXG800VSN821MP30S
	15,000	$\frac{33 \times 30}{30 \times 40}$	0.30	2.76 3.13	ELXG250VSN123MR40S		1,000	$22 \times 30$ $22 \times 35$	0.15	1.12	ELXG800VSN102MP35S
	15,000	$30 \times 40$ $35 \times 35$	0.30	3.15	ELXG250VSN153MA35S		1,000	25.4 × 25	0.15	1.27	ELXG800VSN102MQ25S
	18,000	$33 \times 50$ $30 \times 50$	0.30	3.64	ELXG250VSN183MR50S		1,200	22 × 40	0.15	1.42	ELXG800VSN122MQ255 ELXG800VSN122MP40S
	18,000	35 × 40	0.30	3.61	ELXG250VSN183MA40S		1,200	25.4 × 30	0.15	1.39	ELXG800VSN122MQ30S
	27,000	35 × 50	0.30	4.70	ELXG250VSN273MA50S		1,200	30×25	0.15	1.41	ELXG800VSN122MR25S
	2,200	22 × 25	0.25	1.10	ELXG350VSN222MP25S	80	1,500		0.15	1.62	ELXG800VSN152MQ35S
	3,300	22 × 30	0.25	1.42	ELXG350VSN332MP30S		1,800	22 × 50	0.15	1.84	ELXG800VSN182MP50S
		25.4 × 25	0.25	1.41	ELXG350VSN332MQ25S		1,800		0.15	1.82	ELXG800VSN182MQ40S
35	3,900	22 × 35	0.25	1.58	ELXG350VSN392MP35S		1,800	30 × 30	0.15	1.78	ELXG800VSN182MR30S
		25.4×30	0.25	1.58	ELXG350VSN392MQ30S		1,800	35 × 25	0.15	1.82	ELXG800VSN182MA25S
	4,700	22 × 40	0.25	1.78	ELXG350VSN472MP40S			$25.4 \times 50$	0.15	2.11	ELXG800VSN222MQ50S
	4,700	30 × 25	0.25	1.77	ELXG350VSN472MR25S		2,200	30 × 35	0.15	2.05	ELXG800VSN222MR35S

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### **♦STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.
	2,200	$35 \times 30$	0.15	2.09	ELXG800VSN222MA30S		1,000	$25.4 \times 35$	0.15	1.41	ELXG101VSN102MQ35S
	2,700	$30 \times 40$	0.15	2.35	ELXG800VSN272MR40S		1,000	$30 \times 30$	0.15	1.42	ELXG101VSN102MR30S
80	2,700	$35 \times 35$	0.15	2.37	ELXG800VSN272MA35S		1,000	$35 \times 25$	0.15	1.45	ELXG101VSN102MA25S
00	3,300	$30 \times 50$	0.15	2.75	ELXG800VSN332MR50S		1,200	$22 \times 50$	0.15	1.60	ELXG101VSN122MP50S
	3,300	$35 \times 40$	0.15	2.73	ELXG800VSN332MA40S		1,200	$25.4 \times 40$	0.15	1.59	ELXG101VSN122MQ40S
	4,700	$35 \times 50$	0.15	3.46	ELXG800VSN472MA50S		1,200	$30 \times 35$	0.15	1.61	ELXG101VSN122MR35S
	390	$22 \times 25$	0.15	0.78	ELXG101VSN391MP25S	100	1,500	$25.4 \times 50$	0.15	1.86	ELXG101VSN152MQ50S
	560	$22 \times 30$	0.15	0.99	ELXG101VSN561MP30S		1,500	$30 \times 40$	0.15	1.87	ELXG101VSN152MR40S
	560	$25.4 \times 25$	0.15	0.98	ELXG101VSN561MQ25S		1,500	$35 \times 30$	0.15	1.85	ELXG101VSN152MA30S
100	680	$22 \times 35$	0.15	1.12	ELXG101VSN681MP35S		1,800	$35 \times 35$	0.15	2.07	ELXG101VSN182MA35S
	820	$22 \times 40$	0.15	1.26	ELXG101VSN821MP40S		2,200	$30 \times 50$	0.15	2.40	ELXG101VSN222MR50S
	820	$25.4 \times 30$	0.15	1.23	ELXG101VSN821MQ30S		2,200	$35 \times 40$	0.15	2.39	ELXG101VSN222MA40S
	820	30 × 25	0.15	1.25	ELXG101VSN821MR25S		2,700	$35 \times 50$	0.15	2.81	ELXG101VSN272MA50S

Product specifications in this catalog are subject to change without notice. Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

## ♦MAXIMUM IMPEDANCE [mΩ/20°C, 30kHz]

Vdc Case size ¢ D×L(mm)	10 to 63	80	100		
22×25	120	15	50		
22×30	100	12	20		
22×35	80	ę	95		
22×40	70	8	30		
22×50	50	6	60		
25.4×25	90	11	10		
25.4×30	70	8	35		
25.4×35	60	70			
25.4×40	50	e	50		
25.4×50	40	4	45		
30×25	70	8	30		
30×30	50	60			
30×35	40	Ę	50		
30×40	35	4	40		
30×50	25	3	30		
35×25	65	65 70			
35×30	45	5	50		
35×35	38	4	40		
35×40	30	30			
35×50	23	2	25		

## 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.

Product specifications in this catalog are subject to change without notice. Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

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