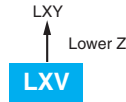


LXV Series

- Low impedance
- Endurance with ripple current : 3,000/5,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

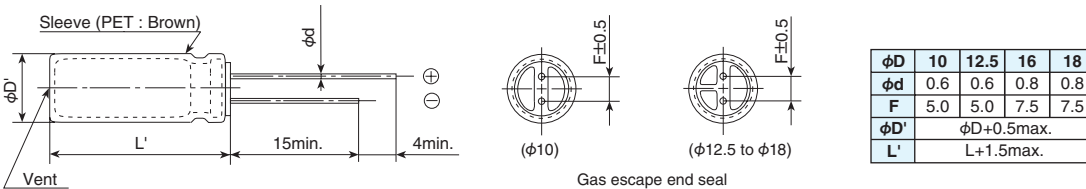


◆ SPECIFICATIONS

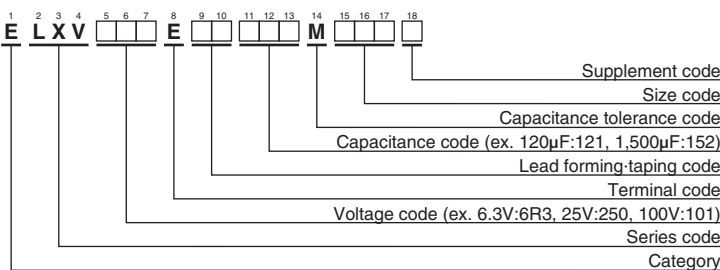
Items	Characteristics	
Category	-55 to +105°C	
Temperature Range		
Rated Voltage Range	6.3 to 100V _{dc}	
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)	
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	6.3V 10V 16V 25V 35V 50V 63V 80V 100V
	tan δ (Max.)	0.22 0.19 0.16 0.14 0.12 0.10 0.10 0.09 0.08
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)	
Low Temperature Characteristics	Capacitance change ΔC (-55°C /+20°C)	0.7min.
	Max. impedance ratio (-55°C /+20°C)	3max.(6.3V _{dc} : 4max.) (at 120Hz)
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 the specified period of time at 105°C.	
	Time	φ 10: 3,000hours φ 12.5 to φ 18: 5,000hours
	Capacitance change	≤ ±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 1,000 hours at 105°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	≤ ±20% of the initial value
	D.F. (tan δ)	≤ 200% of the initial specified value
	Leakage current	≤ The initial specified value

◆ DIMENSIONS [mm]

- Terminal Code : E



◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"



◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA _{rms} /105°C, 100kHz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA _{rms} /105°C, 100kHz)	Part No.	
			20°C	-10°C						20°C	-10°C			
6.3	470	10×12.5	0.12	0.30	635	ELXV6R3E□□471MJC5S	16	2,700	16×25	0.028	0.070	2,190	ELXV160E□□272ML25S	
	680	10×16	0.084	0.21	825	ELXV6R3E□□681MJ16S		3,300	12.5×40	0.024	0.060	2,460	ELXV160E□□332MK40S	
	1,200	10×20	0.062	0.16	1,060	ELXV6R3E□□122MJ20S		3,300	18×20	0.036	0.090	1,940	ELXV160E□□332MM20S	
	1,500	10×25	0.052	0.13	1,260	ELXV6R3E□□152MJ25S		3,900	16×30	0.025	0.063	2,510	ELXV160E□□392ML30S	
	2,200	10×30	0.044	0.11	1,450	ELXV6R3E□□222MJ30S		3,900	18×25	0.027	0.068	2,350	ELXV160E□□392MM25S	
	2,200	12.5×20	0.046	0.12	1,360	ELXV6R3E□□222MK20S		4,700	16×35	0.022	0.055	2,770	ELXV160E□□472ML35S	
	2,700	12.5×25	0.034	0.085	1,700	ELXV6R3E□□272MK25S		4,700	18×30	0.024	0.060	2,720	ELXV160E□□472MM30S	
	3,900	12.5×30	0.030	0.075	1,980	ELXV6R3E□□392MK30S		5,600	16×40	0.018	0.045	3,110	ELXV160E□□562ML40S	
	3,900	16×20	0.038	0.095	1,770	ELXV6R3E□□392ML20S		6,800	18×35	0.021	0.053	3,050	ELXV160E□□682MM35S	
	4,700	12.5×35	0.027	0.068	2,230	ELXV6R3E□□472MK35S		8,200	18×40	0.017	0.043	3,300	ELXV160E□□822MM40S	
	5,600	12.5×40	0.024	0.060	2,460	ELXV6R3E□□562MK40S		25	180	10×12.5	0.12	0.30	635	ELXV250E□□181MJC5S
	5,600	16×25	0.028	0.070	2,190	ELXV6R3E□□562ML25S			330	10×16	0.084	0.21	825	ELXV250E□□331MJ16S
	5,600	18×20	0.036	0.090	1,940	ELXV6R3E□□562MM20S			470	10×20	0.062	0.16	1,060	ELXV250E□□471MJ20S
	6,800	16×30	0.025	0.063	2,510	ELXV6R3E□□682ML30S			560	10×25	0.052	0.13	1,260	ELXV250E□□561MJ25S
	6,800	18×25	0.027	0.068	2,350	ELXV6R3E□□682MM25S			820	10×30	0.044	0.11	1,450	ELXV250E□□821MJ30S
	8,200	16×35	0.022	0.055	2,770	ELXV6R3E□□822ML35S			820	12.5×20	0.046	0.12	1,360	ELXV250E□□821MK20S
	10,000	16×40	0.018	0.045	3,110	ELXV6R3E□□103ML40S			1,000	12.5×25	0.034	0.085	1,700	ELXV250E□□102MK25S
	10,000	18×30	0.024	0.060	2,720	ELXV6R3E□□103MM30S			1,500	12.5×30	0.030	0.075	1,980	ELXV250E□□152MK30S
12,000	18×35	0.021	0.053	3,050	ELXV6R3E□□123MM35S	1,500	16×20		0.038	0.095	1,770	ELXV250E□□152ML20S		
15,000	18×40	0.017	0.043	3,300	ELXV6R3E□□153MM40S	1,800	12.5×35		0.027	0.068	2,230	ELXV250E□□182MK35S		
10	390	10×12.5	0.12	0.30	635	ELXV100E□□391MJC5S	1,800		16×25	0.028	0.070	2,190	ELXV250E□□182ML25S	
	680	10×16	0.084	0.21	825	ELXV100E□□681MJ16S	2,200		12.5×40	0.024	0.060	2,460	ELXV250E□□222MK40S	
	1,000	10×20	0.062	0.16	1,060	ELXV100E□□102MJ20S	2,200		18×20	0.036	0.090	1,940	ELXV250E□□222MM20S	
	1,200	10×25	0.052	0.13	1,260	ELXV100E□□122MJ25S	2,700		16×30	0.025	0.063	2,510	ELXV250E□□272ML30S	
	1,500	10×30	0.044	0.11	1,450	ELXV100E□□152MJ30S	2,700		18×25	0.027	0.068	2,350	ELXV250E□□272MM25S	
	1,800	12.5×20	0.046	0.12	1,360	ELXV100E□□182MK20S	3,300		16×35	0.022	0.055	2,770	ELXV250E□□332ML35S	
	2,200	12.5×25	0.034	0.085	1,700	ELXV100E□□222MK25S	3,300		18×30	0.024	0.060	2,720	ELXV250E□□332MM30S	
	2,700	12.5×30	0.030	0.075	1,980	ELXV100E□□272MK30S	3,900		16×40	0.018	0.045	3,110	ELXV250E□□392ML40S	
	3,300	12.5×35	0.027	0.068	2,230	ELXV100E□□332MK35S	3,900	18×35	0.021	0.053	3,050	ELXV250E□□392MM35S		
	3,300	16×20	0.038	0.095	1,770	ELXV100E□□332ML20S	4,700	18×40	0.017	0.043	3,300	ELXV250E□□472MM40S		
	3,900	12.5×40	0.024	0.060	2,460	ELXV100E□□392MK40S	35	120	10×12.5	0.12	0.30	635	ELXV350E□□121MJC5S	
	3,900	16×25	0.028	0.070	2,190	ELXV100E□□392ML25S		220	10×16	0.084	0.21	825	ELXV350E□□221MJ16S	
	3,900	18×20	0.036	0.090	1,940	ELXV100E□□392MM20S		330	10×20	0.062	0.16	1,060	ELXV350E□□331MJ20S	
	4,700	18×25	0.027	0.068	2,350	ELXV100E□□472MM25S		390	10×25	0.052	0.13	1,260	ELXV350E□□391MJ25S	
	5,600	16×30	0.025	0.063	2,510	ELXV100E□□562ML30S		560	10×30	0.044	0.11	1,450	ELXV350E□□561MJ30S	
	6,800	16×35	0.022	0.055	2,770	ELXV100E□□682ML35S		560	12.5×20	0.046	0.12	1,360	ELXV350E□□561MK20S	
	6,800	18×30	0.024	0.060	2,720	ELXV100E□□682MM30S		680	12.5×25	0.034	0.085	1,700	ELXV350E□□681MK25S	
	8,200	16×40	0.018	0.045	3,110	ELXV100E□□822ML40S		1,000	12.5×30	0.030	0.075	1,980	ELXV350E□□102MK30S	
8,200	18×35	0.021	0.053	3,050	ELXV100E□□822MM35S	1,000		16×20	0.038	0.095	1,770	ELXV350E□□102ML20S		
10,000	18×40	0.017	0.043	3,300	ELXV100E□□103MM40S	1,200		12.5×35	0.027	0.068	2,230	ELXV350E□□122MK35S		
16	270	10×12.5	0.12	0.30	635	ELXV160E□□271MJC5S		1,200	16×25	0.028	0.070	2,190	ELXV350E□□122ML25S	
	470	10×16	0.084	0.21	825	ELXV160E□□471MJ16S		1,500	12.5×40	0.024	0.060	2,460	ELXV350E□□152MK40S	
	680	10×20	0.062	0.16	1,060	ELXV160E□□681MJ20S		1,500	18×20	0.036	0.090	1,940	ELXV350E□□152MM20S	
	820	10×25	0.052	0.13	1,260	ELXV160E□□821MJ25S		1,800	16×30	0.025	0.063	2,510	ELXV350E□□182ML30S	
	1,200	10×30	0.044	0.11	1,450	ELXV160E□□122MJ30S		1,800	18×25	0.027	0.068	2,350	ELXV350E□□182MM25S	
	1,200	12.5×20	0.046	0.12	1,360	ELXV160E□□122MK20S		2,200	16×35	0.022	0.055	2,770	ELXV350E□□222ML35S	
	1,500	12.5×25	0.034	0.085	1,700	ELXV160E□□152MK25S		2,200	18×30	0.024	0.060	2,720	ELXV350E□□222MM30S	
	2,200	12.5×30	0.030	0.075	1,980	ELXV160E□□222MK30S		2,700	16×40	0.018	0.045	3,110	ELXV350E□□272ML40S	
	2,200	16×20	0.038	0.095	1,770	ELXV160E□□222ML20S	2,700	18×35	0.021	0.053	3,050	ELXV350E□□272MM35S		
	2,700	12.5×35	0.027	0.068	2,230	ELXV160E□□272MK35S	3,300	18×40	0.017	0.043	3,300	ELXV350E□□332MM40S		

□ □ : Enter the appropriate lead forming or taping code.



◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA rms/105°C, 100kHz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA rms/105°C, 100kHz)	Part No.
			20°C	-10°C						20°C	-10°C		
50	82	10×12.5	0.16	0.40	530	ELXV500E□□820MJC5S	80	39	10×12.5	0.47	1.3	380	ELXV800E□□390MJC5S
	120	10×16	0.12	0.30	755	ELXV500E□□121MJ16S		56	10×16	0.33	0.90	500	ELXV800E□□560MJ16S
	180	10×20	0.088	0.22	945	ELXV500E□□181MJ20S		82	10×20	0.26	0.70	620	ELXV800E□□820MJ20S
	220	10×25	0.068	0.17	1,150	ELXV500E□□221MJ25S		100	10×25	0.19	0.52	795	ELXV800E□□101MJ25S
	330	10×30	0.059	0.15	1,260	ELXV500E□□331MJ30S		150	10×30	0.15	0.41	955	ELXV800E□□151MJ30S
	330	12.5×20	0.059	0.15	1,190	ELXV500E□□331MK20S		150	12.5×20	0.15	0.41	890	ELXV800E□□151MK20S
	470	12.5×25	0.045	0.11	1,500	ELXV500E□□471MK25S		180	12.5×25	0.11	0.30	1,040	ELXV800E□□181MK25S
	560	12.5×30	0.039	0.098	1,720	ELXV500E□□561MK30S		270	12.5×30	0.094	0.26	1,270	ELXV800E□□271MK30S
	680	12.5×35	0.033	0.083	1,900	ELXV500E□□681MK35S		270	16×20	0.11	0.30	1,240	ELXV800E□□271ML20S
	680	16×20	0.043	0.11	1,500	ELXV500E□□681ML20S		330	12.5×35	0.087	0.24	1,450	ELXV800E□□331MK35S
	820	12.5×40	0.029	0.073	2,120	ELXV500E□□821MK40S		330	16×25	0.081	0.22	1,440	ELXV800E□□331ML25S
	820	16×25	0.033	0.083	1,880	ELXV500E□□821ML25S		390	12.5×40	0.060	0.17	1,610	ELXV800E□□391MK40S
	820	18×20	0.039	0.098	1,660	ELXV500E□□821MM20S		390	18×20	0.085	0.23	1,450	ELXV800E□□391MM20S
	1,000	16×30	0.029	0.073	2,150	ELXV500E□□102ML30S		470	16×30	0.058	0.16	1,790	ELXV800E□□471ML30S
	1,000	18×25	0.030	0.075	2,020	ELXV500E□□102MM25S		470	18×25	0.070	0.19	1,650	ELXV800E□□471MM25S
	1,200	16×35	0.025	0.063	2,320	ELXV500E□□122ML35S		560	16×35	0.052	0.14	2,000	ELXV800E□□561ML35S
	1,500	16×40	0.021	0.053	2,650	ELXV500E□□152ML40S		680	16×40	0.041	0.11	2,200	ELXV800E□□681ML40S
	1,500	18×30	0.026	0.065	2,340	ELXV500E□□152MM30S		680	18×30	0.058	0.16	1,850	ELXV800E□□681MM30S
1,800	18×35	0.023	0.058	2,620	ELXV500E□□182MM35S	820	18×35	0.052	0.14	1,990	ELXV800E□□821MM35S		
2,200	18×40	0.020	0.050	2,790	ELXV500E□□222MM40S	1,000	18×40	0.041	0.11	2,370	ELXV800E□□102MM40S		
63	56	10×12.5	0.27	0.68	420	ELXV630E□□560MJC5S	100	27	10×12.5	0.47	1.3	380	ELXV101E□□270MJC5S
	68	10×16	0.21	0.53	523	ELXV630E□□680MJ16S		33	10×16	0.33	0.90	500	ELXV101E□□330MJ16S
	120	10×20	0.16	0.40	650	ELXV630E□□121MJ20S		56	10×20	0.26	0.70	620	ELXV101E□□560MJ20S
	150	10×25	0.13	0.33	780	ELXV630E□□151MJ25S		68	10×25	0.19	0.52	795	ELXV101E□□680MJ25S
	180	10×30	0.10	0.25	960	ELXV630E□□181MJ30S		100	10×30	0.15	0.41	955	ELXV101E□□101MJ30S
	220	12.5×20	0.11	0.28	870	ELXV630E□□221MK20S		100	12.5×20	0.15	0.41	890	ELXV101E□□101MK20S
	270	12.5×25	0.074	0.19	1,150	ELXV630E□□271MK25S		120	12.5×25	0.11	0.30	1,040	ELXV101E□□121MK25S
	390	12.5×30	0.068	0.17	1,280	ELXV630E□□391MK30S		180	12.5×30	0.094	0.26	1,270	ELXV101E□□181MK30S
	390	16×20	0.085	0.22	1,100	ELXV630E□□391ML20S		180	16×20	0.11	0.30	1,240	ELXV101E□□181ML20S
	470	12.5×35	0.063	0.16	1,390	ELXV630E□□471MK35S		220	12.5×35	0.087	0.24	1,450	ELXV101E□□221MK35S
	470	16×25	0.055	0.14	1,480	ELXV630E□□471ML25S		220	16×25	0.081	0.22	1,440	ELXV101E□□221ML25S
	560	12.5×40	0.051	0.13	1,530	ELXV630E□□561MK40S		270	12.5×40	0.060	0.17	1,610	ELXV101E□□271MK40S
	560	18×20	0.085	0.22	1,170	ELXV630E□□561MM20S		270	18×20	0.085	0.23	1,450	ELXV101E□□271MM20S
	680	16×30	0.046	0.12	1,720	ELXV630E□□681ML30S		330	16×30	0.058	0.16	1,790	ELXV101E□□331ML30S
	680	18×25	0.055	0.14	1,520	ELXV630E□□681MM25S		330	18×25	0.070	0.19	1,650	ELXV101E□□331MM25S
	820	16×35	0.040	0.10	1,910	ELXV630E□□821ML35S		390	16×35	0.052	0.14	2,000	ELXV101E□□391ML35S
	820	18×30	0.046	0.12	1,770	ELXV630E□□821MM30S		390	18×30	0.058	0.16	1,850	ELXV101E□□391MM30S
	1,000	16×40	0.036	0.09	2,070	ELXV630E□□102ML40S		470	16×40	0.041	0.11	2,200	ELXV101E□□471ML40S
1,000	18×35	0.040	0.10	1,970	ELXV630E□□102MM35S	560	18×35	0.052	0.14	1,990	ELXV101E□□561MM35S		
1,200	18×40	0.036	0.09	2,130	ELXV630E□□122MM40S	680	18×40	0.041	0.11	2,370	ELXV101E□□681MM40S		

□□ : Enter the appropriate lead forming or taping code.

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Rated voltage (V _{dc})	Case size φD (mm)	Frequency (Hz)				Rated voltage (V _{dc})	Case size φD (mm)	Frequency (Hz)			
		120	1k	10k	100k			120	1k	10k	100k
6.3 & 10	10 & 12.5	0.70	0.85	0.96	1.00	35 & 50	10 & 12.5	0.50	0.73	0.89	1.00
	16 & 18	0.85	0.92	0.97	1.00		16 & 18	0.60	0.81	0.94	1.00
16 & 25	10 & 12.5	0.65	0.83	0.93	1.00	63 to 100	10 & 12.5	0.35	0.65	0.85	1.00
	16 & 18	0.70	0.87	0.96	1.00		16 & 18	0.50	0.75	0.90	1.00

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.



- 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 \(Appendix\)](#)

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