

# LXV Series

- Low impedance
- Endurance with ripple current : 2,000 to 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	-55 to +105°C	
Rated Voltage Range	6.3 to 100V <sub>ac</sub>	
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 <sub>ac</sub> )	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 <sub>ac</sub> : 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 5 to 6.3 : 2,000hours φ 8 & 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



φD	5	6.3	8	10	12.5	16	18
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φD'	φD+0.5max.						
L'	L+1.5max.						

## PART NUMBERING SYSTEM



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

◆ STANDARD RATINGS

VV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.	VV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
			20°C	-10°C						20°C	-10°C		
6.3	120	5×11.5	0.72	1.8	165	ELXV6R3E□□121MEB5D	16	2,700	12.5×35	0.027	0.068	2,230	ELXV160E□□272MK35S
	220	6.3×11.5	0.38	0.95	255	ELXV6R3E□□221MFB5D		2,700	16×25	0.028	0.070	2,190	ELXV160E□□272ML25S
	330	6.3×15	0.27	0.68	330	ELXV6R3E□□331MF15D		3,300	12.5×40	0.024	0.060	2,460	ELXV160E□□332MK40S
	390	8×12	0.20	0.50	415	ELXV6R3E□□391MH12D		3,300	18×20	0.036	0.090	1,940	ELXV160E□□332MM20S
	470	10×12.5	0.12	0.30	635	ELXV6R3E□□471MJC5S		3,900	16×30	0.025	0.063	2,510	ELXV160E□□392ML30S
	560	8×15	0.16	0.40	495	ELXV6R3E□□561MH15D		3,900	18×25	0.027	0.068	2,350	ELXV160E□□392MM25S
	680	10×16	0.084	0.21	825	ELXV6R3E□□681MJ16S		4,700	16×35	0.022	0.055	2,770	ELXV160E□□472ML35S
	820	8×20	0.11	0.28	640	ELXV6R3E□□821MH20D		4,700	18×30	0.024	0.060	2,720	ELXV160E□□472MM30S
	1,200	10×20	0.062	0.16	1,060	ELXV6R3E□□122MJ20S		5,600	16×40	0.018	0.045	3,110	ELXV160E□□562ML40S
	1,500	10×25	0.052	0.13	1,260	ELXV6R3E□□152MJ25S		6,800	18×35	0.021	0.053	3,050	ELXV160E□□682MM35S
	2,200	10×30	0.044	0.11	1,450	ELXV6R3E□□222MJ30S		8,200	18×40	0.017	0.043	3,300	ELXV160E□□822MM40S
	2,200	12.5×20	0.046	0.12	1,360	ELXV6R3E□□222MK20S		39	5×11.5	0.72	1.8	165	ELXV250E□□390MEB5D
	2,700	12.5×25	0.034	0.085	1,700	ELXV6R3E□□272MK25S		82	6.3×11.5	0.38	0.95	255	ELXV250E□□820MFB5D
	3,900	12.5×30	0.030	0.075	1,980	ELXV6R3E□□392MK30S		120	6.3×15	0.27	0.68	330	ELXV250E□□121MF15D
	3,900	16×20	0.038	0.095	1,770	ELXV6R3E□□392ML20S		150	8×12	0.20	0.50	415	ELXV250E□□151MH12D
	4,700	12.5×35	0.027	0.068	2,230	ELXV6R3E□□472MK35S		180	10×12.5	0.12	0.30	635	ELXV250E□□181MJC5S
	5,600	12.5×40	0.024	0.060	2,460	ELXV6R3E□□562MK40S		220	8×15	0.16	0.40	495	ELXV250E□□221MH15D
	5,600	16×25	0.028	0.070	2,190	ELXV6R3E□□562ML25S		330	8×20	0.11	0.28	640	ELXV250E□□331MH20D
5,600	18×20	0.036	0.090	1,940	ELXV6R3E□□562MM20S	330	10×16	0.084	0.21	825	ELXV250E□□331MJ16S		
6,800	16×30	0.025	0.063	2,510	ELXV6R3E□□682ML30S	470	10×20	0.062	0.16	1,060	ELXV250E□□471MJ20S		
6,800	18×25	0.027	0.068	2,350	ELXV6R3E□□682MM25S	560	10×25	0.052	0.13	1,260	ELXV250E□□561MJ25S		
8,200	16×35	0.022	0.055	2,770	ELXV6R3E□□822ML35S	820	10×30	0.044	0.11	1,450	ELXV250E□□821MJ30S		
10,000	16×40	0.018	0.045	3,110	ELXV6R3E□□103ML40S	820	12.5×20	0.046	0.12	1,360	ELXV250E□□821MK20S		
10,000	18×30	0.024	0.060	2,720	ELXV6R3E□□103MM30S	1,000	12.5×25	0.034	0.085	1,700	ELXV250E□□102MK25S		
12,000	18×35	0.021	0.053	3,050	ELXV6R3E□□123MM35S	1,500	12.5×30	0.030	0.075	1,980	ELXV250E□□152MK30S		
15,000	18×40	0.017	0.043	3,300	ELXV6R3E□□153MM40S	1,500	16×20	0.038	0.095	1,770	ELXV250E□□152ML20S		
10	82	5×11.5	0.72	1.8	165	ELXV100E□□820MEB5D	1,800	12.5×35	0.027	0.068	2,230	ELXV250E□□182MK35S	
	180	6.3×11.5	0.38	0.95	255	ELXV100E□□181MFB5D	1,800	16×25	0.028	0.070	2,190	ELXV250E□□182ML25S	
	270	6.3×15	0.27	0.68	330	ELXV100E□□271MF15D	2,200	12.5×40	0.024	0.060	2,460	ELXV250E□□222MK40S	
	330	8×12	0.20	0.50	415	ELXV100E□□331MH12D	2,200	18×20	0.036	0.090	1,940	ELXV250E□□222MM20S	
	390	10×12.5	0.12	0.30	635	ELXV100E□□391MJC5S	2,700	16×30	0.025	0.063	2,510	ELXV250E□□272ML30S	
	470	8×15	0.16	0.40	495	ELXV100E□□471MH15D	2,700	18×25	0.027	0.068	2,350	ELXV250E□□272MM25S	
	680	8×20	0.11	0.28	640	ELXV100E□□681MH20D	3,300	16×35	0.022	0.055	2,770	ELXV250E□□332ML35S	
	680	10×16	0.084	0.21	825	ELXV100E□□681MJ16S	3,300	18×30	0.024	0.060	2,720	ELXV250E□□332MM30S	
	1,000	10×20	0.062	0.16	1,060	ELXV100E□□102MJ20S	3,900	16×40	0.018	0.045	3,110	ELXV250E□□392ML40S	
	1,200	10×25	0.052	0.13	1,260	ELXV100E□□122MJ25S	3,900	18×35	0.021	0.053	3,050	ELXV250E□□392MM35S	
	1,500	10×30	0.044	0.11	1,450	ELXV100E□□152MJ30S	4,700	18×40	0.017	0.043	3,300	ELXV250E□□472MM40S	
	1,800	12.5×20	0.046	0.12	1,360	ELXV100E□□182MK20S	27	5×11.5	0.72	1.8	165	ELXV350E□□270MEB5D	
	2,200	12.5×25	0.034	0.085	1,700	ELXV100E□□222MK25S	56	6.3×11.5	0.38	0.95	255	ELXV350E□□560MFB5D	
	2,700	12.5×30	0.030	0.075	1,980	ELXV100E□□272MK30S	82	6.3×15	0.27	0.68	330	ELXV350E□□820MF15D	
	3,300	12.5×35	0.027	0.068	2,230	ELXV100E□□332MK35S	120	8×12	0.20	0.50	415	ELXV350E□□121MH12D	
	3,300	16×20	0.038	0.095	1,770	ELXV100E□□332ML20S	120	10×12.5	0.12	0.30	635	ELXV350E□□121MJC5S	
	3,900	12.5×40	0.024	0.060	2,460	ELXV100E□□392MK40S	180	8×15	0.16	0.40	495	ELXV350E□□181MH15D	
	3,900	16×25	0.028	0.070	2,190	ELXV100E□□392ML25S	220	8×20	0.11	0.28	640	ELXV350E□□221MH20D	
3,900	18×20	0.036	0.090	1,940	ELXV100E□□392MM20S	220	10×16	0.084	0.21	825	ELXV350E□□221MJ16S		
4,700	18×25	0.027	0.068	2,350	ELXV100E□□472MM25S	330	10×20	0.062	0.16	1,060	ELXV350E□□331MJ20S		
5,600	16×30	0.025	0.063	2,510	ELXV100E□□562ML30S	390	10×25	0.052	0.13	1,260	ELXV350E□□391MJ25S		
6,800	16×35	0.022	0.055	2,770	ELXV100E□□682ML35S	560	10×30	0.044	0.11	1,450	ELXV350E□□561MJ30S		
6,800	18×30	0.024	0.060	2,720	ELXV100E□□682MM30S	560	12.5×20	0.046	0.12	1,360	ELXV350E□□561MK20S		
8,200	16×40	0.018	0.045	3,110	ELXV100E□□822ML40S	680	12.5×25	0.034	0.085	1,700	ELXV350E□□681MK25S		
8,200	18×35	0.021	0.053	3,050	ELXV100E□□822MM35S	1,000	12.5×30	0.030	0.075	1,980	ELXV350E□□102MK30S		
10,000	18×40	0.017	0.043	3,300	ELXV100E□□103MM40S	1,000	16×20	0.038	0.095	1,770	ELXV350E□□102ML20S		
16	56	5×11.5	0.72	1.8	165	ELXV160E□□560MEB5D	1,200	12.5×35	0.027	0.068	2,230	ELXV350E□□122MK35S	
	120	6.3×11.5	0.38	0.95	255	ELXV160E□□121MFB5D	1,200	16×25	0.028	0.070	2,190	ELXV350E□□122ML25S	
	180	6.3×15	0.27	0.68	330	ELXV160E□□181MF15D	1,500	12.5×40	0.024	0.060	2,460	ELXV350E□□152MK40S	
	270	8×12	0.20	0.50	415	ELXV160E□□271MH12D	1,500	18×20	0.036	0.090	1,940	ELXV350E□□152MM20S	
	270	10×12.5	0.12	0.30	635	ELXV160E□□271MJC5S	1,800	16×30	0.025	0.063	2,510	ELXV350E□□182ML30S	
	330	8×15	0.16	0.40	495	ELXV160E□□331MH15D	1,800	18×25	0.027	0.068	2,350	ELXV350E□□182MM25S	
	470	8×20	0.11	0.28	640	ELXV160E□□471MH20D	2,200	16×35	0.022	0.055	2,770	ELXV350E□□222ML35S	
	470	10×16	0.084	0.21	825	ELXV160E□□471MJ16S	2,200	18×30	0.024	0.060	2,720	ELXV350E□□222MM30S	
	680	10×20	0.062	0.16	1,060	ELXV160E□□681MJ20S	2,700	16×40	0.018	0.045	3,110	ELXV350E□□272ML40S	
	820	10×25	0.052	0.13	1,260	ELXV160E□□821MJ25S	2,700	18×35	0.021	0.053	3,050	ELXV350E□□272MM35S	
	1,200	10×30	0.044	0.11	1,450	ELXV160E□□122MJ30S	3,300	18×40	0.017	0.043	3,300	ELXV350E□□332MM40S	
	1,200	12.5×20	0.046	0.12	1,360	ELXV160E□□122MK20S	18	5×11.5	1.1	3.3	165	ELXV500E□□180MEB5D	
	1,500	12.5×25	0.034	0.085	1,700	ELXV160E□□152MK25S	39	6.3×11.5	0.56	1.6	255	ELXV500E□□390MFB5D	
	2,200	12.5×30	0.030	0.075	1,980	ELXV160E□□222MK30S	56	6.3×15	0.41	1.2	310	ELXV500E□□560MF15D	
	2,200	16×20	0.038	0.095	1,770	ELXV160E□□222ML20S	68	8×12	0.29	0.84	415	ELXV500E□□680MH12D	

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

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
			20°C	-10°C						20°C	-10°C		
50	82	8×15	0.24	0.72	505	ELXV500E□□820MH15D	80	27	6.3×15	0.62	1.7	220	ELXV800E□□270MF15D
	82	10×12.5	0.16	0.40	530	ELXV500E□□820MJC5S		33	8×12	0.53	1.5	275	ELXV800E□□330MH12D
	120	8×20	0.18	0.52	610	ELXV500E□□121MH20D		39	10×12.5	0.47	1.3	380	ELXV800E□□390MJC5S
	120	10×16	0.12	0.30	755	ELXV500E□□121MJ16S		47	8×15	0.35	0.97	360	ELXV800E□□470MH15D
	180	10×20	0.088	0.22	945	ELXV500E□□181MJ20S		56	8×20	0.27	0.74	490	ELXV800E□□560MH20D
	220	10×25	0.068	0.17	1,150	ELXV500E□□221MJ25S		56	10×16	0.33	0.90	500	ELXV800E□□560MJ16S
	330	10×30	0.059	0.15	1,260	ELXV500E□□331MJ30S		82	10×20	0.26	0.70	620	ELXV800E□□820MJ20S
	330	12.5×20	0.059	0.15	1,190	ELXV500E□□331MK20S		100	10×25	0.19	0.52	795	ELXV800E□□101MJ25S
	470	12.5×25	0.045	0.11	1,500	ELXV500E□□471MK25S		150	10×30	0.15	0.41	955	ELXV800E□□151MJ30S
	560	12.5×30	0.039	0.098	1,720	ELXV500E□□561MK30S		150	12.5×20	0.15	0.41	890	ELXV800E□□151MK20S
	680	12.5×35	0.033	0.083	1,900	ELXV500E□□681MK35S		180	12.5×25	0.11	0.30	1,040	ELXV800E□□181MK25S
	680	16×20	0.043	0.11	1,500	ELXV500E□□681ML20S		270	12.5×30	0.094	0.26	1,270	ELXV800E□□271MK30S
	820	12.5×40	0.029	0.073	2,120	ELXV500E□□821MK40S		270	16×20	0.11	0.30	1,240	ELXV800E□□271ML20S
	820	16×25	0.033	0.083	1,880	ELXV500E□□821ML25S		330	12.5×35	0.087	0.24	1,450	ELXV800E□□331MK35S
	820	18×20	0.039	0.098	1,660	ELXV500E□□821MM20S		330	16×25	0.081	0.22	1,440	ELXV800E□□331ML25S
	1,000	16×30	0.029	0.073	2,150	ELXV500E□□102ML30S		390	12.5×40	0.060	0.17	1,610	ELXV800E□□391MK40S
	1,000	18×25	0.030	0.075	2,020	ELXV500E□□102MM25S		390	18×20	0.085	0.23	1,450	ELXV800E□□391MM20S
	1,200	16×35	0.025	0.063	2,320	ELXV500E□□122ML35S		470	16×30	0.058	0.16	1,790	ELXV800E□□471ML30S
	1,500	16×40	0.021	0.053	2,650	ELXV500E□□152ML40S		470	18×25	0.070	0.19	1,650	ELXV800E□□471MM25S
	1,500	18×30	0.026	0.065	2,340	ELXV500E□□152MM30S		560	16×35	0.052	0.14	2,000	ELXV800E□□561ML35S
1,800	18×35	0.023	0.058	2,620	ELXV500E□□182MM35S	680	16×40	0.041	0.11	2,200	ELXV800E□□681ML40S		
2,200	18×40	0.020	0.050	2,790	ELXV500E□□222MM40S	680	18×30	0.058	0.16	1,850	ELXV800E□□681MM30S		
63	12	5×11.5	1.9	4.8	100	ELXV630E□□120MEB5D	820	18×35	0.052	0.14	1,990	ELXV800E□□821MM35S	
	27	6.3×11.5	1.1	2.8	160	ELXV630E□□270MFB5D	1,000	18×40	0.041	0.11	2,370	ELXV800E□□102MM40S	
	39	6.3×15	0.62	1.6	230	ELXV630E□□390MF15D	100	5.6	5×11.5	1.9	5.1	100	ELXV101E□□5R6MEB5D
	47	8×12	0.49	1.3	275	ELXV630E□□470MH12D		12	6.3×11.5	1.1	3.0	150	ELXV101E□□120MFB5D
	56	10×12.5	0.27	0.68	420	ELXV630E□□560MJC5S		18	6.3×15	0.62	1.7	220	ELXV101E□□180MF15D
	68	8×15	0.34	0.85	360	ELXV630E□□680MH15D		22	8×12	0.53	1.5	275	ELXV101E□□220MH12D
	68	10×16	0.21	0.53	523	ELXV630E□□680MJ16S		27	10×12.5	0.47	1.3	380	ELXV101E□□270MJC5S
	82	8×20	0.21	0.53	500	ELXV630E□□820MH20D		33	8×15	0.35	0.97	360	ELXV101E□□330MH15D
	120	10×20	0.16	0.40	650	ELXV630E□□121MJ20S		33	10×16	0.33	0.90	500	ELXV101E□□330MJ16S
	150	10×25	0.13	0.33	780	ELXV630E□□151MJ25S		39	8×20	0.27	0.74	490	ELXV101E□□390MH20D
	180	10×30	0.10	0.25	960	ELXV630E□□181MJ30S		56	10×20	0.26	0.70	620	ELXV101E□□560MJ20S
	220	12.5×20	0.11	0.28	870	ELXV630E□□221MK20S		68	10×25	0.19	0.52	795	ELXV101E□□680MJ25S
	270	12.5×25	0.074	0.19	1,150	ELXV630E□□271MK25S		100	10×30	0.15	0.41	955	ELXV101E□□101MJ30S
	390	12.5×30	0.068	0.17	1,280	ELXV630E□□391MK30S		100	12.5×20	0.15	0.41	890	ELXV101E□□101MK20S
	390	16×20	0.085	0.22	1,100	ELXV630E□□391ML20S		120	12.5×25	0.11	0.30	1,040	ELXV101E□□121MK25S
	470	12.5×35	0.063	0.16	1,390	ELXV630E□□471MK35S		180	12.5×30	0.094	0.26	1,270	ELXV101E□□181MK30S
	470	16×25	0.055	0.14	1,480	ELXV630E□□471ML25S		180	16×20	0.11	0.30	1,240	ELXV101E□□181ML20S
	560	12.5×40	0.051	0.13	1,530	ELXV630E□□561MK40S		220	12.5×35	0.087	0.24	1,450	ELXV101E□□221MK35S
	560	18×20	0.085	0.22	1,170	ELXV630E□□561MM20S		220	16×25	0.081	0.22	1,440	ELXV101E□□221ML25S
	680	16×30	0.046	0.12	1,720	ELXV630E□□681ML30S		270	12.5×40	0.060	0.17	1,610	ELXV101E□□271MK40S
680	18×25	0.055	0.14	1,520	ELXV630E□□681MM25S	270		18×20	0.085	0.23	1,450	ELXV101E□□271MM20S	
820	16×35	0.040	0.10	1,910	ELXV630E□□821ML35S	330		16×30	0.058	0.16	1,790	ELXV101E□□331ML30S	
820	18×30	0.046	0.12	1,770	ELXV630E□□821MM30S	330	18×25	0.070	0.19	1,650	ELXV101E□□331MM25S		
1,000	16×40	0.036	0.09	2,070	ELXV630E□□102ML40S	390	16×35	0.052	0.14	2,000	ELXV101E□□391ML35S		
1,000	18×35	0.040	0.10	1,970	ELXV630E□□102MM35S	390	18×30	0.058	0.16	1,850	ELXV101E□□391MM30S		
1,200	18×40	0.036	0.09	2,130	ELXV630E□□122MM40S	470	16×40	0.041	0.11	2,200	ELXV101E□□471ML40S		
80	8.2	5×11.5	1.9	5.1	100	ELXV800E□□8R2MEB5D	560	18×35	0.052	0.14	1,990	ELXV101E□□561MM35S	
	18	6.3×11.5	1.1	3.0	150	ELXV800E□□180MFB5D	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 <sub>dc</sub> )	Case size φD (mm)	Frequency (Hz)				Rated voltage (V <sub>dc</sub> )	Case size φD (mm)	Frequency (Hz)			
		120	1k	10k	100k			120	1k	10k	100k
6.3 & 10	5 to 8	0.65	0.83	0.95	1.00	35 & 50	5 to 8	0.40	0.66	0.85	1.00
	10 & 12.5	0.70	0.85	0.96	1.00		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	5 to 8	0.55	0.76	0.91	1.00	63 to 100	5 to 8	0.20	0.55	0.80	1.00
	10 & 12.5	0.65	0.83	0.93	1.00		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 endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.