

# LXY Series

- Adoption of innovative electrolyte and new technologies
- Endurance with ripple current : 2,000 to 8,000 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	10 to 63V <sub>dc</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>dc</sub> )	10V 16V 25V 35V 50V 63V
	tan δ (Max.)	0.19 0.16 0.14 0.12 0.10 0.10
	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 (Max. Impedance Ratio)	Z(-55°C)/Z(+20°C)	10 to 50V <sub>dc</sub> : 3max. 63V <sub>dc</sub> : 6max. (at 120Hz)
	Endurance	
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 & 6.3 : 2,000hours φ 8 : 3,000hours φ 10 : 5,000hours φ 12.5 : 7,000hours φ 16 & 18 : 8,000hours
	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
φd	0.5	0.5	0.6	0.6	0.6	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5
φD'	φD+0.5max.					
L'	L+1.5max.					

## PART NUMBERING SYSTEM



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

## RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance(µF)	Frequency(Hz)			
	120	1k	10k	100k
10 to 180	0.40	0.75	0.90	1.00
220 to 560	0.50	0.85	0.94	1.00
680 to 1,800	0.60	0.87	0.95	1.00
2,200 to 3,900	0.75	0.90	0.95	1.00
4,700 to 8,200	0.85	0.95	0.98	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.

### ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA rms/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 rms/105°C, 100kHz)	Part No.
			20°C	-10°C						20°C	-10°C		
10	82	5×11.5	0.75	1.5	163	ELXY100E□□820MEB5D	35	27	5×11.5	0.75	1.5	163	ELXY350E□□270MEB5D
	180	6.3×11.5	0.35	0.70	273	ELXY100E□□181MFB5D		56	6.3×11.5	0.35	0.70	273	ELXY350E□□560MFB5D
	220	6.3×15	0.25	0.50	390	ELXY100E□□221MF15D		82	6.3×15	0.25	0.50	390	ELXY350E□□820MF15D
	330	8×12	0.17	0.34	445	ELXY100E□□331MH12D		120	8×12	0.17	0.34	445	ELXY350E□□121MH12D
	390	10×12.5	0.12	0.24	625	ELXY100E□□391MJC5S		120	10×12.5	0.12	0.24	625	ELXY350E□□121MJC5S
	470	8×15	0.13	0.26	555	ELXY100E□□471MH15D		180	8×15	0.13	0.26	555	ELXY350E□□181MH15D
	680	8×20	0.095	0.19	740	ELXY100E□□681MH20D		220	8×20	0.095	0.19	740	ELXY350E□□221MH20D
	680	10×16	0.084	0.17	825	ELXY100E□□681MJ16S		220	10×16	0.084	0.17	825	ELXY350E□□221MJ16S
	1,000	10×20	0.062	0.13	1,040	ELXY100E□□102MJ20S		330	10×20	0.062	0.13	1,040	ELXY350E□□331MJ20S
	1,200	10×25	0.052	0.11	1,260	ELXY100E□□122MJ25S		390	10×25	0.052	0.11	1,260	ELXY350E□□391MJ25S
	1,500	10×30	0.044	0.088	1,440	ELXY100E□□152MJ30S		560	10×30	0.044	0.088	1,440	ELXY350E□□561MJ30S
	1,800	12.5×20	0.046	0.092	1,340	ELXY100E□□181MJ20S		560	12.5×20	0.046	0.092	1,340	ELXY350E□□561MJ20S
	2,200	12.5×25	0.034	0.068	1,690	ELXY100E□□222MK25S		680	12.5×25	0.034	0.068	1,690	ELXY350E□□681MK25S
	2,700	12.5×30	0.030	0.060	1,950	ELXY100E□□272MK30S		1,000	12.5×30	0.030	0.060	1,950	ELXY350E□□102MK30S
	3,300	12.5×35	0.024	0.048	2,220	ELXY100E□□332MK35S		1,000	16×20	0.038	0.076	1,630	ELXY350E□□102ML20S
	3,300	16×20	0.038	0.076	1,630	ELXY100E□□332ML20S		1,200	12.5×35	0.024	0.048	2,220	ELXY350E□□122MK35S
	3,900	12.5×40	0.022	0.044	2,390	ELXY100E□□392MK40S		1,200	16×25	0.028	0.056	2,070	ELXY350E□□122ML25S
3,900	16×25	0.028	0.056	2,070	ELXY100E□□392ML25S	1,500	12.5×40	0.022	0.044	2,390	ELXY350E□□152MK40S		
5,600	16×30	0.025	0.050	2,350	ELXY100E□□562ML30S	1,800	16×30	0.025	0.050	2,350	ELXY350E□□182ML30S		
6,800	16×35	0.022	0.044	2,550	ELXY100E□□682ML35S	2,200	16×35	0.022	0.044	2,550	ELXY350E□□222ML35S		
8,200	16×40	0.018	0.036	2,900	ELXY100E□□822ML40S	2,700	16×40	0.018	0.036	2,900	ELXY350E□□272ML40S		
16	56	5×11.5	0.75	1.5	163	ELXY160E□□560MEB5D	50	18	5×11.5	1.2	2.4	129	ELXY500E□□180MEB5D
	120	6.3×11.5	0.35	0.70	273	ELXY160E□□121MFB5D		39	6.3×11.5	0.54	1.1	219	ELXY500E□□390MFB5D
	180	6.3×15	0.25	0.50	390	ELXY160E□□181MF15D		56	6.3×15	0.34	0.68	310	ELXY500E□□560MF15D
	270	8×12	0.17	0.34	445	ELXY160E□□271MH12D		68	8×12	0.30	0.60	340	ELXY500E□□680MH12D
	270	10×12.5	0.12	0.24	625	ELXY160E□□271MJC5S		82	8×15	0.20	0.40	470	ELXY500E□□820MH15D
	330	8×15	0.13	0.26	555	ELXY160E□□331MH15D		82	10×12.5	0.20	0.40	480	ELXY500E□□820MJC5S
	470	8×20	0.095	0.19	740	ELXY160E□□471MH20D		120	8×20	0.14	0.28	610	ELXY500E□□121MH20D
	470	10×16	0.084	0.17	825	ELXY160E□□471MJ16S		120	10×16	0.13	0.26	755	ELXY500E□□121MJ16S
	680	10×20	0.062	0.13	1,040	ELXY160E□□681MJ20S		180	10×20	0.088	0.18	945	ELXY500E□□181MJ20S
	820	10×25	0.052	0.11	1,260	ELXY160E□□821MJ25S		220	10×25	0.073	0.15	1,150	ELXY500E□□221MJ25S
	1,200	10×30	0.044	0.088	1,440	ELXY160E□□122MJ30S		330	10×30	0.054	0.11	1,260	ELXY500E□□331MJ30S
	1,200	12.5×20	0.046	0.092	1,340	ELXY160E□□122MK20S		330	12.5×20	0.059	0.12	1,190	ELXY500E□□331MK20S
	1,500	12.5×25	0.034	0.068	1,690	ELXY160E□□152MK25S		470	12.5×25	0.044	0.088	1,490	ELXY500E□□471MK25S
	2,200	12.5×30	0.030	0.060	1,950	ELXY160E□□222MK30S		560	12.5×30	0.039	0.078	1,720	ELXY500E□□561MK30S
	2,200	16×20	0.038	0.076	1,630	ELXY160E□□222ML20S		680	12.5×35	0.033	0.066	1,890	ELXY500E□□681MK35S
	2,700	12.5×35	0.024	0.048	2,220	ELXY160E□□272MK35S		680	16×20	0.050	0.10	1,420	ELXY500E□□681ML20S
	2,700	16×25	0.028	0.056	2,070	ELXY160E□□272ML25S		820	12.5×40	0.029	0.058	2,030	ELXY500E□□821MK40S
3,300	12.5×40	0.022	0.044	2,390	ELXY160E□□332MK40S	820	16×25	0.034	0.068	1,880	ELXY500E□□821ML25S		
3,900	16×30	0.025	0.050	2,350	ELXY160E□□392ML30S	1,000	16×30	0.030	0.060	2,150	ELXY500E□□102ML30S		
4,700	16×35	0.022	0.044	2,550	ELXY160E□□472ML35S	1,200	16×35	0.027	0.054	2,320	ELXY500E□□122ML35S		
5,600	16×40	0.018	0.036	2,900	ELXY160E□□562ML40S	1,500	16×40	0.024	0.048	2,540	ELXY500E□□152ML40S		
25	39	5×11.5	0.75	1.5	163	ELXY250E□□390MEB5D	63	10	5×11.5	1.9	4.8	103	ELXY630E□□100MEB5D
	82	6.3×11.5	0.35	0.70	273	ELXY250E□□820MFB5D		18	6.3×11.5	1.0	2.5	161	ELXY630E□□180MFB5D
	120	6.3×15	0.25	0.50	390	ELXY250E□□121MF15D		33	6.3×15	0.61	1.6	233	ELXY630E□□330MF15D
	150	8×12	0.17	0.34	445	ELXY250E□□151MH12D		47	8×12	0.47	1.2	274	ELXY630E□□470MH12D
	180	10×12.5	0.12	0.24	625	ELXY250E□□181MJC5S		56	10×12.5	0.27	0.68	418	ELXY630E□□560MJC5S
	220	8×15	0.13	0.26	555	ELXY250E□□221MH15D		68	8×15	0.34	0.85	360	ELXY630E□□680MH15D
	330	8×20	0.095	0.19	740	ELXY250E□□331MH20D		68	10×16	0.21	0.53	525	ELXY630E□□680MJ16S
	330	10×16	0.084	0.17	825	ELXY250E□□331MJ16S		82	8×20	0.21	0.53	500	ELXY630E□□820MH20D
	470	10×20	0.062	0.13	1,040	ELXY250E□□471MJ20S		120	10×20	0.16	0.40	650	ELXY630E□□121MJ20S
	560	10×25	0.052	0.11	1,260	ELXY250E□□561MJ25S		150	10×25	0.13	0.33	783	ELXY630E□□151MJ25S
	820	10×30	0.044	0.088	1,440	ELXY250E□□821MJ30S		180	10×30	0.10	0.25	960	ELXY630E□□181MJ30S
	820	12.5×20	0.046	0.092	1,340	ELXY250E□□821MK20S		220	12.5×20	0.11	0.28	870	ELXY630E□□221MK20S
	1,000	12.5×25	0.034	0.068	1,690	ELXY250E□□102MK25S		270	12.5×25	0.074	0.19	1,150	ELXY630E□□271MK25S
	1,500	12.5×30	0.030	0.060	1,950	ELXY250E□□152MK30S		330	16×20	0.085	0.22	1,100	ELXY630E□□331ML20S
	1,500	16×20	0.038	0.076	1,630	ELXY250E□□152ML20S		390	12.5×30	0.068	0.17	1,280	ELXY630E□□391MK30S
	1,800	12.5×35	0.024	0.048	2,220	ELXY250E□□182MK35S		470	12.5×35	0.063	0.16	1,390	ELXY630E□□471MK35S
	1,800	16×25	0.028	0.056	2,070	ELXY250E□□182ML25S		470	16×25	0.055	0.14	1,480	ELXY630E□□471ML25S
2,200	12.5×40	0.022	0.044	2,390	ELXY250E□□222MK40S	560	12.5×40	0.051	0.13	1,530	ELXY630E□□561MK40S		
2,700	16×30	0.025	0.050	2,350	ELXY250E□□272ML30S	680	16×30	0.046	0.12	1,720	ELXY630E□□681ML30S		
3,300	16×35	0.022	0.044	2,550	ELXY250E□□332ML35S	820	16×35	0.040	0.10	1,910	ELXY630E□□821ML35S		
3,900	16×40	0.018	0.036	2,900	ELXY250E□□392ML40S	1,000	16×40	0.036	0.090	2,070	ELXY630E□□102ML40S		

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