

# LXJ Series

- Low impedance
- Endurance with ripple current: 105°C 2,000 to 5,000 hours
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)
- Pb-free design

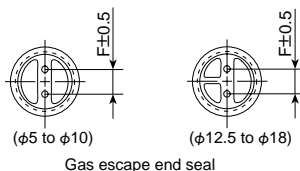
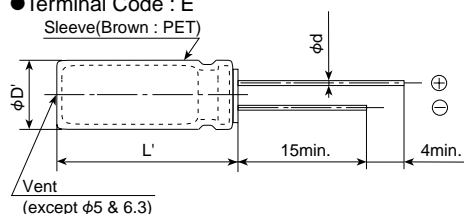


## ◆ SPECIFICATIONS

Items	Characteristics	
<b>Category</b>	-55 to +105°C	
<b>Temperature Range</b>		
<b>Rated Voltage Range</b>	6.3 to 50V <sub>dc</sub>	
<b>Capacitance Tolerance</b>	±20% (M) (at 20°C, 120Hz)	
<b>Leakage Current</b>	I=0.03CV or 4µA, whichever is greater. (at 20°C after 1 minute) I=0.01CV or 3µA, whichever is greater. (at 20°C after 2 minutes) Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V)	
<b>Dissipation Factor (tanδ)</b>	Rated voltage (V <sub>dc</sub> )	6.3V 10V 16V 25V 35V 50V
	tanδ	0.22 0.19 0.16 0.14 0.12 0.10
	When nominal capacitance exceeds 1,000µF, add 0.02 to the value above for each 1,000µF increase. (at 20°C, 120Hz)	
<b>Low Temperature Characteristics</b>	Capacitance change ΔC(-55°C/20°C)	0.7min.
	Max. impedance ratio(-55°C/20°C)	3max. (at 120Hz)
<b>Endurance</b>	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 for the specified period of time at 105°C.	
	Time	φ5 & φ6.3 : 2,000hours φ8 & φ10 : 3,000hours φ12.5 and larger : 5,000hours
	Capacitance change	≤±20% of the initial value
	D.F. (tanδ)	≤200% of the initial specified value
	Leakage current	≤The initial specified value
<b>Shelf Life</b>	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.	
	Capacitance change	≤±20% of the initial value
	D.F. (tanδ)	≤200% of the initial specified value
	Leakage current	≤The initial specified value

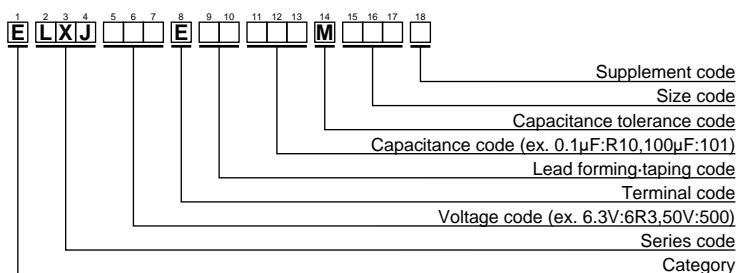
## ◆ DIMENSIONS [mm]

- Terminal Code : E  
Sleeve(Brown : PET)



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



Specifications in this bulletin are subject to change without notice.

◆STANDARD RATINGS

WV(Vdc)		6.3					10						
		Items φD×L(mm) Case code		Cap (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/ 105°C, 100kHz)	Part No.	Cap (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/ 105°C, 100kHz)	Part No.
					20°C	-10°C				20°C	-10°C		
5×11.5	EB5	120	1.1	3.3	165	ELXJ6R3E□□121MEB5D	82	1.1	3.3	165	ELXJ100E□□820MEB5D		
5×15	E15	150	1.0	3.0	180	ELXJ6R3E□□151ME15D	120	1.0	3.0	180	ELXJ100E□□121ME15D		
6.3×11.5	FB5	220	0.55	1.6	255	ELXJ6R3E□□221MFB5D	180	0.55	1.6	255	ELXJ100E□□181MFB5D		
6.3×15	F15	330	0.41	1.2	330	ELXJ6R3E□□331MF15D	270	0.41	1.2	330	ELXJ100E□□271MF15D		
8×12	H12	390	0.29	0.84	415	ELXJ6R3E□□391MH12D	330	0.29	0.84	415	ELXJ100E□□331MH12D		
8×15	H15	560	0.25	0.75	495	ELXJ6R3E□□561MH15D	470	0.25	0.75	495	ELXJ100E□□471MH15D		
8×20	H20	820	0.18	0.52	640	ELXJ6R3E□□821MH20D	680	0.18	0.52	640	ELXJ100E□□681MH20D		
10×12.5	JC5	470	0.16	0.40	635	ELXJ6R3E□□471MJC5S	390	0.16	0.40	635	ELXJ100E□□391MJC5S		
10×16	J16	680	0.12	0.30	795	ELXJ6R3E□□681MJ16S	680	0.12	0.30	795	ELXJ100E□□681MJ16S		
10×20	J20	1,200	0.088	0.22	1,060	ELXJ6R3E□□122MJ20S	1,000	0.088	0.22	1,060	ELXJ100E□□102MJ20S		
10×25	J25	1,500	0.068	0.17	1,240	ELXJ6R3E□□152MJ25S	1,200	0.068	0.17	1,240	ELXJ100E□□122MJ25S		
10×30	J30	2,200	0.059	0.15	1,450	ELXJ6R3E□□222MJ30S	1,500	0.059	0.15	1,450	ELXJ100E□□152MJ30S		
12.5×20	K20	2,200	0.059	0.15	1,360	ELXJ6R3E□□222MK20S	1,800	0.059	0.15	1,360	ELXJ100E□□182MK20S		
12.5×25	K25	2,700	0.045	0.11	1,700	ELXJ6R3E□□272MK25S	2,200	0.045	0.11	1,700	ELXJ100E□□222MK25S		
12.5×30	K30	3,900	0.039	0.098	1,980	ELXJ6R3E□□392MK30S	2,700	0.039	0.098	1,980	ELXJ100E□□272MK30S		
12.5×35	K35	4,700	0.033	0.083	2,230	ELXJ6R3E□□472MK35S	3,300	0.033	0.083	2,230	ELXJ100E□□332MK35S		
12.5×40	K40	5,600	0.029	0.073	2,460	ELXJ6R3E□□562MK40S	3,900	0.029	0.073	2,460	ELXJ100E□□392MK40S		
16×20	L20	3,900	0.043	0.11	1,770	ELXJ6R3E□□392ML20S	3,300	0.043	0.11	1,770	ELXJ100E□□332ML20S		
16×25	L25	5,600	0.033	0.083	2,190	ELXJ6R3E□□562ML25S	3,900	0.033	0.083	2,190	ELXJ100E□□392ML25S		
16×30	L30	6,800	0.029	0.073	2,510	ELXJ6R3E□□682ML30S	4,700	0.029	0.073	2,510	ELXJ100E□□472ML30S		
16×35	L35	8,200	0.025	0.063	2,770	ELXJ6R3E□□822ML35S	6,800	0.025	0.063	2,770	ELXJ100E□□682ML35S		
16×40	L40	10,000	0.021	0.053	3,110	ELXJ6R3E□□103ML40S	8,200	0.021	0.053	3,110	ELXJ100E□□822ML40S		
18×20	M20	5,600	0.039	0.098	1,940	ELXJ6R3E□□562MM20S	3,900	0.039	0.098	1,940	ELXJ100E□□392MM20S		
18×25	M25	6,800	0.030	0.075	2,350	ELXJ6R3E□□682MM25S	4,700	0.030	0.075	2,350	ELXJ100E□□472MM25S		
18×30	M30	10,000	0.026	0.065	2,720	ELXJ6R3E□□103MM30S	6,800	0.026	0.065	2,720	ELXJ100E□□682MM30S		
18×35	M35	12,000	0.023	0.058	3,050	ELXJ6R3E□□123MM35S	8,200	0.023	0.058	3,050	ELXJ100E□□822MM35S		
18×40	M40	15,000	0.020	0.050	3,300	ELXJ6R3E□□153MM40S	10,000	0.020	0.050	3,300	ELXJ100E□□103MM40S		

WV(Vdc)		16					25						
		Items φD×L(mm) Case code		Cap (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/ 105°C, 100kHz)	Part No.	Cap (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/ 105°C, 100kHz)	Part No.
					20°C	-10°C				20°C	-10°C		
5×11.5	EB5	56	1.1	3.3	165	ELXJ160E□□560MEB5D	39	1.1	3.3	165	ELXJ250E□□390MEB5D		
5×15	E15	82	1.0	3.0	180	ELXJ160E□□820ME15D	56	1.0	3.0	180	ELXJ250E□□560ME15D		
6.3×11.5	FB5	120	0.55	1.6	255	ELXJ160E□□121MFB5D	82	0.55	1.6	255	ELXJ250E□□820MFB5D		
6.3×15	F15	180	0.41	1.2	330	ELXJ160E□□181MF15D	120	0.41	1.2	330	ELXJ250E□□121MF15D		
8×12	H12	270	0.29	0.84	415	ELXJ160E□□271MH12D	150	0.29	0.84	415	ELXJ250E□□151MH12D		
8×15	H15	330	0.25	0.75	495	ELXJ160E□□331MH15D	220	0.25	0.75	495	ELXJ250E□□221MH15D		
8×20	H20	470	0.18	0.52	640	ELXJ160E□□471MH20D	330	0.18	0.52	640	ELXJ250E□□331MH20D		
10×12.5	JC5	270	0.16	0.40	635	ELXJ160E□□271MJC5S	180	0.16	0.40	635	ELXJ250E□□181MJC5S		
10×16	J16	470	0.12	0.30	795	ELXJ160E□□471MJ16S	330	0.12	0.30	795	ELXJ250E□□331MJ16S		
10×20	J20	680	0.088	0.22	1,060	ELXJ160E□□681MJ20S	470	0.088	0.22	1,060	ELXJ250E□□471MJ20S		
10×25	J25	820	0.068	0.17	1,240	ELXJ160E□□821MJ25S	560	0.068	0.17	1,240	ELXJ250E□□561MJ25S		
10×30	J30	1,200	0.059	0.15	1,450	ELXJ160E□□122MJ30S	820	0.059	0.15	1,450	ELXJ250E□□821MJ30S		
12.5×20	K20	1,200	0.059	0.15	1,360	ELXJ160E□□122MK20S	820	0.059	0.15	1,360	ELXJ250E□□821MK20S		
12.5×25	K25	1,500	0.045	0.11	1,700	ELXJ160E□□152MK25S	1,000	0.045	0.11	1,700	ELXJ250E□□102MK25S		
12.5×30	K30	2,200	0.039	0.098	1,980	ELXJ160E□□222MK30S	1,500	0.039	0.098	1,980	ELXJ250E□□152MK30S		
12.5×35	K35	2,700	0.033	0.083	2,230	ELXJ160E□□272MK35S	1,800	0.033	0.083	2,230	ELXJ250E□□182MK35S		
12.5×40	K40	3,300	0.029	0.073	2,460	ELXJ160E□□332MK40S	2,200	0.029	0.073	2,460	ELXJ250E□□222MK40S		
16×20	L20	2,200	0.043	0.11	1,770	ELXJ160E□□222ML20S	1,500	0.043	0.11	1,770	ELXJ250E□□152ML20S		
16×25	L25	2,700	0.033	0.083	2,190	ELXJ160E□□272ML25S	1,800	0.033	0.083	2,190	ELXJ250E□□182ML25S		
16×30	L30	3,900	0.029	0.073	2,510	ELXJ160E□□392ML30S	2,700	0.029	0.073	2,510	ELXJ250E□□272ML30S		
16×35	L35	4,700	0.025	0.063	2,770	ELXJ160E□□472ML35S	3,300	0.025	0.063	2,770	ELXJ250E□□332ML35S		
16×40	L40	5,600	0.021	0.053	3,110	ELXJ160E□□562ML40S	3,900	0.021	0.053	3,110	ELXJ250E□□392ML40S		
18×20	M20	3,300	0.039	0.098	1,940	ELXJ160E□□332MM20S	2,200	0.039	0.098	1,940	ELXJ250E□□222MM20S		
18×25	M25	3,900	0.030	0.075	2,350	ELXJ160E□□392MM25S	2,700	0.030	0.075	2,350	ELXJ250E□□272MM25S		
18×30	M30	4,700	0.026	0.065	2,720	ELXJ160E□□472MM30S	3,300	0.026	0.065	2,720	ELXJ250E□□332MM30S		
18×35	M35	6,800	0.023	0.058	3,050	ELXJ160E□□682MM35S	3,900	0.023	0.058	3,050	ELXJ250E□□392MM35S		
18×40	M40	8,200	0.020	0.050	3,300	ELXJ160E□□822MM40S	4,700	0.020	0.050	3,300	ELXJ250E□□472MM40S		

□ : Lead forming / Taping code

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◆STANDARD RATINGS

WV(Vdc) Items φD×L(mm) Case code		35					50				
		Cap (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mA rms/105°C, 100kHz)	Part No.	Cap (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mA rms/105°C, 100kHz)	Part No.
			20°C	-10°C				20°C	-10°C		
5×11.5	EB5	27	1.1	3.3	165	ELXJ350E□□270MEB5D	18	1.2	3.6	165	ELXJ500E□□180MEB5D
5×15	E15	39	1.0	3.0	180	ELXJ350E□□390ME15D	27	1.0	3.0	170	ELXJ500E□□270ME15D
6.3×11.5	FB5	56	0.55	1.6	255	ELXJ350E□□560MFB5D	39	0.57	1.7	255	ELXJ500E□□390MFB5D
6.3×15	F15	82	0.41	1.2	330	ELXJ350E□□820MF15D	56	0.46	1.4	310	ELXJ500E□□560MF15D
8×12	H12	120	0.29	0.84	415	ELXJ350E□□121MH12D	68	0.29	0.90	415	ELXJ500E□□680MH12D
8×15	H15	180	0.25	0.75	495	ELXJ350E□□181MH15D	82	0.24	0.72	505	ELXJ500E□□820MH15D
8×20	H20	220	0.18	0.52	640	ELXJ350E□□221MH20D	120	0.20	0.58	605	ELXJ500E□□121MH20D
10×12.5	JC5	120	0.16	0.40	635	ELXJ350E□□121MJC5S	82	0.23	0.58	530	ELXJ500E□□820MJC5S
10×16	J16	220	0.12	0.30	795	ELXJ350E□□221MJ16S	120	0.17	0.43	675	ELXJ500E□□121MJ16S
10×20	J20	330	0.088	0.22	1,060	ELXJ350E□□331MJ20S	180	0.13	0.33	860	ELXJ500E□□181MJ20S
10×25	J25	390	0.068	0.17	1,240	ELXJ350E□□391MJ25S	220	0.096	0.24	1,060	ELXJ500E□□221MJ25S
10×30	J30	560	0.059	0.15	1,450	ELXJ350E□□561MJ30S	330	0.083	0.21	1,230	ELXJ500E□□331MJ30S
12.5×20	K20	560	0.059	0.15	1,360	ELXJ350E□□561MK20S	330	0.083	0.21	1,170	ELXJ500E□□331MK20S
12.5×25	K25	680	0.045	0.11	1,700	ELXJ350E□□681MK25S	470	0.061	0.16	1,500	ELXJ500E□□471MK25S
12.5×30	K30	1,000	0.039	0.098	1,980	ELXJ350E□□102MK30S	560	0.056	0.14	1,680	ELXJ500E□□561MK30S
12.5×35	K35	1,200	0.033	0.083	2,230	ELXJ350E□□122MK35S	680	0.046	0.12	1,900	ELXJ500E□□681MK35S
12.5×40	K40	1,500	0.029	0.073	2,460	ELXJ350E□□152MK40S	820	0.041	0.10	2,120	ELXJ500E□□821MK40S
16×20	L20	1,000	0.043	0.11	1,770	ELXJ350E□□102ML20S	680	0.061	0.16	1,500	ELXJ500E□□681ML20S
16×25	L25	1,200	0.033	0.083	2,190	ELXJ350E□□122ML25S	820	0.046	0.12	1,880	ELXJ500E□□821ML25S
16×30	L30	1,800	0.029	0.073	2,510	ELXJ350E□□182ML30S	1,000	0.041	0.10	2,150	ELXJ500E□□102ML30S
16×35	L35	2,200	0.025	0.063	2,770	ELXJ350E□□222ML35S	1,200	0.037	0.093	2,320	ELXJ500E□□122ML35S
16×40	L40	2,700	0.021	0.053	3,110	ELXJ350E□□272ML40S	1,500	0.030	0.075	2,650	ELXJ500E□□152ML40S
18×20	M20	1,500	0.039	0.098	1,940	ELXJ350E□□152MM20S	820	0.056	0.14	1,660	ELXJ500E□□821MM20S
18×25	M25	1,800	0.030	0.075	2,350	ELXJ350E□□182MM25S	1,000	0.042	0.11	2,020	ELXJ500E□□102MM25S
18×30	M30	2,200	0.026	0.065	2,720	ELXJ350E□□222MM30S	1,500	0.037	0.093	2,340	ELXJ500E□□152MM30S
18×35	M35	2,700	0.023	0.058	3,050	ELXJ350E□□272MM35S	1,800	0.031	0.078	2,620	ELXJ500E□□182MM35S
18×40	M40	3,300	0.020	0.050	3,300	ELXJ350E□□332MM40S	2,200	0.029	0.073	2,790	ELXJ500E□□222MM40S

50Vdc φ5×11.5L(EB5)					
Cap (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mA rms/105°C, 100kHz)	Part No.	
	20°C	-10°C			
0.47	7.0	21	65	ELXJ500E□□R47MEB5D	
1	5.0	15	80	ELXJ500E□□1R0MEB5D	
2.2	4.0	12	90	ELXJ500E□□2R2MEB5D	
3.3	3.5	11	95	ELXJ500E□□3R3MEB5D	
4.7	3.0	9.0	100	ELXJ500E□□4R7MEB5D	
10	2.0	6.0	125	ELXJ500E□□100MEB5D	

The following case sizes are also available upon request : φ12.5×15mm, φ16×15mm, and φ18×15mm.

□□ : Lead forming / Taping code

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Rated Voltage (Vdc)	Case size φD (mm)	Frequency (Hz)			
		120	1k	10k	100k
6.3 to 10	5 to 8	0.65	0.83	0.95	1.00
	10 & 12.5	0.70	0.85	0.96	1.00
	16 & 18	0.85	0.92	0.97	1.00
16 to 25	5 to 8	0.55	0.76	0.91	1.00
	10 & 12.5	0.65	0.83	0.93	1.00
	16 & 18	0.70	0.87	0.96	1.00
35 to 50	5 to 8	0.40	0.66	0.85	1.00
	10 & 12.5	0.50	0.73	0.89	1.00
	16 & 18	0.60	0.81	0.94	1.00
50Vdc (0.47 to 3.3μF)		0.20	0.66	0.90	1.00
50Vdc (4.7 to 10μF)		0.40	0.76	0.93	1.00

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