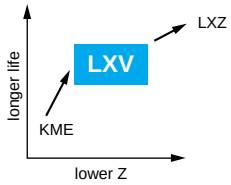
LXV Series

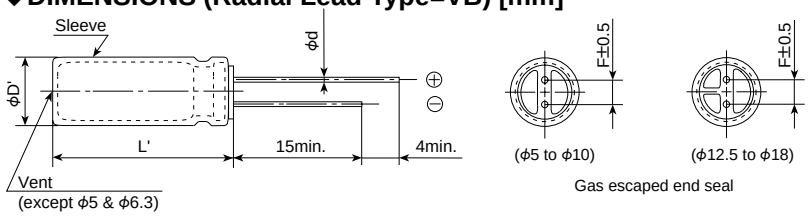
- Low impedance
- Endurance with ripple current: 105℃ 2000 to 5000 hours
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)



◆SPECIFICATIONS

Items	Characteristics									
Category Temperature Range	−55 to +105℃									
Rated Voltage Range	6.3 to 100Vdc									
Capacitance Tolerance	±20% (M) (at 20℃, 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℃ after 2 minutes)									
Dissipation Factor (tanδ)	Rated voltage (Vdc)	6.3V	10V	16V	25V	35V	50V	63V	80V	100V
	tanδ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.10	0.09	0.08
	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20℃, 120Hz)									
Low Temperature Characteristics	Capacitance change ΔC (−55℃ /+20℃)	0.7min.								
	Max. impedance ratio (−55℃ /+20℃)	3max.(6.3Vdc : 4max.)								(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for the specified period of time at 105℃.									
	Time	ϕ5 to 6.3 : 2000hours ϕ8 & 10 : 3000hours ϕ12.5 to ϕ18 : 5000hours								
	Capacitance change	≦±20% of the initial value								
	D.F. (tanδ)	≦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℃ after exposing them for 1000 hours at 105℃ 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 (Radial Lead Type=VB) [mm]



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

LXV 6.3 VB 1200 M J20

- J20 : Case code
- M : Cap tolerance (±20%)
- 1200 : Nominal cap code
- VB : Radial lead type
- 6.3 : Rated voltage in volts
- LXV : Series name

Capacitance	Code
4.7μF	4R7
10μF	10
100μF	100
2200μF	2200

LXV Series

◆STANDARD RATINGS

φD×L	Case code	Vdc	6.3				10				16			
		Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)
			20℃	−10℃			20℃	−10℃			20℃	−10℃	
5×11.5	E11	120	0.72	1.8	165	82	0.72	1.8	165	56	0.72	1.8	165
6.3×11.5	F11	220	0.38	0.95	255	180	0.38	0.95	255	120	0.38	0.95	255
6.3×15	F15	330	0.27	0.68	330	270	0.27	0.68	330	180	0.27	0.68	330
8×12	H12	390	0.20	0.50	415	330	0.20	0.50	415	270	0.20	0.50	415
8×15	H15	560	0.16	0.40	495	470	0.16	0.40	495	330	0.16	0.40	495
8×20	H20	820	0.11	0.28	640	680	0.11	0.28	640	470	0.11	0.28	640
10×12.5	J12	470	0.12	0.30	635	390	0.12	0.30	635	270	0.12	0.30	635
10×16	J16	680	0.084	0.21	825	680	0.084	0.21	825	470	0.084	0.21	825
10×20	J20	1,200	0.062	0.16	1,060	1,000	0.062	0.16	1,060	680	0.062	0.16	1,060
10×25	J25	1,500	0.052	0.13	1,260	1,200	0.052	0.13	1,260	820	0.052	0.13	1,260
10×30	J30	2,200	0.044	0.11	1,450	1,500	0.044	0.11	1,450	1,200	0.044	0.11	1,450
12.5×20	K20	2,200	0.046	0.12	1,360	1,800	0.046	0.12	1,360	1,200	0.046	0.12	1,360
12.5×25	K25	2,700	0.034	0.085	1,700	2,200	0.034	0.085	1,700	1,500	0.034	0.085	1,700
12.5×30	K30	3,900	0.030	0.075	1,980	2,700	0.030	0.075	1,980	2,200	0.030	0.075	1,980
12.5×35	K35	4,700	0.027	0.068	2,230	3,300	0.027	0.068	2,230	2,700	0.027	0.068	2,230
12.5×40	K40	5,600	0.024	0.060	2,460	3,900	0.024	0.060	2,460	3,300	0.024	0.060	2,460
16×20	L20	3,900	0.038	0.095	1,770	3,300	0.038	0.095	1,770	2,200	0.038	0.095	1,770
16×25	L25	5,600	0.028	0.070	2,190	3,900	0.028	0.070	2,190	2,700	0.028	0.070	2,190
16×30	L30	6,800	0.025	0.063	2,510	5,600	0.025	0.063	2,510	3,900	0.025	0.063	2,510
16×35	L35	8,200	0.022	0.055	2,770	6,800	0.022	0.055	2,770	4,700	0.022	0.055	2,770
16×40	L40	10,000	0.018	0.045	3,110	8,200	0.018	0.045	3,110	5,600	0.018	0.045	3,110
18×20	M20	5,600	0.036	0.090	1,940	3,900	0.036	0.090	1,940	3,300	0.036	0.090	1,940
18×25	M25	6,800	0.027	0.068	2,350	4,700	0.027	0.068	2,350	3,900	0.027	0.068	2,350
18×30	M30	10,000	0.024	0.060	2,720	6,800	0.024	0.060	2,720	4,700	0.024	0.060	2,720
18×35	M35	12,000	0.021	0.053	3,050	8,200	0.021	0.053	3,050	6,800	0.021	0.053	3,050
18×40	M40	15,000	0.017	0.043	3,300	10,000	0.017	0.043	3,300	8,200	0.017	0.043	3,300

φD×L	Case code	Vdc	25				35				50			
		Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)
			20℃	−10℃			20℃	−10℃			20℃	−10℃	
5×11.5	E11	39	0.72	1.8	165	27	0.72	1.8	165	18	1.1	3.3	165
6.3×11.5	F11	82	0.38	0.95	255	56	0.38	0.95	255	39	0.56	1.6	255
6.3×15	F15	120	0.27	0.68	330	82	0.27	0.68	330	56	0.41	1.2	310
8×12	H12	150	0.20	0.50	415	120	0.20	0.50	415	68	0.29	0.84	415
8×15	H15	220	0.16	0.40	495	180	0.16	0.40	495	82	0.24	0.72	505
8×20	H20	330	0.11	0.28	640	220	0.11	0.28	640	120	0.18	0.52	610
10×12.5	J12	180	0.12	0.30	635	120	0.12	0.30	635	82	0.16	0.40	530
10×16	J16	330	0.084	0.21	825	220	0.084	0.21	825	120	0.12	0.30	755
10×20	J20	470	0.062	0.16	1,060	330	0.062	0.16	1,060	180	0.088	0.22	945
10×25	J25	560	0.052	0.13	1,260	390	0.052	0.13	1,260	220	0.068	0.17	1,150
10×30	J30	820	0.044	0.11	1,450	560	0.044	0.11	1,450	330	0.059	0.15	1,260
12.5×20	K20	820	0.046	0.12	1,360	560	0.046	0.12	1,360	330	0.059	0.15	1,190
12.5×25	K25	1,000	0.034	0.085	1,700	680	0.034	0.085	1,700	470	0.045	0.11	1,500
12.5×30	K30	1,500	0.030	0.075	1,980	1,000	0.030	0.075	1,980	560	0.039	0.098	1,720
12.5×35	K35	1,800	0.027	0.068	2,230	1,200	0.027	0.068	2,230	680	0.033	0.083	1,900
12.5×40	K40	2,200	0.024	0.060	2,460	1,500	0.024	0.060	2,460	820	0.029	0.073	2,120
16×20	L20	1,500	0.038	0.095	1,770	1,000	0.038	0.095	1,770	680	0.043	0.11	1,500
16×25	L25	1,800	0.028	0.070	2,190	1,200	0.028	0.070	2,190	820	0.033	0.083	1,880
16×30	L30	2,700	0.025	0.063	2,510	1,800	0.025	0.063	2,510	1,000	0.029	0.073	2,150
16×35	L35	3,300	0.022	0.055	2,770	2,200	0.022	0.055	2,770	1,200	0.025	0.063	2,320
16×40	L40	3,900	0.018	0.045	3,110	2,700	0.018	0.045	3,110	1,500	0.021	0.053	2,650
18×20	M20	2,200	0.036	0.090	1,940	1,500	0.036	0.090	1,940	820	0.039	0.098	1,660
18×25	M25	2,700	0.027	0.068	2,350	1,800	0.027	0.068	2,350	1,000	0.030	0.075	2,020
18×30	M30	3,300	0.024	0.060	2,720	2,200	0.024	0.060	2,720	1,500	0.026	0.065	2,340
18×35	M35	3,900	0.021	0.053	3,050	2,700	0.021	0.053	3,050	1,800	0.023	0.058	2,620
18×40	M40	4,700	0.017	0.043	3,300	3,300	0.017	0.043	3,300	2,200	0.020	0.050	2,790

LXV Series

◆STANDARD RATINGS

ϕD×L	Case code	Vdc	63				80				100			
		Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms / 105℃ 100kHz)
			20℃	−10℃			20℃	−10℃			20℃	−10℃	
5×11.5	E11	12	1.9	4.8	100	8.2	1.9	5.1	100	5.6	1.9	5.1	100
6.3×11.5	F11	27	1.1	2.8	160	18	1.1	3.0	150	12	1.1	3.0	150
6.3×15	F15	39	0.62	1.6	230	27	0.62	1.7	220	18	0.62	1.7	220
8×12	H12	47	0.49	1.3	275	33	0.53	1.5	275	22	0.53	1.5	275
8×15	H15	68	0.34	0.85	360	47	0.35	0.97	360	33	0.35	0.97	360
8×20	H20	82	0.21	0.53	500	56	0.27	0.74	490	39	0.27	0.74	490
10×12.5	J12	56	0.27	0.68	420	39	0.47	1.3	380	27	0.47	1.3	380
10×16	J16	68	0.21	0.53	523	56	0.33	0.90	500	33	0.33	0.90	500
10×20	J20	120	0.16	0.40	650	82	0.26	0.70	620	56	0.26	0.70	620
10×25	J25	150	0.13	0.33	780	100	0.19	0.52	795	68	0.19	0.52	795
10×30	J30	180	0.10	0.25	960	150	0.15	0.41	955	100	0.15	0.41	955
12.5×20	K20	220	0.11	0.28	870	150	0.15	0.41	890	100	0.15	0.41	890
12.5×25	K25	270	0.074	0.19	1,150	180	0.11	0.30	1,040	120	0.11	0.30	1,040
12.5×30	K30	390	0.068	0.17	1,280	270	0.094	0.26	1,270	180	0.094	0.26	1,270
12.5×35	K35	470	0.063	0.16	1,390	330	0.087	0.24	1,450	220	0.087	0.24	1,450
12.5×40	K40	560	0.051	0.13	1,530	390	0.060	0.17	1,610	270	0.060	0.17	1,610
16×20	L20	390	0.085	0.22	1,100	270	0.11	0.30	1,240	180	0.11	0.30	1,240
16×25	L25	470	0.055	0.14	1,480	330	0.081	0.22	1,440	220	0.081	0.22	1,440
16×30	L30	680	0.046	0.12	1,720	470	0.058	0.16	1,790	330	0.058	0.16	1,790
16×35	L35	820	0.040	0.10	1,910	560	0.052	0.14	2,000	390	0.052	0.14	2,000
16×40	L40	1,000	0.036	0.090	2,070	680	0.041	0.11	2,200	470	0.041	0.11	2,200
18×20	M20	560	0.085	0.22	1,170	390	0.085	0.23	1,450	270	0.085	0.23	1,450
18×25	M25	680	0.055	0.14	1,520	470	0.070	0.19	1,650	330	0.070	0.19	1,650
18×30	M30	820	0.046	0.12	1,770	680	0.058	0.16	1,850	390	0.058	0.16	1,850
18×35	M35	1,000	0.040	0.10	1,970	820	0.052	0.14	1,990	560	0.052	0.14	1,990
18×40	M40	1,200	0.036	0.090	2,130	1,000	0.041	0.11	2,370	680	0.041	0.11	2,370

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Rated voltage (Vdc)	Case size ϕD (mm)	Frequency (Hz)			
		120	1k	10k	100k
6.3 & 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 & 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 & 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
63 to 100	5 to 8	0.20	0.55	0.80	1.00
	10 & 12.5	0.35	0.65	0.85	1.00
	16 & 18	0.50	0.75	0.90	1.00