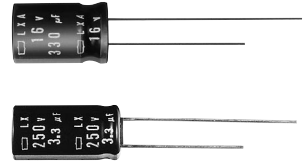


LXA/LX Series

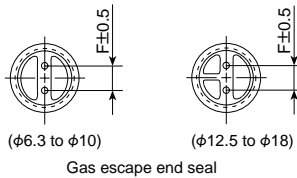
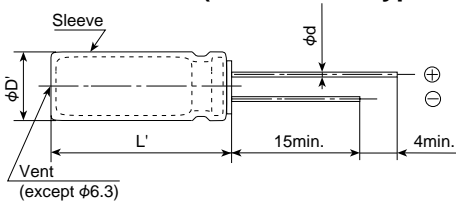
- Endurance : 105°C 5000 to 7000 hours
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)



◆ SPECIFICATIONS

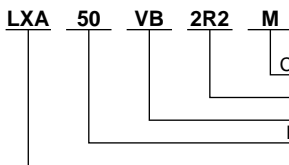
Items	Characteristics	
Series	LXA	LX
Category		
Temperature Range	-55 to +105°C	-40 to +105°C
Rated Voltage Range	10 to 63V _{dc}	100 to 250V _{dc}
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	±20% (M) (at 20°C, 120Hz)
Leakage Current	I=0.01CV or 3µA, whichever is greater. (at 20°C after 2 minutes)	I=0.01CV+2µA (100V _{dc}) I=0.04CV+100µA (160 to 250V _{dc}) (at 20°C after 2 minutes)
	Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V)	
Dissipation Factor (tanδ)	Rated Voltage (V _{dc})	10V 16V 25V 35V 50V 63V 100V 160V 200V 250V
	tanδ (Max.)	0.30 0.25 0.22 0.18 0.15 0.12 0.12 0.15 0.15 0.15
	When nominal capacitance exceeds 1000µF, add 0.02 to the value above for each 1000µF increase. (at 20°C, 120Hz)	
Low Temperature Characteristics		Capacitance change ΔC (-10°C/+20°C) ≥ 0.8 (at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for the specified period of time at 105°C.	
	Series	LXA LX
	Time	7000 hours (φ12.5 and larger) 5000hours 5000 hours
	Capacitance change	≤±30% of the initial value ≤±30% of the initial value
	D.F. (tanδ)	≤300% of the initial specified value ≤250% of the initial specified value
	Leakage current	≤The initial specified value ≤The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 105°C without voltage applied.	
	Series	LXA LX
	Capacitance change	≤±15% of the initial value ≤±20% of the initial value
	D.F. (tanδ)	≤150% of the initial specified value ≤150% of the initial specified value
	Leakage current	≤The initial specified value ≤The initial specified value

◆ DIMENSIONS (Radial Lead Type=VB) [mm]



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

◆ PART NUMBERING SYSTEM



Capacitance	Code
0.47µF	R47
1.0µF	1
4.7µF	4R7
10µF	10
100µF	100

◆STANDARD RATINGS 10 to 63V_{dc}

Items μF	10			16			25			35		
	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)
4.7										6.3X15	1.65	0.14
10							6.3X15	1.65	0.14	6.3X15	1.65	0.14
22							6.3X15	1.65	0.14	6.3X15	1.65	0.14
33				6.3X15	1.65	0.14	6.3X15	1.65	0.14	6.3X15	1.65	0.14
47	6.3X15	1.65	0.14	6.3X15	1.65	0.14	6.3X15	1.65	0.14	6.3X15	1.65	0.14
100	6.3X15	1.65	0.14	6.3X15	1.65	0.14	8X15	0.90	0.21	8X15	0.90	0.21
220	8X15	0.90	0.21	8X15	0.90	0.21	10X16	0.42	0.37	10X20	0.28	0.49
330	10X16	0.42	0.37	10X16	0.42	0.37	10X20	0.28	0.49	12.5X20	0.16	0.72
470	10X16	0.42	0.37	10X20	0.28	0.49	12.5X20	0.16	0.72	12.5X20	0.16	0.72
1,000	12.5X20	0.16	0.72	12.5X25	0.13	0.78	16X25	0.08	1.22	16X25	0.08	1.22
2,200	16X25	0.08	1.22	16X25	0.08	1.22	16X35.5	0.06	1.55	18X35.5	0.055	1.69
3,300	16X31.5	0.07	1.40	16X35.5	0.06	1.55	18X40	0.05	1.80			
4,700	16X35.5	0.06	1.55	18X35.5	0.055	1.69						

► LXA-series

Items μF	50			63		
	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)
0.47	6.3X15	4.5	0.14			
1.0	6.3X15	2.6	0.14			
2.2	6.3X15	1.8	0.14			
3.3	6.3X15	1.8	0.14			
4.7	6.3X15	1.65	0.14	6.3X15	1.65	0.14
10	6.3X15	1.65	0.14	6.3X15	1.65	0.14
22	6.3X15	1.65	0.14	6.3X15	1.65	0.14
33	8X15	0.90	0.21	8X15	0.90	0.21
47	8X15	0.90	0.21	8X15	0.90	0.21
100	10X16	0.55	0.32	10X20	0.37	0.42
220	12.5X20	0.20	0.64	12.5X20	0.20	0.64
330	12.5X20	0.20	0.64	12.5X25	0.16	0.72
470	16X25	0.09	1.15	16X25	0.09	1.15
1,000	16X31.5	0.07	1.40	18X35.5	0.055	1.69

◆STANDARD RATINGS 100 to 250V_{dc}

Items μF	100			
	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Impedance (Q _{max.} / 100kHz -10°C)	Rated ripple (Arms/ 105°C 100kHz)
0.47	8X15	35.0	105.0	0.03
1.0	8X15	18.0	54.0	0.05
2.2	8X15	9.62	28.8	0.06
3.3	8X15	8.57	25.7	0.07
4.7	8X15	6.43	19.3	0.08
10	10X20	2.99	8.97	0.23
22	12.5X20	1.47	4.41	0.25
33	12.5X25	1.00	3.00	0.33
47	16X25	0.69	2.07	0.44

◁ LX-series

Items μF	160			200			250					
	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz 20°C)	Rated ripple (Arms/ 105°C 100kHz)	Case size φDXL (mm)	Impedance (Q _{max.} / 100kHz -10°C)	Rated ripple (Arms/ 105°C 100kHz)			
1.0				10X16	18.0	70.0	0.03	10X16	20.0	80.0	0.03	
2.2				10X16	16.0	65.0	0.04	10X16	18.0	70.0	0.04	
3.3				10X16	9.2	32.0	0.05	10X20	9.0	27.0	0.06	
4.7				10X20	4.7	14.0	0.08	12.5X20	5.0	15.0	0.09	
10	12.5X20	3.5	10.0	0.13	12.5X20	2.6	7.6	0.14	12.5X25	2.5	7.0	0.15
22	16X25	1.8	4.8	0.25	16X25	1.9	5.0	0.25	16X31.5	1.8	4.8	0.26
33	16X25	1.7	4.5	0.32	16X31.5	1.2	3.0	0.33	16X35.5	1.0	2.8	0.34
47	16X31.5	1.1	2.9	0.40	18X35.5	1.0	2.5	0.43	18X40	0.8	2.0	0.44
68	18X35.5	0.9	1.9	0.51	18X40	0.7	1.8	0.52				

◆RATED RIPPLE CURRENT MULTIPLIERS

●LXA-series : Frequency Multipliers

Capacitance (μF)	Frequency (Hz)				
	50	120	300	1k	10k
0.47 to 4.7	0.1	0.2	0.3	0.5	1.0
10 to 22	0.2	0.3	0.4	0.6	1.0
33 to 47	0.3	0.4	0.5	0.7	1.0
100 to 330	0.4	0.5	0.6	0.8	1.0
470 to	0.6	0.7	0.8	0.9	1.0

●LX-series : Frequency Multipliers

Capacitance (μF)	Frequency (Hz)				
	50	120	300	1k	10k
0.47 to 3.3	0.3	0.4	0.5	0.7	1.0
4.7 to 33	0.4	0.5	0.6	0.8	1.0
47 to	0.6	0.7	0.8	0.9	1.0