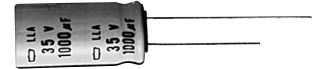


LLA Series

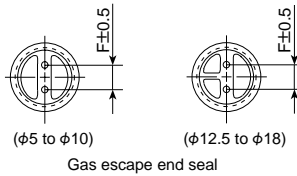
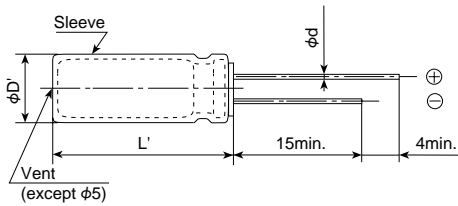
- Endurance : 85°C 1000 hours
- Solvent-proof (see PRECAUTIONS AND GUIDELINES)



◆SPECIFICATIONS

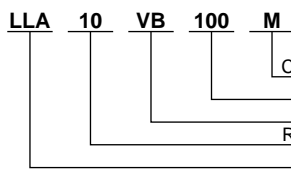
Items	Characteristics
Category	
Temperature Range	-40 to +85°C
Rated Voltage Range	6.3 to 50V _{dc}
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)
Leakage Current	I=0.002CV or 0.2μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 1 minute)
Dissipation Factor (tanδ)	Rated voltage (V _{dc})
	tanδ (Max.)
Low Temperature Characteristics	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20°C, 120Hz)
	○ Leakage current Leakage current at 85°C : ≤10 times of the 20°C specified value ○ Max. Impedance Ratio (at 120Hz) Z(-25°C)/Z(+20°C)≤4, Z(-40°C)/Z(+20°C)≤8
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C.
	Capacitance change
	D.F. (tanδ)
	Leakage current
Shelf Life	The same specifications as "Endurance" shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 hours at 85°C without voltage applied.
Shelf Test	The following specifications shall be satisfied when the capacitors are restored to 20°C after leaving them for 6 months at a nominal temperature (-10 to +40°C) without voltage applied.
	Capacitance change
	D.F. (tanδ)
	Leakage current

◆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



Capacitance	Code
0.1μF	R1
0.47μF	R47
1.0μF	1
4.7μF	4R7
10μF	10
100μF	100

◆STANDARD RATINGS

V _{dc}	6.3		10		16		25		35		50	
	Case size	Rated ripple	Case size	Rated ripple	Case size	Rated ripple	Case size	Rated ripple	Case size	Rated ripple	Case size	Rated ripple
μF	φDXL (mm)	(mArms/85°C 120Hz)	φDXL (mm)	(mArms/85°C 120Hz)	φDXL (mm)	(mArms/85°C 120Hz)	φDXL (mm)	(mArms/85°C 120Hz)	φDXL (mm)	(mArms/85°C 120Hz)	φDXL (mm)	(mArms/85°C 120Hz)
1.0												
2.2												
3.3												
4.7												
10					5×11	44	5×11	54	5×11	58	5×11	65
22			5×11	59	5×11	75	5×11	80	5×11	87	5×11	95
33	5×11	55	5×11	84	5×11	90	5×11	97	5×11	105	6.3×11	125
47	5×11	79	5×11	100	5×11	110	5×11	115	6.3×11	145	6.3×11	150
100	5×11	130	5×11	145	6.3×11	180	6.3×11	190	8×11.5	240	8×11.5	255
220	6.3×11	230	6.3×11	250	8×11.5	300	8×11.5	320	10×12.5	420	10×16	490
330	6.3×11	280	8×11.5	350	8×11.5	370	10×12.5	470	10×16	570	10×20	650
470	8×11.5	380	8×11.5	415	10×12.5	520	10×16	620	10×20	740	12.5×20	860
1,000	10×12.5	650	10×16	790	10×20	910	12.5×20	1,090	12.5×25	1,300	16×25	1,530
2,200	12.5×20	1,150	12.5×20	1,240	12.5×25	1,420	16×25	1,660	16×31.5	1,890	18×35.5	2,160
3,300	12.5×20	1,380	12.5×25	1,590	16×25	1,840	16×31.5	2,070	18×35.5	2,340		
4,700	16×25	1,880	16×25	1,980	16×31.5	2,260	18×35.5	2,520	18×40	2,690		
6,800	16×25	2,120	16×31.5	2,390	18×35.5	2,690	18×40	2,830				
10,000	16×31.5	2,500	18×35.5	2,840	18×40	2,920						
15,000	18×35.5	2,990										

V _{dc}	50	
Items	Case size	Rated ripple
μF	φDXL (mm)	(mArms/85°C 120Hz)
0.1	5×11	1.3
0.22	5×11	2.9
0.33	5×11	4.4
0.47	5×11	11