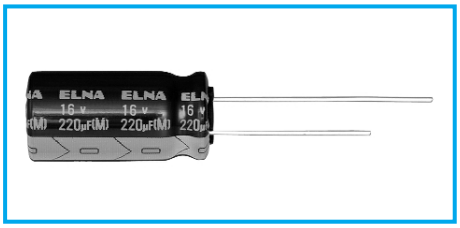
Low Leakage Current Capacitors Series RLB [RB (LL)]

• **Low leakage current (after 1 minute) : 0.006CV or 0.5(μA).**



Marking color : White print on a blue sleeve or
Blue print on an orange sleeve

Specifications

Item	Performance
Category temperature range (˚C)	−40 to +85
Tolerance at rated capacitance (%)	±20 (20˚C,120Hz)
Leakage current (μA)	Less than 0.006CV or 0.5 whichever is larger (after 1 minute) Less than 0.002CV or 0.3 whichever is larger (after 2 minutes), C: Rated capacitance(μF); V: Rated voltage(V) (20˚C)
Tangent of loss angle (tanδ)	See table below (20˚C,120Hz)
Characteristics at high and low temperature	See table below (120Hz)
Endurance (105˚C) (Applied ripple current)	See table below
Shelf life (105˚C)	Test time : 1000 hours; other items are the same as those for the endurance. Voltage application treatment
Applicable standards	JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)

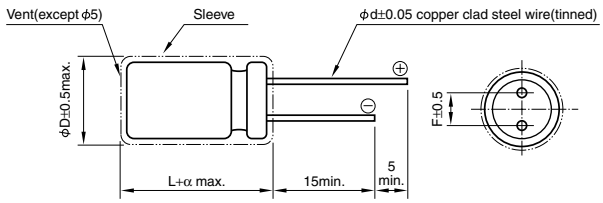
Rated voltage (V)		6.3	10	16	25	35	50
tanδ (max.)	More than 1μF	0.20	0.17	0.13	0.10	0.10	0.08
	1μF or less	0.06	0.06	0.06	0.06	0.06	0.06

Rated voltage (V)		6.3	10	16	25	35	50
Impedance ratio (max.)	Z–25˚C / Z+20˚C	4	3	2	2	2	2
	Z–40˚C / Z+20˚C	8	6	4	4	3	3

Test time	1000 hours
Leakage current	The initial specified value or less
Percentage of capacitance change	Within ±20% of initial value
Tangent of the loss angle	150% or less of the initial specified value

Outline Drawing

Unit: mm



ø D	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ø d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
α	1.5			1.5 for L16 max. 2.0 for L20 min.			

Coefficient of Frequency for Rated Ripple Current

Rated voltage(V)	Frequency(Hz) / CV(μFxV)	50 · 60	120	1k	10k · 100k
6.3 to 10	All CV value	0.8	1	1.1	1.2
16 to 25	≤ 1000	0.8	1	1.5	1.7
	1000 <	0.8	1	1.2	1.3
35 to 50	All CV value	0.8	1	1.6	1.9

Part numbering system (example: 10V1000μF)

Environmental item	RLB	—	10	V	102		M	I6	#
	Series code		Rated voltage symbol		Rated capacitance symbol		Capacitance tolerance symbol	Casing symbol	
Former item	RLB	—	10	V	102		M	V2Z	
	Series code		Rated voltage symbol		Rated capacitance symbol		Capacitance tolerance symbol	Additional symbol	

(Note) "MV2" is not added for ø 5 unit.

Casing symbol

Case ø DxL(mm)	Casing Symbol	Case ø DxL(mm)	Casing Symbol	Case ø DxL(mm)	Casing Symbol	Case ø DxL(mm)	Casing Symbol
5x11	E3	10x12.5	H3	12.5x20	I 5	16x31.5	J 7
6.3x11	F3	10x16	H4	12.5x25	I 6	16x35.5	J 8
8x11.5	G3	10x20	H5	16x25	J 6	18x35.5	K8
						18x40	K9

Standard Ratings

Rated voltage(V) / Item / Rated capacitance(μF)	6.3		10		16		25		35		50	
	Case ø DxL(mm)	Rated ripple current mArms	Case ø DxL(mm)	Rated ripple current mArms	Case ø DxL(mm)	Rated ripple current mArms	Case ø DxL(mm)	Rated ripple current mArms	Case ø DxL(mm)	Rated ripple current mArms	Case ø DxL(mm)	Rated ripple current mArms
0.47	—	—	—	—	—	—	—	—	—	—	5x11	14
1	—	—	—	—	—	—	—	—	—	—	5x11	20
2.2	—	—	—	—	—	—	—	—	—	—	5x11	26
3.3	—	—	—	—	—	—	—	—	—	—	5x11	32
4.7	—	—	—	—	—	—	5x11	34	5x11	34	6.3x11	43
10	—	—	—	—	5x11	543	6.3x11	57	6.3x11	57	8x11.5	75
22	—	—	5x11	56	6.3x11	74	8x11.5	99	8x11.5	99	10x12.5	131
33	—	—	6.3x11	79	6.3x11	90	8x11.5	121	10x12.5	144	10x16	176
47	—	—	6.3x11	94	8x11.5	127	10x12.5	172	10x12.5	172	10x16	210
100	—	—	10x12.5	260	10x12.5	220	10x16	270	10x20	300	12.5x20	380
220	10x12.5	260	10x16	350	10x20	390	12.5x20	510	12.5x25	550	16x25	720
330	10x16	350	10x20	460	12.5x20	550	12.5x25	680	16x25	790	16x31.5	970
470	10x20	460	12.5x20	570	12.5x25	650	16x25	940	16x25	940	16x35.5	1210
1000	12.5x25	840	12.5x25	910	16x25	1210	16x35.5	1580	18x35.5	1690	—	—
2200	16x25	1440	16x31.5	1710	18x35.5	2200	—	—	—	—	—	—

(Note) Rated ripple current : 85˚C, 120Hz

NOTE
Design, Specifications are subject to change without notice.
Ask factory for technical specifications before purchase and/or use.