Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

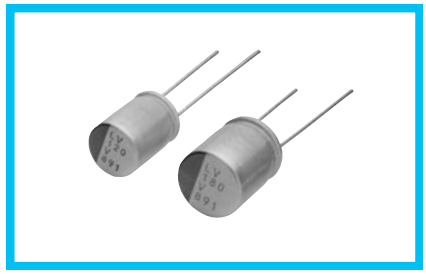
LV Radial Lead Type, High Voltage / Long Life series

HR High Ripple Current | F For High Frequency | L Long Life | Anti-Solvent Feature

NEW

- Low ESR, High ripple current.
- Long life of 3000 hours at 105°C.
- Radial lead type:
  Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2002/95/EC).

LV — High voltage, Long life — LF

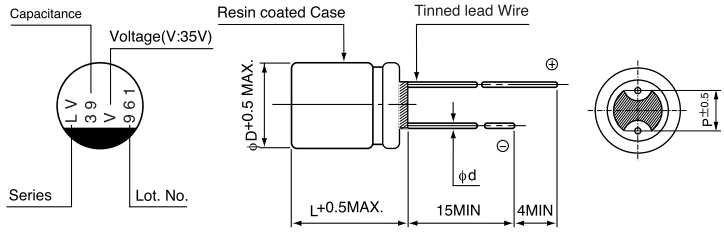


■ Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Rated Voltage Range	16 to 50V
Rated Capacitance Range	18 to 220μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C
ESR (※1)	Less than or equal to the specified value at 100kHz, 20°C
Leakage Current (※2)	Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C
Temperature Characteristics (Max. Impedance Ratio)	Z+105°C / Z+20°C ≦ 1.25 (100kHz) Z-55°C / Z+20°C ≦ 1.25
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 3000 hours at 105°C. Capacitance Change: Within ± 20% of the initial capacitance value (※3) tan δ: 150% or less than the initial specified value ESR (※1): 150% or less than the initial specified value Leakage current (※2): Less than or equal to the initial specified value
Damp Heat (Steady State)	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1500 hours at 60°C, 90% RH. Capacitance Change: Within ± 20% of the initial capacitance value (※3) tan δ: 150% or less than the initial specified value ESR (※1): 150% or less than the initial specified value Leakage current (※2): Less than or equal to the initial specified value
Resistance to Soldering Heat	After soldering the capacitor under the soldering conditions prescribed here as preheat at 150 to 200°C for 60 to 180 seconds and peak temperature at 265°C for 10 seconds or less, the capacitor shall meet the specifications listed at right, provided that its temperature profile is measured at both of terminal ends facing the soldering side. Capacitance Change: Within ± 10% of the initial capacitance value (※3) tan δ: 130% or less than the initial specified value ESR (※1): 130% or less than the initial specified value Leakage current (※2): Less than or equal to the initial specified value
Marking	Navy blue print on the case top

(※1) ESR should be measured at both of the terminal ends closest to the capacitor body.
(※2) Conditioning: If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.
(※3) Initial value: The value before test of examination of resistance to soldering.

■ Dimensions



(mm)

Size	φ8 × 9L	φ8 × 12L	φ10 × 13L
φD	8.0	8.0	10.0
L	8.5	11.5	12.5
P	3.5	3.5	5.0
φd	0.6	0.6	0.6

Voltage

V	16	20	25	35	50
Code	C	D	E	V	H

Type numbering system (Example : 35V 39μF)

1	2	3	4	5	6	7	8	9	10	11	12
P	L	V	1	V	3	9	0	M	D	L	1

12: Size code
11–10: Configuration※
9: Capacitance tolerance (±20%)
8–6: Rated capacitance (39μF)
5–4: Rated voltage (35V)
3–2: Series name
1: Type

※Configuration

φ D × L	Code
8 × 9	CL
8 × 12	DL
10 × 13	DL

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

LV series

■ Standard ratings

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φ D × L (mm)	tan δ	Leakage Current (μA)	ESR (mΩ) (at 100kHz 20°C)	Rated Ripple (mArms)	Part Number
16 (1C)	18.4	82	8 × 9	0.12	262	35	1800	PLV1C820MCL1
		120	8 × 12	0.12	384	26	2400	PLV1C121MDL1
		220	10 × 13	0.12	704	23	2900	PLV1C221MDL1
20 (1D)	23.0	68	8 × 9	0.12	272	37	1700	PLV1D680MCL1
		100	8 × 12	0.12	400	28	2300	PLV1D101MDL1
		180	10 × 13	0.12	720	25	2800	PLV1D181MDL1
25 (1E)	28.7	56	8 × 9	0.12	280	38	1700	PLV1E560MCL1
		82	8 × 12	0.12	410	28	2300	PLV1E820MDL1
		120	10 × 13	0.12	600	25	2800	PLV1E121MDL1
35 (1V)	40.2	27	8 × 9	0.12	189	42	1600	PLV1V270MCL1
		39	8 × 12	0.12	273	31	2100	PLV1V390MDL1
		68	10 × 13	0.12	476	28	2700	PLV1V680MDL1
50 (1H)	57.5	18	8 × 9	0.12	180	48	1500	PLV1H180MCL1
		27	8 × 12	0.12	270	36	2000	PLV1H270MDL1
		47	10 × 13	0.12	470	31	2500	PLV1H470MDL1

Rated ripple current (mArms) at 105°C 100kHz

Design, Specifications are subject to change without notice.

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