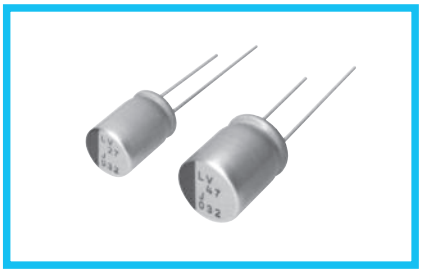
nichicon

PLV

Radial Lead Type,
Long Life Assurance

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



- High voltage (to 100V), 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 (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

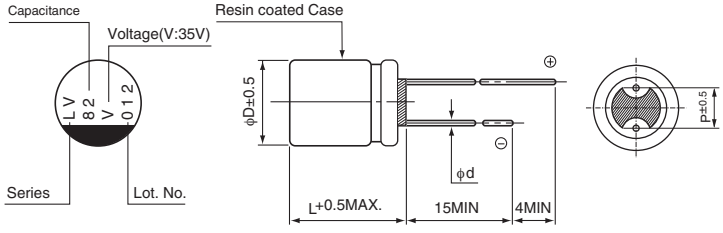
PLX ← High Temperature — PLV

■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Rated Voltage Range	16 to 100V
Rated Capacitance Range	6.8 to 470μF
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 1000 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



Type numbering system (Example : 35V 82μF)

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

12: Size code
11: Configuration
9: Capacitance tolerance (±20%)
6–8: Rated capacitance (82μF)
4–5: Rated voltage (35V)
3: Series name
1–2: Type

(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	63	80	100
Code	C	D	E	V	H	J	K	2A

●Frequency coefficient of rated ripple current

Frequency	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.05	0.30	0.70	1.00

Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

●Dimension table in next page.

PLV

■Dimensions

Rated Voltage (V) code	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD × L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) (20°C/100kHz)	Rated Ripple (mArms) (105°C/100kHz)	Part Number
16 (1C)	18.4	220	8 × 9	0.12	704	26	2100	PLV1C221MCL1
		270	8 × 12	0.12	864	24	2500	PLV1C271MDL1
		470	10 × 13	0.12	1504	23	2900	PLV1C471MDL1
20 (1D)	23.0	150	8 × 9	0.12	600	27	2000	PLV1D151MCL1
		220	8 × 12	0.12	880	25	2400	PLV1D221MDL1
		330	10 × 13	0.12	1320	24	2800	PLV1D331MDL1
25 (1E)	28.7	120	8 × 9	0.12	600	28	2000	PLV1E121MCL1
		150	8 × 12	0.12	750	26	2400	PLV1E151MDL1
		270	10 × 13	0.12	1350	25	2800	PLV1E271MDL1
35 (1V)	40.2	56	8 × 9	0.12	392	29	1900	PLV1V560MCL1
		82	8 × 12	0.12	574	27	2300	PLV1V820MDL1
		150	10 × 13	0.12	1050	26	2700	PLV1V151MDL1
50 (1H)	57.5	33	8 × 9	0.12	330	32	1900	PLV1H330MCL1
		39	8 × 12	0.12	390	29	2200	PLV1H390MDL1
		68	10 × 13	0.12	680	28	2600	PLV1H680MDL1
63 (1J)	72.4	22	8 × 9	0.12	277	35	1800	PLV1J220MCL1
		27	8 × 12	0.12	340	33	2100	PLV1J270MDL1
		47	10 × 13	0.12	592	29	2600	PLV1J470MDL1
80 (1K)	92	10	8 × 9	0.12	160	40	1700	PLV1K100MCL1
		12	8 × 12	0.12	192	38	1900	PLV1K120MDL1
		22	10 × 13	0.12	352	35	2300	PLV1K220MDL1
100 (2A)	115	6.8	8 × 9	0.12	136	45	1600	PLV2A6R8MCL1
		10	8 × 12	0.12	200	42	1800	PLV2A100MDL1
		18	10 × 13	0.12	360	38	2200	PLV2A180MDL1

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.