



Conductive Polymer Aluminum Solid Electrolytic Capacitors

LF Series 高分子固態電解電容器

- 超低ESR，高容許紋波電流。
 - 105°C 2000小時保證品。
 - 引線型，對應無鉛流动焊接條件。
 - RoHS指令 (2002/EC) 已對應完畢。
 - Low ESR,allow high ripple current
 - 105°C,2000Hrs to ensure that good
 - CP.wire,corresponding flow of lead-free welding conditions
 - RoHS (2002/EC) directive has been corresponding

HOW TO ORDER

The diagram illustrates the pin assignment for a 15-pin DIP package. The pins are numbered 1 through 15 along the top edge. Below the pins, the following components are labeled:

- P**: Pin 1
- L**: Pin 2
- F**: Pin 3
- 5**: Pin 4
- 6**: Pin 5
- 1**: Pin 6
- M**: Pin 7
- 0**: Pin 8
- G**: Pin 9
- 0**: Pin 10
- 8**: Pin 11
- 0**: Pin 12
- 9**: Pin 13
- B**: Pin 14
- 5**: Pin 15

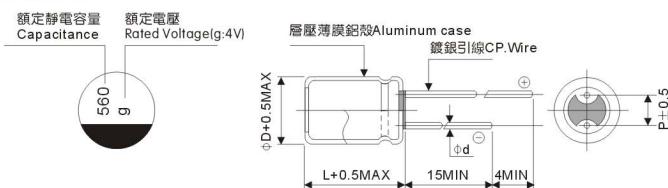
Annotations with leader lines provide the following information:

- Pitch間距 (3.5mm)**: Refers to the distance between Pin 1 and Pin 2.
- Packing(Bulk)包裝(散裝)**: Refers to the packaging method.
- Code尺寸編碼**: Refers to the code dimensioning.
- Rated Voltage額定電壓 (4V)**: Refers to the rated voltage.
- Tolerance容量容許差 $\pm 20\%$** : Refers to the tolerance.
- Capacitance額定靜電容量 (560 μ F)**: Refers to the rated static capacitance.
- Series系列品名**: Refers to the series name.
- Fix Code品名**: Refers to the fix code name.

SPECIFICATION

項目 Item	性能 Performance	Characteristics
分類溫度範圍 Operating Temp. Range	-55 ~ +105°C	
額定電壓範圍 Rated voltage Range	2.5 ~ 16V	
額定靜電容量範圍 Capacitance Range	270~1000 μF	
額定靜電容量容許差 Capacitance Tolerance	± 20%120Hz,20°C	
損失角正切值 Dissipation Factor	標準品一覽表的值以下120Hz,20°C Standard list of what the value of 120Hz,20°C	
等效串聯阻抗 (ESR) (*1)	標準品一覽表的值以下100kHz,20°C Standard list of what the value of 100kHz,20°C	
漏損電流 (*2)Leakage Current	標準品一覽表的值以下, 施加額定電壓2分鐘後為 20°C It's 20°C after imposed 2mins under rated voltage	
電阻溫度特性 Temp. Characteristics of Resistor	Z+105°C/Z+20°C ≤1.25 (100kHz) Z- 55°C/Z+20°C ≤1.25	
耐久性 Durability	在105°C下連續施加額定電壓2000小時 rated voltage imposed for 2000hrs under 105°C	
	靜電容量變化率Capacitance varierity ratio	初始值（基板組裝焊接前）的 ± 20% 以內between the 20% of initial value(before PCB assy)
	tan δ	初始標準值的160%以下 <160% below the initial standard value of 160%
	等效串聯阻抗(ESR)(*1)	初始標準值的150%以下 <150% below the initial standard value of 150%
	漏損電流 (*2) Leakage current	初始標準值以下 below the initial standard value
	在60°C、90%R.H.下連續施加額定電壓1000小時 rated voltage imposed for 1000hrs under 60°C、90%R.H.	
高溫高濕 High temp. High Humidity (恒定) (Constant)	靜電容量變化率Capacitance varierity ratio	初始值（基板組裝焊接前）的 ± 20% 以內between the 20% of initial value(before PCB assy)
	tan δ	初始標準值的160%以下 <160% below the initial standard value of 160%
	等效串聯阻抗(ESR)(*1)	初始標準值的150%以下 <150% below the initial standard value of 150%
	漏損電流 (*2) Leakage current	初始標準值以下 below the initial standard value
焊接耐熱性 Welding Heat Resistance	按以下流動焊接條件進行By the following flow welding conditions 預熱150 ~ 200°C：60~180秒，峰值溫度265°C：10秒以內pre-heat 150 ~ 200°C：60~180secs,peak temp. 265°C within 10secs 溫度曲線變化的測量要在焊接面一側的電極端子底部進行 changes in the curve of temp. measurement in the side of the welding surface at the bottom of the terminal	
	靜電容量變化率Capacitance varierity ratio	初始值（基板組裝焊接前）的 ± 10% 以內between the 10% of initial value(before PCB assy)
	tan δ	初始標準值的130%以下 <130% below the initial standard value of 130%
	等效串聯阻抗 (ESR) (*1)	初始標準值的130%以下 <130% below the initial standard value of 130%
	漏損電流 (*2) Leakage current	初始標準值以下 below the initial standard value
標識 Sign	鋁殼上部印刷print in the aluminum sleeve	

Dimension



Size	$\phi 8 \times 9L$	$\phi 8 \times 12L$	$\phi 10 \times 13L$
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

Rated Voltage

V	2.5	4	6.3	10	16
Code	e	g	j	A	C

Rated Voltage

額定電圧 (V) (編碼)	額定靜電容量 (μF)	鉛殼尺寸 φDXL (mm)	$\tan \delta$	漏損電流 (0.2CV) (μA)	ESR(mΩ) (20°C 100kHz)	額定紋波電流 (mA rms) (105°C 100kHz)
2.5 (0E)	560	8 X 9	0.08	280	6	4800
	680	8 X 12	0.08	340	6	5700
	820	8 X 9	0.08	410	7	5200
	820	8 X 12	0.08	410	6	6200
4 (0G)	1000	10 X 13	0.08	500	6	6500
	560	8 X 9	0.08	448	7	5200
6.3 (0J)	560	8 X 12	0.08	448	7	5500
	680	8 X 12	0.08	544	6	6200
	820	10 X 13	0.08	656	6	6500
10 (1A)	470	8 X 9	0.08	592	7	5200
	470	8 X 12	0.08	592	7	5500
	680	10 X 13	0.08	857	6	6300
16 (1C)	270	8 X 12	0.08	540	8	4900
	470	10 X 13	0.08	940	7	5700
	270	8 X 12	0.08	864	9	4800
	470	10 X 13	0.08	1504	9	5000