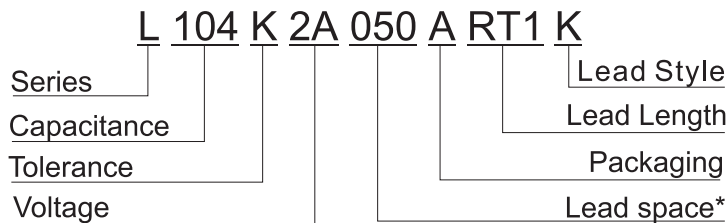


INTRODUCTION

L series is constructed with polyester film dielectric, aluminum foil electrode, copperplated lead, and epoxy resin coating. They are suitable for blocking, by-pass and coupling of DC and signal to VHF range, timing circuits, filtering, and other general purpose usage. They are also ideal for use in amplifiers, TV, radio, stereo equipment and other electronic equipments.

PART NUMBER EXAMPLE



* Leadspace is straight lead non-formed original leadspace.

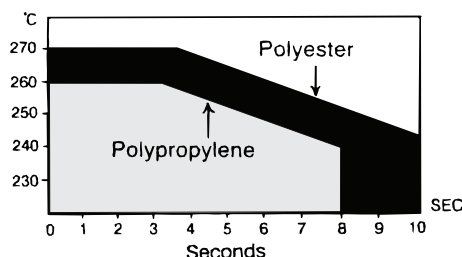
FEATURES

- High moisture resistance
- Unilateral lead-out
- Good insulating performance
- ESR is minimized
- Rated Voltage 100~1200Vdc

ELECTRICAL CHARACTERISTICS

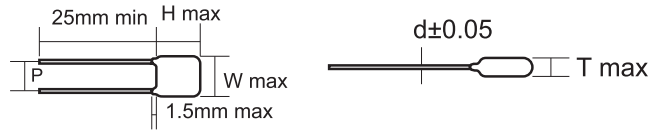
Items	Performance
Operating Voltage Range	100Vdc, 250Vdc, 400Vdc, 630Vdc, 1200Vdc
Rated Temperature	-55°C ~ +105°C (Derates over 85°C)
Climatic Category	55 / 105 / 21
Capacitance Range	0.001 μF ~ 0.27 μF
Capacitance Tolerance	5% (J), 10% (K), 20%(M)
Dissipation Factor	≤ 1.0% (1KHz, 20°C)
Insulation Resistance Terminal to Terminal	≥ 30000MΩ, CR ≤ 0.1μF (20°C, 10V, 1min) ≥ 10000MΩ, CR > 0.1μF (20°C, 100V, 1min)
Withstand Voltage	2.0UR : (5s)

SOLDERING



The area under the curve is the recommended soldering time & temp. for the materials shown.

■ **MAXIMUM DIMENSIONS (mm)**



(μF)	W.V. DC	50V (1H) / 63V (1J) / 100V (2A)						250V (2E)					400V (2G)				
	Code	W	H	T	P	d	W	H	T	P	d	W	H	T	P	d	
0.001	102	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	
0.0012	122	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	
0.0015	152	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	
0.0018	182	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	6.0	11.5	3.5	3.5	0.5	
0.0022	222	6.0	11.5	4.0	3.5	0.5	6.0	11.5	4.0	3.5	0.5	6.0	11.5	4.0	3.5	0.5	
0.0027	272	6.0	11.5	4.0	3.5	0.5	6.5	12.0	4.0	3.5	0.5	7.0	13.0	4.0	4.0	0.5	
0.0033	332	6.0	11.5	4.0	3.5	0.5	6.5	12.0	4.0	3.5	0.5	7.0	13.0	4.5	4.5	0.5	
0.0039	392	6.0	11.5	4.0	3.5	0.5	6.5	12.0	4.0	4.0	0.5	7.5	13.5	4.5	4.5	0.5	
0.0047	472	6.0	11.5	4.0	3.5	0.5	6.5	12.0	4.0	4.5	0.5	8.0	13.5	4.5	4.5	0.5	
0.0056	562	6.0	11.5	4.0	4.0	0.5	7.0	12.0	4.0	5.0	0.5	8.0	13.5	5.0	5.5	0.5	
0.0068	682	6.5	11.5	4.0	4.0	0.5	7.0	12.0	4.0	5.0	0.5	8.5	13.5	5.5	5.5	0.5	
0.0082	822	7.0	11.5	4.0	4.0	0.5	8.0	13.0	4.0	5.5	0.5	9.0	15.5	5.5	5.5	0.5	
0.01	103	7.0	11.5	4.5	4.0	0.5	8.0	13.0	5.0	5.5	0.5	9.5	15.5	6.0	5.5	0.5	
0.012	123	7.0	11.5	4.5	4.0	0.5	8.5	13.5	5.0	5.5	0.5	10.5	15.5	6.5	6.0	0.5	
0.015	153	7.0	11.5	4.5	4.5	0.5	8.5	13.5	5.0	5.5	0.5	10.5	15.5	6.5	6.5	0.5	
0.018	183	7.0	12.0	4.5	4.5	0.5	9.0	14.0	6.0	6.0	0.5	11.5	17.5	7.0	7.0	0.5	
0.022	223	8.0	12.0	4.5	5.0	0.5	9.5	14.0	6.0	6.5	0.5	11.5	17.5	7.0	7.0	0.5	
0.027	273	8.0	13.0	5.0	5.0	0.5	10.0	15.0	6.5	6.5	0.5	12.5	18.5	7.5	7.5	0.5	
0.033	333	8.5	13.0	5.0	5.5	0.5	10.5	15.5	6.5	6.5	0.5	12.5	18.5	7.5	7.5	0.5	
0.039	393	9.0	13.0	5.0	5.5	0.5	11.5	15.5	7.0	7.0	0.5	14.0	19.0	8.0	8.5	0.5	
0.047	473	9.0	13.0	5.5	5.5	0.5	11.5	16.0	7.0	7.5	0.5	14.5	19.0	8.5	9.0	0.5	
0.056	563	9.5	13.5	5.5	6.5	0.5	12.5	16.0	8.5	8.0	0.5	14.5	21.5	8.5	9.0	0.5	
0.068	683	10.0	13.5	6.0	7.0	0.5	12.5	17.0	8.5	8.0	0.5	14.5	22.5	9.0	9.5	0.5	
0.082	823	10.5	13.5	6.5	7.0	0.5	14.0	19.0	10.0	8.5	0.5						
0.1	104	11.5	13.5	7.0	7.5	0.5	15.0	19.0	10.0	9.0	0.5						
0.12	124	12.5	15.5	7.5	8.5	0.5											
0.15	154	13.5	16.0	8.0	9.0	0.5											
0.18	184	14.0	16.5	8.0	9.5	0.5											
0.22	224	14.5	17.5	8.5	9.5	0.5											
0.27	274	15.0	21.0	9.0	10.0	0.5											

(μF)	W.V. DC	630VDC (2J)					1200VDC (3B)				
	Code	W	H	T	P	d	W	H	T	P	d
0.001	102	6.5	12.5	4.0	3.5	0.5	7.0	13.5	4.5	4.0	0.5
0.0012	122	6.5	12.5	4.0	3.5	0.5	7.0	13.5	4.5	4.0	0.5
0.0015	152	6.5	12.5	4.0	3.5	0.5	7.5	13.5	4.5	4.5	0.5
0.0018	182	6.5	12.5	4.0	3.5	0.5	7.5	13.5	4.5	4.5	0.5
0.0022	222	7.0	12.5	4.5	4.5	0.5	8.0	14.0	5.0	5.0	0.5
0.0027	272	7.5	13.5	5.0	4.5	0.5	8.0	14.0	5.5	5.0	0.5
0.0033	332	7.5	13.5	5.0	4.5	0.5	9.0	14.0	6.0	5.5	0.5
0.0039	392	8.0	13.5	5.5	5.0	0.5	9.5	15.0	6.0	6.0	0.5
0.0047	472	8.5	13.5	5.5	5.0	0.5	9.5	16.0	6.0	6.0	0.5
0.0056	562	9.5	14.0	5.5	5.5	0.5	10.0	16.5	6.5	6.0	0.5
0.0068	682	10.0	14.0	6.0	6.0	0.5	10.5	16.5	6.5	6.5	0.5
0.0082	822	10.0	16.0	6.0	6.0	0.5	11.5	17.5	7.5	7.5	0.5
0.01	103	10.0	16.0	6.5	6.0	0.5	12.0	17.5	7.5	7.5	0.5
0.012	123	11.0	16.5	6.5	7.0	0.5					
0.015	153	11.5	17.0	7.0	7.5	0.5					
0.018	183	12.0	17.5	7.5	7.5	0.5					
0.022	223	12.5	18.0	7.5	8.0	0.5					

■ PERFORMANCE

Item	Test Methods	Requirements
Resistance to Soldering Heat	Solder Bath: 260°C ± 5°C Immersion Time: 10sec ± 1sec	Capacitance Change $\Delta C/C \leq 5\%$ DF Change $\Delta \tan \delta \leq 1\%$ at 1KHz $I_R \geq 50\%$ spec value
Resistance to Vibration	Frequency Range: 10 ~ 500Hz Amplitude: 0.75m/m Duration: 6 hours	There shall be no Visible Damage No Intermittent Contact, No Open or Short Circuit
Damp heat, Steady State	Temperature: 55°C Relative Humidity: 90% to 95% Duration: 21 Days	Capacitance Change $\Delta C/C \leq 5\%$ DF Change $\Delta \tan \delta \leq 1\%$ at 1KHz $I_R \geq 50\%$ spec value
Electrical Endurance	Temperature: 105°C Voltage Applied: 1.25 x Vr (DC) Duration: 1,000 hours	Capacitance Change $\Delta C/C \leq 1\%$ DF Change $\Delta \tan \delta \leq 1\%$ at 1KHz $I_R \geq 50\%$ spec value

■ CAPACITANCE CODE

μF	0.001	0.0047	0.01	0.047	0.1	0.27
pF	1000	4700	10000	47000	100000	270000
Code	102	472	103	473	104	274

■ RATED VOLTAGE

W V	100	250	400	630	1200
Code	2A	2E	2G	2J	3B

■ TOLERANCE

Code	Tolerance
J	± 5%
K	± 10%
M	± 20%

■ RADIAL LEAD SPACING

* Leadspace is straight lead non-formed original leadspace.

Lead Spacing	5.0mm	7.5mm	10mm
Code	050	075	100

■ TAPE CODE (Lead spacing of tape)

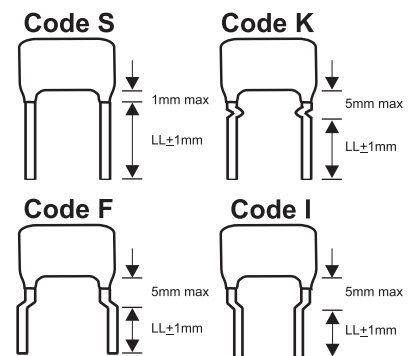
* see diagram on page 4

Lead Spacing	5.0mm	7.5mm	10mm
Tape Packing	A	A	A
Code	RT1	RT2	RT3

■ LEAD LENGTH FROM SEATING PLANE (Bulk Pack)

mm	5	10	15	20
Code	50	100	150	250

■ LEAD STYLE EXAMPLES



Typical length (LL) is 20mm for straight lead bulk pack

■ **RADIAL TAPING CODE DIAGRAM**

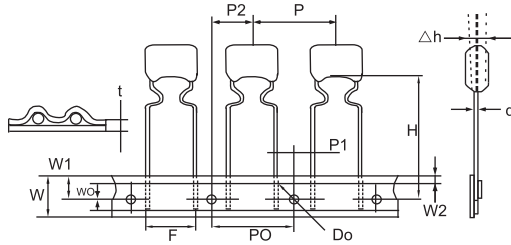


Fig. 1
F=7.5mm
(RT2)

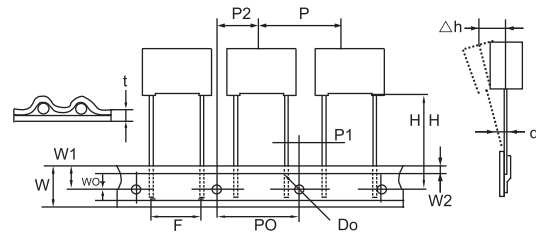


Fig. 2
F=7.5mm
(RT2)

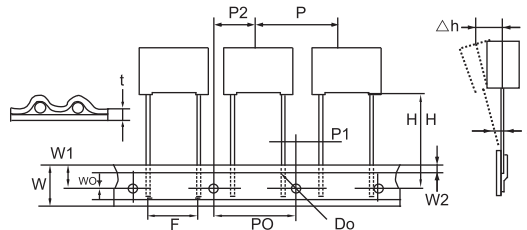


Fig. 4 Box or Epoxy Coated
F=10 = Ammo Only (RT3)

■ **SPECIFICATIONS**

Description	Letter	Dimension (mm)			
		RT1	RT2	RT3	Tol.
Lead Wire Diameter	d	0.5 / 0.6	0.5 / 0.6	0.6	± 0.05
Tape Pitch	P	12.7	12.7	12.7	± 1
Feed Hole Pitch	PO	12.7	12.7	12.7	± 0.2
Centering of the Lead Wire	P1	3.85	2.6 / 3.75	7.7	± 0.7
Centering of the Body	P2	6.35	6.35	12.7	± 1.3
Lead Spacing (Pitch)	F	5	7.5	10	± 0.6; -0.1
Component Alignment	Δh	0	0	0	± 2
Height of Component from Tape Center	H	18.5	18.5	18.5	± 0.5
Carrier Tape Width	W	18	18	18	± 1; -0.5
Hold Down Tape Width	W0	6	6	9	Min
Hole Position	W1	9	9	9	± 0.5
Hold Down Tape Position	W2	3	3	3	Max
Feed Hole Diameter	Do	4	4	4	± 0.2
Tape Thickness	t	0.7	0.5	0.5	± 0.2
Figure	fig	1 or 2	1.2 or 3	4	

Remark: *Allowance of accumulated pitch less than 1mm at the sum of 20 pitches.
 *Continuous empty component less than 3 consecutive pieces.
 *Total empty on one reel less than 1%.