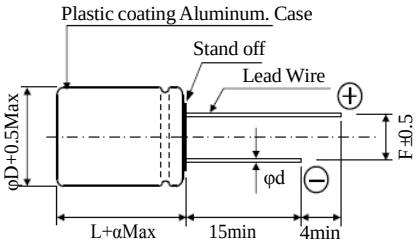
RS series Super low ESR & large ripple current

It's a low ESR & large permissible ripple current series. Suitable for use with DC-DC converts, voltage regulators,motherboard, servers, VGA, etc. Lead free-flow is supported.

✧ Specifications

Items	Characteristics	
Operating Temp. Range	-55℃～+105℃	
Capacitance Range	47～1500μF	
Capacitance Tolerance	M：±20%	
Rated Voltage Range	16V ～25V DC	
Dissipation Factor （at 120Hz,20℃）	Not to exceed the value specified	
Leakage Current	≤0.2CV (μA, after 2 minutes)	
ESR（100K~300KHz）	Not to exceed the value specified	
Endurance 105℃，2000h， at rated voltage	Capacitance	Within ±20% of the value before test
	Leakage current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified
Moisture Resistance Stored at 60℃，RH90～95%，2000h	Capacitance	Within ±20% of the value before test
	Leakage Current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified

✧ Dimensions



Unit: mm

φ DxL	ΦD +0.5max.	α	F ±0.5	Φd ±0.05
6.3x8	6.3	1.0	2.5	0.6
6.3x9	6.3	1.0	2.5	0.5
6.3x11	6.3	1.0	2.5	0.5
6.3x12	6.3	1.0	2.5	0.5
8x8	8.0	1.0	3.5	0.6
8x11.5	8.0	1.0	3.5	0.6
10x12.5	10.0	1.0	5.0	0.6

✧ Capacitance List

SIZE W.V（S.V）	6.3×8	6.3×9	6.3×11	6.3×12	8×8	8×11.5	10×12.5
16（18.4）	100 ~ 390μF	220 ~ 470μF	270 ~ 560μF	390 ~ 680μF	270 ~ 680μF	390 ~ 1000μF	470 ~ 1500μF
20（23）	100 ~ 270μF	180 ~ 270μF	220 ~ 330μF	270 ~ 390μF	180 ~ 390μF	270 ~ 560μF	390 ~ 820μF
25（27.5）	47 ~ 180μF	100 ~ 220μF	150 ~ 270μF	180 ~ 270μF	150 ~ 270μF	220 ~ 470μF	270 ~ 680μF

✧ Characteristics List

W.V. (V)	Capacitance (μF)	L.C. (μA,2min)	tg δ (120Hz,20℃)	ESR (mΩ,100kHz)	Rated Ripple Current(mA,r.m.s)	Size ΦD×L (mm)	Part Number
16	100	320	0.10	18	3100	6.3x8	RS101M016E080□□
	220	704	0.10	18	3100	6.3x8	RS221M016E080□□
	270	864	0.10	12	4500	8x8	RS271M016F080□□
	330	1056	0.10	18	3100	6.3x8	RS331M016E080□□
	330	1056	0.10	15	3400	6.3x9	RS331M016E090□□
	330	1056	0.10	12	4500	8x8	RS331M016F080□□
	470	1504	0.10	15	3400	6.3x9	RS471M016E090□□
	470	1504	0.10	13	3700	6.3x11	RS471M016E110□□
	470	1504	0.10	12	4500	8x8	RS471M016F080□□
	560	1792	0.10	13	3700	6.3x11	RS561M016E110□□
	680	2176	0.10	12	4100	6.3x12	RS681M016E120□□
	820	2624	0.10	11	4800	8x11.5	RS821M016F115□□
	820	2624	0.10	11	5100	10x12.5	RS821M016G125□□
	1000	3200	0.10	11	4800	8x11.5	RS102M016F115□□
	1000	3200	0.10	11	5100	10x12.5	RS102M016G125□□
	1200	3840	0.10	11	5100	10x12.5	RS122M016G125□□
20	100	400	0.10	25	2800	6.3x8	RS101M020E080□□
	220	880	0.10	20	3100	6.3x9	RS221M020E090□□
	270	1080	0.10	18	3400	6.3x11	RS271M020E110□□
	330	1320	0.10	15	3800	6.3x12	RS331M020E120□□
	330	1320	0.10	15	3800	8x8	RS331M020F080□□
	470	1880	0.10	13	4500	8x11.5	RS471M020F115□□
	680	2720	0.10	12	4800	10x12.5	RS681M020G125□□
25	47	300	0.10	25	2800	6.3x8	RS470M025E080□□
	100	500	0.10	25	2800	6.3x8	RS101M025E080□□
	100	500	0.10	15	3800	8x8	RS101M025F080□□
	220	1100	0.10	20	3100	6.3x9	RS221M025E090□□
	220	1100	0.10	18	3400	6.3x11	RS221M025E110□□
	220	1100	0.10	15	3800	6.3x12	RS221M025E120□□
	220	1100	0.10	15	3800	8x8	RS221M025F080□□
	220	1100	0.10	13	4500	8x11.5	RS221M025F115□□
	220	1100	0.10	12	4800	10x12.5	RS221M025G125□□
	330	1650	0.10	13	4500	8x11.5	RS331M025F115□□
	330	1650	0.10	12	4800	10x12.5	RS331M025G125□□
	470	2350	0.10	13	4500	8x11.5	RS471M025F115□□
	470	2350	0.10	12	4800	10x12.5	RS471M025G125□□
	680	3400	0.10	12	4800	10x12.5	RS471M025G125□□

✧ Frequency Coefficient for Ripple Current

Frequency	120Hz≤freq.<1KHz	1KHz≤freq.<10KHz	10KHz≤freq.<100KHz	100KHz≤freq.<300KHz
Coefficient	0.05	0.3	0.7	1

PolyCap Part Number System

1. POLYCAP Explanation of Part Number (**Radial** Type).

R	L	8	2	1	M	2	R	5	E	0	8	0	C	A
Series name		Rated capacitance			Capacitance tolerance			Rated voltage	Case diameter			Case length	Taping or forming of terminal code	

Example

- **RA** Series
- **RH** Series
- **RV** Series
- **RE** Series
- **RL** Series
- **RM** Series
- **RS** Series
- **RN** Series
- **RF** Series
- **RQ** Series
- **RU** Series
- **VS** Series
- **VN** Series
- **VA** Series

Rated Cap.(μF)	Code
4.7	4R7
10	100
33	330
100	101
820	821
1000	102
2700	272

Tol.%	Code
±20	M
±10	H
±5	Z

Rated Volt.(v)	Code
2.5	2R5
6.3	6R3
10	010
16	016
25	025
35	035
50	050
63	063
100	100
125	125
160	160
200	200

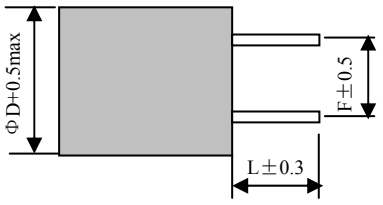
Dia (mm)	Code
4	B
5/5.5	C
6.3	E
8	F
10	G

Len. (mm)	Code
5	050
6	060
7	070
8	080
11	110
11.5	115
12.5	125
14	140
16	160
20	200

Taping or lead terminal wire process code.
None suffix for regular length lead type products

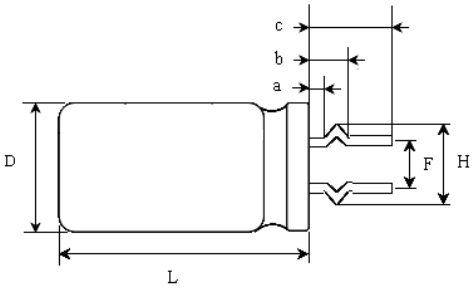
2. POLYCAP Radial lead terminal process

1) Specifications for lead terminal cutting



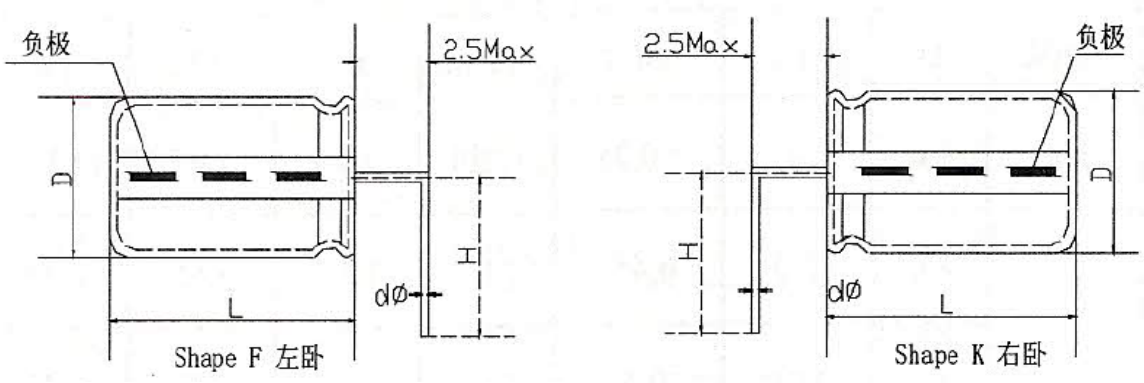
Shape A (lead cutting)

Lead terminal cutting code	Cutting size(L/mm)	Applicable case size(D/mm)
CI	2.2	
CA	2.5	
CJ	2.8	
CB	3.0	Φ4
CC	3.2	Φ5
CD	3.3	Φ5.5
CE	3.5	Φ6.3
CF	4.0	Φ8
CG	5.0	Φ10
CH	6.0	



Shape B (lead cutting and crimping)

lead cutting and crimping code	H±0.5	a±0.5	b±0.5	c±0.5
BA	4.5	1.0	4.0	7.5
BB	4.5	1.0	4.0	8.0
BC	4.5	1.0	4.0	9.5



Shape F、K (lead cutting and bending)

Shape F 左卧 code	Shape K 右卧 code	H±0.5
FA	KA	6.3
FB	KB	8.0
FC	KC	10.0

2) POLYCAP Specifications for Taping

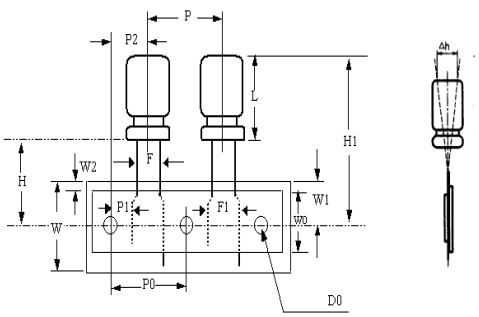


Fig-1(Φ5～Φ8)

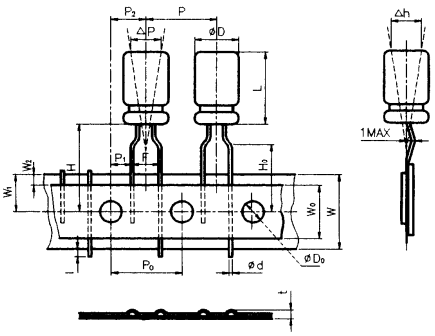


Fig-2(Φ5～Φ8)

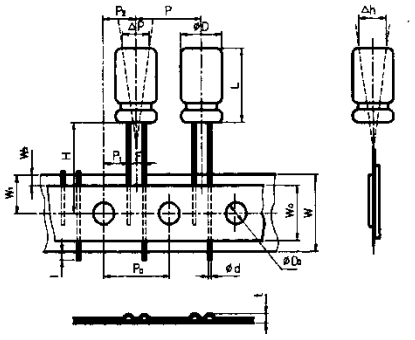


Fig-3(Φ10)

Code	D	L	d	P	P0	P1	F	W	W0	W1	W2	H	D0	△h	t
Tol.	±0.5	±1.0	±0.02	±1.0	±0.2	±0.7	±0.5	±0.5	Min	±0.5	Max	0.75 -0.5	±0.2	Max	±0.3
Item	4	7~9(+1)	0.5	12.7	12.7	4.6	2.2	18	11	9	1.5	18.5	4. 1	1	0.3
		10(+1)	0.45				1.5								
	5	5(+1)	0.45	12.7	12.7	4.6	2.0	18	11	9	1.5	18.5	4.1	1	0.3
		6-9(+1)	0.5				2.5								
	5.5	7-11(+1)	0.5	12.7	12.7	4.6	2.5	18	11	9	1.5	18.5	4.1	1	0.3
	6.3	5-7(+1)	0.5	12.7	12.7	4.6	2.5	18	11	9	1.5	18.5	4.1	1	0.6
		8(+1)	0.6				3.5								
		9-13(+1)	0.5				5.0								
		15(+1.5)	0.6												
	8	8-14(+1)	0.6	12.7	12.7	4.6	3.5	18	12	9	1.5	18.5	4.1	1	0.6
		16-20(+1.5)					5.0								
	10	12.5~14(+1)	0.6	12.7	12.7	3.85	5.0	18	12	9	1.5	18.5	4.1	1	0.6
		16-20(+1.5)													

Taping code	Taping size(F/mm)	Applicable case size(ΦD/mm)
TA	2.0	Φ5
TB	2.5	Φ5, Φ5.5,Φ6.3
TC	3.5	Φ6.3,Φ8
TD	5.0	Φ6.3,Φ8,Φ10
TR	Taping and Reel	