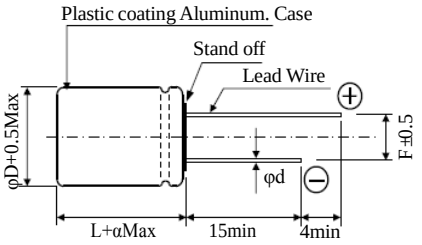
RM series Hybrid (25v~100v)

It's a hybrid series for Automotive Application.
Lead free-flow is supported.

✧ Specifications

Items	Characteristics	
Operating Temp. Range	-55℃～+105℃	
Capacitance Range	10～1000 μF	
Capacitance Tolerance	M：±20%	
Rated Voltage Range	25V ～100V DC	
Dissipation Factor （at 120Hz,20℃）	Not to exceed the value specified	
Leakage Current	Not to exceed the value specified	
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 D×L	ΦD +0.5max.	α	F ±0.5	Φd ±0.05
6.3x5	6.3	1.0	2.5	0.5
6.3x8	6.3	1.0	2.5	0.6
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
10x16	10.0	1.5	5.0	0.6

✧ Capacitance List

SIZE W.V(S.V)	6.3×5	6.3×8	8×8	8×11.5	10×12.5	10×16
25（27.5）	47~82μF	82~120μF	100~220μF	180~330μF	220~470μF	470~820μF
35（41）	39~68μF	68~100μF	56~180μF	100~270μF	100~470μF	470~680μF
50（57.5）		10~47μF	47~82μF	56~100μF	100~180μF	180~270μF
63（73）		10~27μF	27~47μF	33~56μF	56~100μF	100~150μF
80（92）			18~33μF	27~47μF	39~82μF	82~120μF
100（115）			10~27μF	22~39μF	33~68μF	68~100μF

✧ 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
25	47	300	0.12	45	1600	6.3x5	RM470M025E050□□
	47	300	0.12	40	2000	6.3x8	RM470M025E080□□
	100	300	0.12	40	2000	6.3x8	RM101M025E080□□
	100	300	0.12	30	2900	8x8	RM101M025F080□□
	220	300	0.12	25	3300	8x11.5	RM221M025F115□□
	330	300	0.12	25	3800	10x12.5	RM331M025G125□□
	680	300	0.12	20	4200	10x16	RM681M025G160□□
35	22	300	0.12	45	1600	6.3x5	RM220M035E050□□
	56	300	0.12	45	1600	6.3x5	RM560M035E050□□
	100	300	0.12	40	2000	6.3x8	RM101M035E080□□
	100	300	0.12	30	2900	8x8	RM101M035F080□□
	100	300	0.12	25	3300	8x11.5	RM101M035F115□□
	220	300	0.12	25	3800	10x12.5	RM221M035G125□□
	330	300	0.12	25	3800	10x12.5	RM331M035G125□□
	560	300	0.12	20	4200	10x16	RM561M035G160□□
50	10	300	0.12	40	2000	6.3x8	RM100M050E080□□
	47	300	0.12	30	2900	8x8	RM470M050F080□□
	100	300	0.12	25	3300	8x11.5	RM101M050F115□□
	100	300	0.12	25	3800	10x12.5	RM101M050G125□□
	220	300	0.12	20	4200	10x12.5	RM221M050G160□□
63	10	300	0.12	40	2000	6.3x8	RM100M063E080□□
	47	300	0.12	30	2900	8x8	RM470M063F080□□
	56	300	0.12	25	3300	8x11.5	RM560M063F115□□
	82	300	0.12	25	3800	10x12.5	RM820M063G125□□
	120	300	0.12	20	4200	10x16	RM121M063G160□□
80	22	300	0.12	30	2900	8x8	RM220M080F080□□
	47	300	0.12	25	3300	8x11.5	RM470M080F115□□
	82	300	0.12	25	3800	10x12.5	RM820M080G125□□
	100	300	0.12	20	4200	10x16	RM101M080G160□□
100	10	300	0.12	30	2900	8x8	RM100M100F080□□
	22	300	0.12	25	3300	8x11.5	RM220M100F115□□
	56	300	0.12	25	3800	10x12.5	RM560M100G125□□
	82	300	0.12	20	4200	10x16	RM820M100G160□□

✧ 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

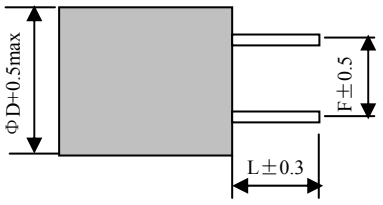
Dia (mm)	Code
4	B
5/5.5	C
6.3	E
8	F
10	G

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

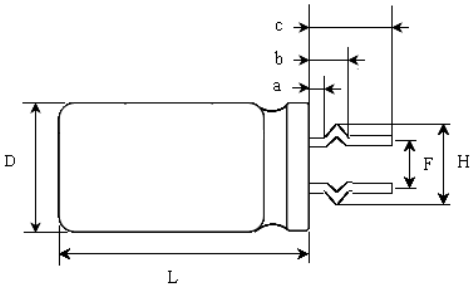
2. POLYCAP Radial lead terminal process

1) Specifications for lead terminal cutting



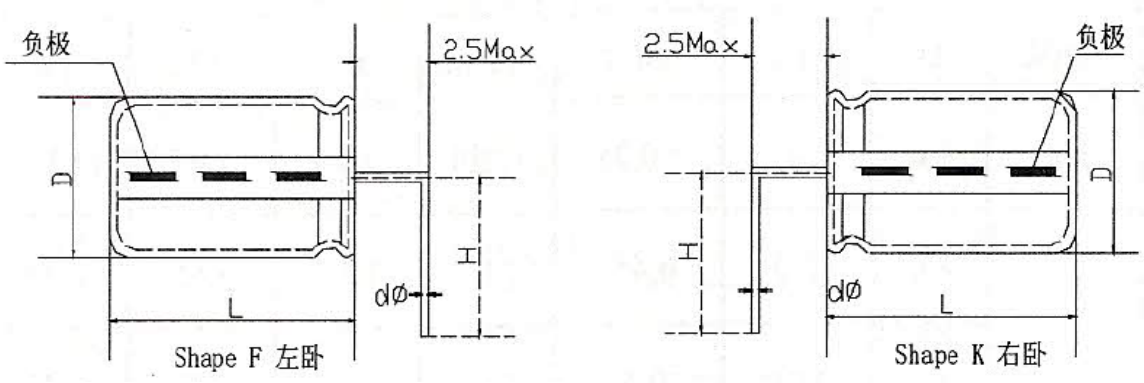
Shape A (lead cutting)

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

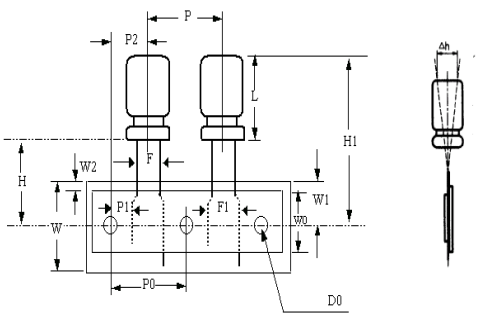


Fig-1(Φ5～Φ8)

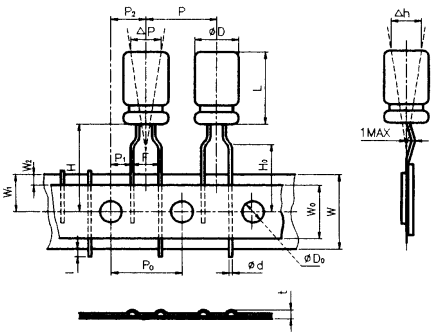


Fig-2(Φ5～Φ8)

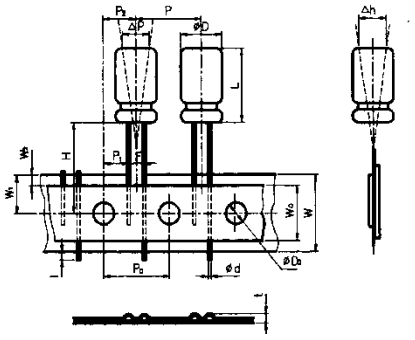


Fig-3(Φ10)

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	