

# RM series

## Hybrid (16V~63V)

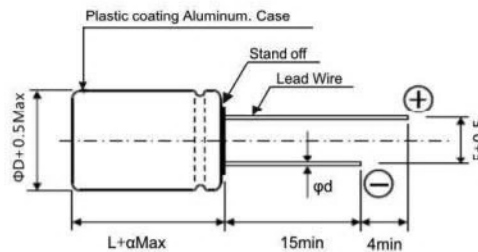
- Conductive Polymer Hybrid Aluminum Electrolytic Capacitor
- Load life of 2000 hours at 105°C
- Compliant to the RoHS directive (2011/65/EU)
- Suitable for Automotive Application.

混合型铝电容器，产品满足RoHS指令(2011/65/EU)，适用于汽车应用。

### » Specifications

Items	Characteristics	
Operating Temp. Range	-55°C ~ +105°C	
Capacitance Range	6.8 ~ 2200 uF	
Capacitance Tolerance	M: ±20%	
Rated Voltage Range	16V ~ 63V DC	
Dissipation Factor ( at 120Hz, 20°C )	Not to exceed the value specified Not to exceed the value specified (after 2 minutes)	
Leakage Current	Not to exceed the value specified	
Endurance 105°C, 2000h, at rated voltage	Capacitance Change	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°C, Rh90 ~ 95%, 1000h	Capacitance Change	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	φ D +0.5max.	α	F ± 0.5	φ d ± 0.05
6.3 × 5	6.3	1.0	2.5	0.5
6.3 × 8	6.3	1.0	2.5	0.5
8 × 8	8.0	1.0	3.5	0.6
8 × 11.5	8.0	1.0	3.5	0.6
8 × 14	8.0	1.0	3.5	0.6
8 × 16	8.0	1.0	3.5	0.6
8 × 20	8.0	1.0	3.5	0.6
10 × 10	10.0	1.0	5.0	0.6

φ D × L	φ D +0.5max.	α	F ± 0.5	φ d ± 0.05
10 × 12.5	10.0	1.0	5.0	0.6
10 × 14	10.0	1.0	5.0	0.6
10 × 16	10.0	1.5	5.0	0.6
10 × 20	10.0	1.5	5.0	0.6

### » Capacitance List

W.V (S.V)	16 (18.4)	25 (28.7)	35 (41)	50 (57.5)	63 (72)
6.3 x 5			33~68 uF	10~27 uF	6.8~12 uF
6.3 x 8			82~120 uF	22~47 uF	15~33 uF
8 x 8			100~220 uF	27~82 uF	18~47 uF
8 x 11.5			150~330 uF	39~120 uF	27~68 uF
8 x 14			180~330 uF	56~150 uF	39~100 uF
8 x 16	560~1200 uF	390~820 uF	220~470 uF	56~180 uF	39~120 uF
8 x 20	820~1500 uF	560~1000 uF	270~560 uF	82~220 uF	56~120 uF
10 x 10			150~330 uF	47~150 uF	33~82 uF
10 x 12.5	560~1200 uF	390~820 uF	220~470 uF	56~180 uF	47~120 uF
10 x 14	820~1500 uF	560~1000 uF	270~560 uF	82~220 uF	56~150 uF
10 x 16	1000~1800 uF	680~1200 uF	330~680 uF	82~270 uF	56~180 uF
10 x 20	1200~2200 uF	820~1500 uF	470~1000 uF	100~390 uF	82~220 uF

### » Characteristics List

W.V. (V)	Capacitance (uF)	L.C. (uA, 2min)	tg δ (120Hz, 20°C)	ESR (mΩ, 100kHz)	Rated Ripple Current (mA, r. m. s)	Size Φ D x L (mm)	Part Number
16	1200	300	0.12	10	4100	8 x 16	RM122M016F160□□
	1500	300	0.12	10	4500	8 x 20	RM152M016F200□□
	1200	300	0.12	12	3900	10 x 12.5	RM122M016G125□□
	1500	300	0.12	12	4100	10 x 14	RM152M016G140□□
	1800	300	0.12	10	4300	10 x 16	RM182M016G160□□
	2200	300	0.12	9	4800	10 x 20	RM222M016G200□□
25	680	300	0.12	18	3500	8 x 16	RM681M025F160□□
	820	300	0.12	15	4000	8 x 20	RM821M025F200□□
	680	300	0.12	20	3300	10 x 12.5	RM681M025G125□□
	820	300	0.12	20	3500	10 x 14	RM821M025G140□□
	1000	300	0.12	18	3800	10 x 16	RM102M025G160□□
	1200	300	0.12	15	4300	10 x 20	RM122M025G200□□
35	56	300	0.12	50	1900	6.3 x 5	HM560M035E050□□
	100	300	0.12	40	2100	6.3 x 8	RM101M035E080□□
	220	300	0.12	30	2500	8 x 8	RM221M035F080□□
	220	300	0.12	25	2900	8 x 11.5	RM221M035F115□□
	330	300	0.12	22	3100	8 x 14	RM331M035F140□□
	470	300	0.12	18	3300	8 x 16	RM471M035F160□□
	560	300	0.12	15	3800	8 x 20	RM561M035F200□□
	330	300	0.12	25	2700	10 x 10	RM331M035G100□□
	470	300	0.12	20	3100	10 x 12.5	RM471M035G125□□
	500	300	0.12	20	3300	10 x 14	RM561M035G140□□
	680	300	0.12	18	3600	10 x 16	RM681M035G160□□
	1000	300	0.12	15	4100	10 x 20	RM102M035G200□□

W.V. (V)	Capacitance ( $\mu$ F)	L.C. ( $\mu$ A, 2min)	tg $\delta$ (120Hz, 20°C)	ESR (m $\Omega$ , 100kHz)	Rated Ripple Current (mA, r. m. s)	Size $\Phi$ D $\times$ L (mm)	Part Number
50	22	300	0.12	50	1700	6.3 $\times$ 5	RM220M050E050□□
	33	300	0.12	40	1900	6.3 $\times$ 8	RM330M050E080□□
	68	300	0.12	30	2300	8 $\times$ 8	RM680M050F080□□
	120	300	0.12	25	2700	8 $\times$ 11.5	RM121M050F115□□
	150	300	0.12	22	2900	8 $\times$ 14	RM151M050F140□□
	180	300	0.12	18	3100	8 $\times$ 16	RM181M050F160□□
	220	300	0.12	15	3600	8 $\times$ 20	RM221M050F200□□
	150	300	0.12	25	2500	10 $\times$ 10	RM151M050G100□□
	180	300	0.12	20	2900	10 $\times$ 12.5	RM181M050G125□□
	220	300	0.12	20	3100	10 $\times$ 14	RM221M050G140□□
	270	300	0.12	18	3400	10 $\times$ 16	RM271M050G160□□
	330	300	0.12	15	3900	10 $\times$ 20	RM331M050G200□□
63	10	300	0.12	50	1400	6.3 $\times$ 5	RM100M063E050□□
	33	300	0.12	40	1700	6.3 $\times$ 8	RM330M063E080□□
	47	300	0.12	30	1900	8 $\times$ 8	RM470M063F080□□
	68	300	0.12	25	2500	8 $\times$ 11.5	RM680M063F115□□
	100	300	0.12	22	2700	8 $\times$ 14	RM101M063F140□□
	120	300	0.12	18	2900	8 $\times$ 16	RM121M063F160□□
	120	300	0.12	15	3300	8 $\times$ 20	RM121M063F200□□
	82	300	0.12	25	2200	10 $\times$ 10	RM820M063G100□□
	120	300	0.12	20	2600	10 $\times$ 12.5	RM121M063G125□□
	150	300	0.12	20	2800	10 $\times$ 14	RM151M063G140□□
	180	300	0.12	18	3100	10 $\times$ 16	RM181M063G160□□
	220	300	0.12	15	3600	10 $\times$ 20	RM221M063G200□□

## » Frequency Coefficient for Ripple Current

Frequency	120Hz $\leq$ freq. < 1KHz	1KHz $\leq$ freq. < 10KHz	10KHz $\leq$ freq. < 100KHz	100KHz $\leq$ freq. < 300KHz
Coefficient	0.05	0.3	0.7	1