RN series

Features

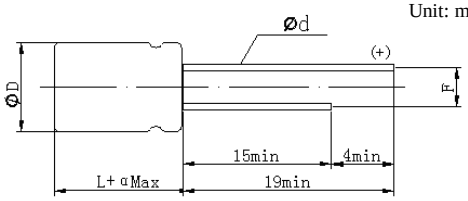
- Low ESR at high frequency Range 2000 hours at 105℃.
- Large permissible ripple current.
- Low profile.
- RoHS Compliant .

Specifications

Items	Characteristics	
Operating Temp. Range	-55℃～+105℃	
Capacitance Range	10～560μF	
Capacitance Tolerance	M：±20%	
Rated Voltage Range	2.5V～25V dc	
Dissipation Factor （at 120Hz,20℃）	Not to exceed the value specified	
Leakage Current	Not to exceed the value specified (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



φD×L	ΦD+0.5max.	α	F±0.5	Φd±0.05
4×5	4	1.0	1.5	0.45
5×5	5	1.0	2.0	0.45
5×8	5	1.0	2.0	0.45
5×9	5	1.0	2.0	0.5
6.3×5.2	6.3	1.0	2.5	0.5
6.3×7	6.3	1.0	2.5	0.6

Size List

CAP \ RV/v (SV)	2.5 (2.8)	4 (4.6)	6.3 (7.2)	7.5 *NEW* (8.6)	10 (11.5)	16 (18.4)	20 （23）	25 （27.5）
10					4×5	6.3×5.2	6.3×5.2	6.3×5.2/ 6.3×7
15					4×5	6.3×5.2	6.3×5.2	6.3×5.2/ 6.3×7
22					4×5	6.3×5.2	6.3×5.2/ 6.3×7	5×8/ 6.3×7
33					5×5 /6.3×5.2	6.3×5.2	5×8/ 6.3×7	5×8/ 6.3×7
39					5×5 /6.3×5.2	6.3×5.2	5×8/ 6.3×7	6.3×7
47					6.3×5.2	6.3×5.2/ 6.3×7	5×8/ 6.3×7	
68					6.3×5.2	5×8/ 6.3×7		
82					6.3×5.2	5×8/ 6.3×7		
100	4×5 /5×5	5×5	6.3×5.2		6.3×5.2	5×8/ 6.3×7		
150	5×5 /6.3×5.2	6.3×5.2	6.3×5.2		5×8/6.3×7	6.3×7		
180	5×5 /6.3×5.2	6.3×5 .2	5×8/6.3×7	5×8	5×8/6.3×7			
220	5×5 /6.3×5.2	5×8/ 6.3×7	5×8/6.3×7	5×8/6.3×7	5×8/6.3×7			
270	6.3×5.2/	5×8/ 6.3×7	5×8/6.3×7	5×9/6.3×7	6.3×7			
330	5×8/ 6.3×7	5×8/ 6.3×7	5×8/6.3×7	5×9/6.3×7				
390	5×8/6.3×7	5×8 /6.3×7	5×9/6.3×7	5×9/6.3×7				
470	5×8/6.3×7	5×9/6.3×7	5×9/6.3×7	5×9/6.3×7				
500	5×8/6.3×7	5×9/6.3×7	5×9/6.3×7	5×9/6.3×7				
560	5×8/6.3×7							

Characteristics List

W.V. （V）	Capacitance (μF)	L.C. (μA,2min)	tgδ (120Hz,20℃)	ESR (mΩ,100kHz)	Rated Ripple Current(mA,r.m.s)	Size ΦD×L(mm)	Part Number
2.5	100	300	0.08	30	1670	4×5	RN101M2R5B050□□
	100	300	0.08	30	1970	5×5	RN101M2R5C050□□
	150	300	0.08	30	1970	5×5	RN151M2R5C050□□
	150	300	0.08	30	2200	6.3×5.2	RN151M2R5E052□□
	180	300	0.08	30	1970	5×5	RN181M2R5C050□□
	180	300	0.08	30	2200	6.3×5.2	RN181M2R5E052□□
	220	300	0.08	30	2200	5×5	RN221M2R5C050□□
	220	300	0.08	30	2610	6.3×5.2	RN221M2R5E052□□
	270	300	0.08	25	2610	6.3×5.2	RN271M2R5E052□□
	270	300	0.08	12	2690	6.3×7	RN271M2R5E070□□
	330	300	0.08	15	2690	5×8	RN331M2R5C080□□
	330	300	0.08	12	2690	6.3×7	RN331M2R5E070□□
	390	300	0.08	15	2690	5×8	RN391M2R5C080□□
	390	300	0.08	12	2690	6.3×7	RN391M2R5E070□□
	470	300	0.08	15	2690	5×8	RN471M2R5C080□□
	470	300	0.08	12	2690	6.3×7	RN471M2R5E070□□
	560	300	0.08	15	2690	5×8	RN561M2R5C080□□
	560	300	0.08	12	2690	6.3×7	RN561M2R5E070□□
4	100	300	0.08	30	1970	5×5	RN101M004C050□□
	150	300	0.08	30	2200	6.3×5.2	RN151M004E052□□
	180	300	0.08	30	2200	6.3×5.2	RN181M004E052□□
	220	300	0.08	15	2690	5×8	RN221M004E052□□
	220	300	0.08	12	2690	6.3×7	RN221M004E070□□
	270	300	0.08	15	2690	5×8	RN271M004E052□□
	270	300	0.08	12	2690	6.3×7	RN271M004E070□□
	330	300	0.08	15	2690	5×8	RN331M004C080□□
	330	300	0.08	12	2690	6.3×7	RN331M004E070□□
	390	300	0.08	15	2690	5×8	RN391M004C080□□
	390	300	0.08	12	2690	6.3×7	RN391M004E070□□
	470	300	0.08	12	2690	6.3×7	RN471M004E070□□
6.3	100	300	0.08	25	2390	6.3×5.2	RN101M6R3E052□□
	150	300	0.08	25	2390	6.3×5.2	RN151M6R3E052□□
	180	300	0.08	20	2690	5×8	RN181M6R3C080□□
	180	300	0.08	12	2690	6.3×7	RN181M6R3E070□□
	220	300	0.08	15	3100	5×8	RN221M6R3C080□□
	220	300	0.08	12	3100	6.3×7	RN221M6R3E070□□
	270	300	0.08	15	3100	5×8	RN271M6R3C080□□
	270	300	0.08	12	3100	6.3×7	RN271M6R3E070□□
	330	300	0.08	15	3100	5×8	RN331M6R3C080□□
	330	300	0.08	12	3100	6.3×7	RN331M6R3E070□□
	390	300	0.08	12	3100	5×9	RN391M6R3C090□□
	390	300	0.08	12	3100	6.3×7	RN391M6R3E070□□
	470	300	0.08	12	3100	5×9	RN471M6R3C090□□
	470	300	0.08	12	3100	6.3×7	RN471M6R3E070□□
	500	300	0.08	12	3100	5×9	RN501M6R3C090□□
	500	300	0.08	12	3100	6.3×7	RN501M6R3E070□□
7.5	180	300	0.08	15	2690	5×8	RN181M7R5C080□□
	220	300	0.08	15	3100	5×8	RN221M7R5C080□□
	220	300	0.08	12	3100	6.3×7	RN221M7R5E070□□
	270	300	0.08	12	3100	5×9	RN271M7R5C090□□
	270	300	0.08	12	3100	6.3×7	RN271M7R5E070□□
	330	300	0.08	12	3100	5×9	RN331M7R5C090□□
	330	300	0.08	12	3100	6.3×7	RN331M7R5E070□□

Characteristics List

W.V. (V)	Capacitance (μF)	L.C. (μA,2min)	tgδ (120Hz,20℃)	ESR (mΩ,100kHz)	Rated Ripple Current(mA,r.m.s)	SizeΦD×L(mm)	Part Number
7.5	390	300	0.08	12	3100	5×9	RN391M7R5C090□□
	390	300	0.08	12	3100	6.3×7	RN391M7R5E070□□
	470	300	0.08	12	3100	5×9	RN471M7R5C090□□
	470	300	0.08	12	3100	6.3×7	RN471M7R5E070□□
	500	300	0.08	12	3100	5×9	RN501M7R5C090□□
	500	300	0.08	12	3100	6.3×7	RN501M7R5E070□□
10	10	300	0.08	45	1200	4×5	RN100M010B050□□
	15	300	0.08	45	1200	4×5	RN150M010B050□□
	22	300	0.08	45	1200	4×5	RN220M010B050□□
	33	300	0.08	45	1670	5×5	RN330M010C050□□
	33	300	0.08	30	2200	6.3×5.2	RN330M010E052□□
	39	300	0.08	45	1670	5×5	RN390M010C050□□
	39	300	0.08	30	2200	6.3×5.2	RN390M010E052□□
	47	300	0.08	30	2200	6.3×5.2	RN470M010E052□□
	68	300	0.08	30	2200	6.3×5.2	RN680M010E052□□
	82	300	0.08	30	2200	6.3×5.2	RN820M010E052□□
	100	300	0.08	30	2200	6.3×5.2	RN101M010E052□□
	150	300	0.08	15	2690	5×8	RN151M010C080□□
	150	300	0.08	15	2690	6.3×7	RN151M010E070□□
	180	300	0.08	15	2690	5×8	RN181M010C080□□
	180	300	0.08	15	2690	6.3×7	RN181M010E070□□
	220	300	0.08	15	2690	5×8	RN221M010C080□□
	220	300	0.08	15	2690	6.3×7	RN221M010E070□□
	270	300	0.08	15	2690	6.3×7	RN271M010E070□□
16	10	300	0.08	30	2200	6.3×5.2	RN100M016E052□□
	15	300	0.08	30	2200	6.3×5.2	RN150M016E052□□
	22	300	0.08	30	2200	6.3×5.2	RN220M016E052□□
	33	300	0.08	30	2200	6.3×5.2	RN330M016E052□□
	39	300	0.08	30	2200	6.3×5.2	RN390M016E070□□
	47	300	0.08	30	2200	6.3×5.2	RN470M016E052□□
	47	300	0.08	25	2610	6.3×7	RN470M016E070□□
	68	300	0.08	20	2690	5×8	RN680M016C080□□
	68	300	0.08	20	2690	6.3×7	RN680M016E070□□
	82	300	0.08	20	2690	5×8	RN820M016C080□□
	82	300	0.08	20	2690	6.3×7	RN820M016E070□□
	100	300	0.08	20	2690	5×8	RN101M016C080□□
	100	300	0.08	20	2690	6.3×7	RN101M016E070□□
	150	300	0.08	20	2690	6.3×7	RN151M016E070□□
20	10	300	0.08	30	2200	6.3×5.2	RN100M020E052□□
	15	300	0.08	30	2200	6.3×5.2	RN150M020E052□□
	22	300	0.08	30	2200	6.3×5.2	RN220M020E052□□
	22	300	0.08	25	2670	6.3×7	RN220M020E070□□
	33	300	0.08	25	2670	5×8	RN330M020C080□□
	33	300	0.08	25	2670	6.3×7	RN330M020E070□□
	39	300	0.08	25	2670	5×8	RN390M020C080□□
	39	300	0.08	25	2670	6.3×7	RN390M020E070□□
	47	300	0.08	25	2670	5×8	RN470M020C080□□
	47	300	0.08	25	2670	6.3×7	RN470M020E070□□
25	10	300	0.08	30	2200	6.3×5.2	RN100M025E052□□
	10	300	0.08	25	2670	6.3×7	RN100M025E070□□
	15	300	0.08	30	2200	6.3×5.2	RN150M025E052□□
	15	300	0.08	25	2670	6.3×7	RN150M025E070□□
	22	300	0.08	25	2670	5×8	RN220M025C080□□
	22	300	0.08	25	2670	6.3×7	RN220M025E070□□
	33	300	0.08	25	2670	5×8	RN330M025C080□□
	33	300	0.08	25	2670	6.3×7	RN330M025E070□□
	39	300	0.08	25	2670	6.3×7	RN390M025E070□□

Frequency Coefficient for Ripple Current

Frequency	120Hz≤freq.<1KHz	1KHz≤freq.<10KHz	10KHz≤freq.<100KHz	100KHz≤freq.<300KHz
Coefficient	0.05	0.30	0.70	1.00