

### RK Series

105°C 2000 hours (1000 hours for case diameter 5-8mm)  
 Applications: Communications equipment, switching power supplies  
 and industrial applicatons.



Blue

#### Characteristics

Voltage Range	6.3-350V									
Capacitance Range	0.47-15000uF									
Temperature Range	-55~+105°C (6.3-100V) -40~+105°C (160-350V)									
Capacitance Tolerance	-20 ~ +20% (at 20°C, 120Hz)									
Leakage Current	I=0.01CV or 3uA Whichever is greater (After 2 minutes,6.3-100V) I=0.03CV +10uA (After 2 minutes,160-350V)									
Dissipation Factor (tan δ)	Rated voltage	6.3V	10V	16V	25V	35V	50V	63V	100V	
	tan δ (max.)	0.22	0.20	0.16	0.14	0.12	0.10	0.10	0.08	
	Rated voltage	160V	200V	250V	350V	(at 20°C, 120Hz)				
	tan δ (max.)	0.20	0.20	0.20	0.25					
	For capacitance > 1000uF, add 0.02 for every 1000uF.									
Low Temperature Stability	Impedance ratio at 120Hz									
	Rated voltage	6.3V	10V	16V	25V	35V	50V	63V	100V	
	Z-25°C/Z20°C	4	3	2	2	2	2	2	2	
	Z-40°C/Z20°C	10	8	6	4	3	3	3	3	
	Rated voltage	160V	200V	250V	350V					
	Z-25°C/Z20°C	4	8	8	20					
Load Life	After 2000 hours application of rated voltage at 105°C (in case of D=5-8, after 1000 hours applied) the capacitor shall meet the following characteristics									
	Capacitance change	Within ±20% of initial value								
	D.F. (tan δ)	200% or less of initial spesified								
	Leakage current	Initial specified value or less								

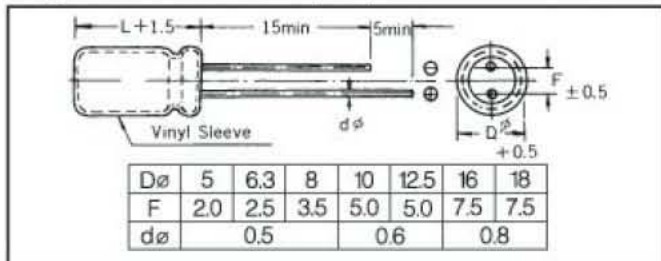
Maximum Impedance (Ω) 20°C 120Hz)

Maximum Ripple Current (mA rms 105°C 120Hz)

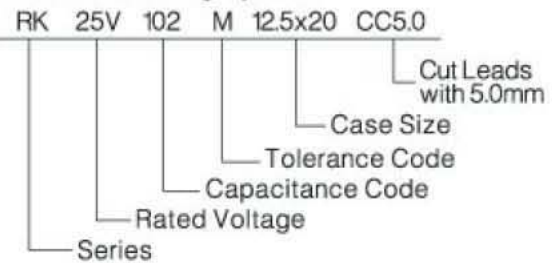
uF	6.3		10		16		25		35		50		63		100	
	ESR	IR	ESR	IR	ESR	IR	ESR	IR	ESR	IR	ESR	IR	ESR	IR	ESR	IR
0.47											52.0	9			46.0	10
1											26.0	15			23.0	17
2.2											13.0	20			11.0	26
3.3											7.80	28			7.20	38
4.7											5.10	35			4.90	43
10									2.80	58	2.60	62	2.40	64	2.10	79
22							2.50	75	2.40	76	2.00	85	1.60	105	1.40	126
33					2.40	86	2.30	89	2.00	96	1.10	116	0.92	140	0.86	180
47			2.20	92	1.90	100	1.70	110	1.10	128	0.90	150	0.76	190	0.68	240
100	1.90	128	1.80	136	0.87	170	0.68	190	0.60	230	0.53	250	0.41	300	0.30	440
220	0.85	220	0.67	238	0.51	290	0.46	320	0.31	380	0.28	440	0.25	490	0.18	750
330	0.60	260	0.49	310	0.42	340	0.29	400	0.25	480	0.21	590	0.19	770	0.14	900
470	0.49	340	0.40	390	0.28	470	0.22	530	0.19	660	0.15	800	0.13	950	0.11	1170
1000	0.25	570	0.21	640	0.17	800	0.12	990	0.074	1190	0.071	1390	0.066	1580		
2200	0.10	1010	0.095	1100	0.076	1270	0.063	1510	0.050	1840	0.048	2070				
3300	0.095	1180	0.087	1390	0.063	1590	0.050	1890	0.042	2180						
4700	0.066	1560	0.062	1760	0.050	2000	0.043	2240								
6800	0.059	1800	0.052	2090	0.042	2400										
10000	0.050	2130	0.043	2450												
15000	0.05	2560														

uF \ WV	160		200		250		350	
	E.S.R.	I.R.	E.S.R.	I.R.	E.S.R.	I.R.	E.S.R.	I.R.
1	153.60	18	153.60	153.6	153.60	18	315.70	19
2.2	74.30	27	74.30	28	74.30	32	145.80	32
3.3	47.50	37	47.50	37	47.50	37	97.30	37
4.7	33.90	43	33.90	48	33.90	48	69.80	48
10	15.00	73	15.00	73	15.00	79	30.90	79
22	7.10	114	7.10	125	7.10	135	14.10	125
33	4.90	165	4.90	186	4.90	186	9.90	175
47	3.10	215	3.10	215	3.10	236	6.60	225
100	1.52	390	1.52	410	1.52	430		
220	0.75	660						

Diagram of Dimensions (mm)



Part Numbering System



Case Size of Standard Products

uF \ WV	DxL (mm)							
	6.3	10	16	25	35	50	63	100
0.47						5x11		5x11
1						5x11		5x11
2.2						5x11		5x11
3.3						5x11		5x11
4.7						5x11		5x11
10					5x11	5x11		5x11
22				5x11	5x11	6.3x11	6.3x11	8x11.5
33			5x11	5x11	5x11	6.3x11	8x11.5	10x12.5
47		5x11	5x11	6.3x11	6.3x11	8x11.5	8x11.5	10x16
100	5x11	5x11	6.3x11	6.3x11	8x11.5	10x12.5	10x16	12.5x20
220	6.3x11	6.3x11	8x11.5	8x11.5	10x12.5	10x16	10x20	16x25
330	8x11.5	8x11.5	8x11.5	10x12.5	10x16	10x20	12.5x20	16x31.5
470	8x11.5	8x11.5	10x12.5	10x16	10x20	12.5x20	12.5x25	16x35.5
1000	10x12.5	10x16	10x20	12.5x20	12.5x25	16x25	16x31.5	
2200	10x20	10x20	12.5x20	16x25	16x31.5	18x35.5		
3300	12.5x20	12.5x25	16x25	16x31.5	18x31.5			
4700	16x25	16x25	16x31.5	18x31.5				
6800	16x25	16x31.5	16x35.5					
10000	16x35.5	16x35.5						
15000	18x35.5							

uF \ WV	160	200	250	350
	1	6.3x11	6.3x11	6.3x11
2.2	6.3x11	8x11.5	8x11.5	10x12.5
3.3	8x11.5	10x12.5	10x12.5	10x16
4.7	8x11.5	10x12.5	10x16	10x16
10	10x12.5	10x16	10x16	10x20
22	10x20	12.5x20	12.5x20	12.5x25
33	12.5x20	12.5x20	12.5x25	16x25
47	12.5x20	16x25	16x25	16x31.5
100	16x31.5	16x35.5	18x31.5	
220	18x35.5			