

# RF Series

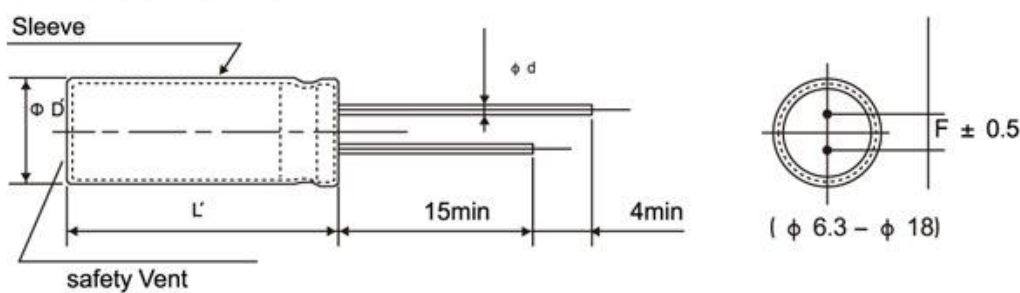


- Longer life, better performance, cost effective
- Life time: +105 °C 6,000 hours
- Suitable for electronic ballast; electronic energy saving lamp
- RoHS Compliant

## ● SPECIFICATIONS

Items	Characteristics							
Temperature Range	-25 ~ +105 °C (160 ~ 400Vdc)			-25 ~ +105 °C (450Vdc)				
Rated Voltage Range	160 to 450Vdc							
Capacitance Tolerance	± 20%(M) (at 20 °C ,120Hz)							
Leakage Current	160 ~ 400Vdc	450Vdc		I:leakage current( μ A),C:Nominal capacitance ( μ F) V:Rated voltage(V)				
	$1 \leq 0.02CV + 10 \mu A$	$1 \leq 0.03CV + 10 \mu A$		(20 °C ,2minutes)				
Dissipation Factor (tan δ )	Rated voltage(Vdc)	160	200	250	350	400	450	
	tan δ (Max)	0.15	0.15	0.15	0.20	0.20	0.20	
Temperature Characteristics (Max.Impedance Ratio)	Rate Voltage(Vcd)	160	200	250	350	400	450	
	Z(-25 °C )/Z(+20 °C )	3	3	3	5	5	6	
	Z(-40 °C )/Z(+20 °C )	6	6	6	6	6	-	
Endurance	After application of DC voltage with rated ripple current (the voltage peak is not more than rated voltage) at 105 °C 6,000 hours, measuring the parameters when the capacitors are restored to 20 °C ,the capacitors shall meet the requirements as below							
	Capacitance change	≤ ± 20% of the initial value						
	D.F. (tan δ )	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						
Shelf Life	The following specification shall be satisfied when the capacitor are restored to 20 °C after exposing them for 1,000hours at 105 °C without voltage application.							
	Capacitance change	≤ ± 20% of the initial value						
	D.F. (tan δ )	≤ 200% of the initial specified value						
	Leakage current	≤ 200% of the initial specified value						

## ● DIMENSIONS[MM]



Φ D	6.3	8	10	12.5	16	18
Φ d	0.5	0.5   0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5
Φ D'	Φ D+0.5max					
L'	L+2max					

## ● RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

WV (Vdc)	Freq(Hz)			
	120	1k	10k	100k
160-450	0.50	0.80	0.90	1.00

# RF Series

## STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size Φ DxL(mm)	tan δ	Ripple current (mA rms/105 °C, 100kHz)
160V(2C)	1.0	6.3 × 12	0.15	40
	1.5	6.3 × 12	0.15	50
	1.8	6.3 × 12	0.15	56
	2.2	6.3 × 12	0.15	60
	2.8	6.3 × 12	0.15	68
	3.3	6.3 × 12	0.15	72
	4.7	8 × 12	0.15	80
	5.6	8 × 12	0.15	84
	6.8	8 × 12	0.15	96
	8.2	8 × 12	0.15	110
	10	8 × 12	0.15	206
	15	8 × 16	0.15	250
	22	8 × 20	0.15	400
	33	10 × 20	0.15	450
	47	10 × 20	0.15	500
	68	12.5 × 20	0.15	630
	100	12.5 × 25	0.15	720
150	16 × 25	0.15	850	
200V(2D)	1.0	6.3 × 12	0.15	42
	1.5	6.3 × 12	0.15	54
	1.8	6.3 × 12	0.15	60
	2.2	6.3 × 12	0.15	68
	2.8	6.3 × 12	0.15	71
	3.3	6.3 × 12	0.15	80
	4.7	8 × 12	0.15	95
	5.6	8 × 12	0.15	98
	6.8	8 × 12	0.15	110
	8.2	8 × 16	0.15	120
	10	8 × 16	0.15	210
	15	8 × 20	0.15	268
	22	10 × 16	0.15	400
	33	10 × 20	0.15	450
	47	12.5 × 20	0.15	610
	68	12.5 × 25	0.15	700
	100	16 × 25	0.15	800
150	16 × 30	0.15	900	
250V(2E)	1.0	6.3 × 12	0.15	46
	1.5	6.3 × 12	0.15	58
	1.8	6.3 × 12	0.15	63
	2.2	6.3 × 12	0.15	75
	2.8	6.3 × 12	0.15	78
	3.3	6.3 × 12	0.15	83
	4.7	8 × 12	0.15	102
	6.6	8 × 12	0.15	105
	6.8	8 × 16	0.15	115
	8.2	8 × 16	0.15	120
	10	8 × 16	0.15	210
	15	8 × 20	0.15	310
	22	10 × 16	0.15	400
	33	12.5 × 20	0.15	530
	47	12.5 × 20	0.15	627
	68	16 × 25	0.15	720
	100	16 × 30	0.15	880
150	16 × 35	0.15	1030	

WV (Vdc)	Cap (μF)	Size Φ DxL(mm)	tan δ	Ripple current (mA rms/105 °C, 100kHz)
350V(2V)	1.0	6.3 × 12	0.20	65
	1.5	6.3 × 12	0.20	72
	1.8	6.3 × 12	0.20	80
	2.2	6.3 × 12	0.20	90
	2.8	8 × 12	0.20	106
	3.3	8 × 12	0.20	110
	4.7	8 × 16	0.20	120
	5.6	8 × 16	0.20	150
	6.8	8 × 20	0.20	170
	8.2	8 × 20	0.20	189
	10	8 × 20	0.20	230
	15	10 × 20	0.20	310
	22	12.5 × 20	0.20	430
	33	12.5 × 25	0.20	535
	47	16 × 20	0.20	650
	68	18 × 20	0.20	726
	82	18 × 25	0.20	910
400V(2G)	1.0	6.3 × 12	0.20	75
	1.5	8 × 12	0.20	80
	1.8	8 × 12	0.20	90
	2.2	8 × 12	0.20	105
	2.8	8 × 16	0.20	109
	3.3	8 × 16	0.20	112
	4.7	6.3 × 9	0.20	120
	5.6	8 × 20	0.20	155
	6.8	8 × 20	0.20	170
	8.2	10 × 20	0.20	230
	10	10 × 20	0.20	280
	12	10 × 20	0.20	290
	15	12.5 × 20	0.20	320
	22	12.5 × 25	0.20	450
	33	16 × 25	0.20	550
	47	16 × 30	0.20	670
	56	16 × 35	0.20	720
68	18 × 30	0.20	800	
100	18 × 40	0.20	950	
450V(2W)	1.0	8 × 12	0.20	72
	1.5	8 × 12	0.20	75
	1.8	8 × 12	0.20	90
	2.2	8 × 16	0.20	115
	2.8	8 × 16	0.20	120
	3.3	8 × 16	0.20	128
	4.7	8 × 20	0.20	140
	5.6	10 × 16	0.20	158
	6.8	10 × 20	0.20	200
	8.2	10 × 20	0.20	230
	10	10 × 20	0.20	250
	15	12.5 × 20	0.20	350
	22	12.5 × 25	0.20	450
	33	16 × 25	0.20	550
	47	16 × 35	0.20	700
	68	18 × 30	0.20	810
	100	18 × 40	0.20	950