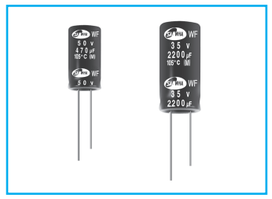
WF High ripple current, Extremely Low Impedance Series

Solvent Proof



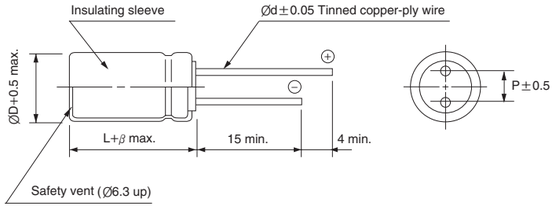
WL ⇨ WF
Long life

- Operating temperature range of −40 ~ +105˚C
- Extremely low impedance at high frequency
- High reliability withstanding 10000 hours load life at 105˚C (5000 / 7000 hours for smaller case size as specified below)
- Complied to the RoHS directive

Item	Characteristics
Operating temperature range	-40 ~ +105˚C
Leakage current max.	I = 0.03CV or 3μA whichever is greater (after 2 minutes)
Capacitance tolerance	±20% at 120Hz, 20˚C
Dissipation factor max. (at 120Hz, 20˚C)	WV 6.3 10 16 25 35 50 63 100 tanδ 0.22 0.19 0.16 0.14 0.12 0.10 0.09 0.08
Low temperature characteristics (Impedance ratio at 120Hz)	WV 6.3 10 16 25 ~ 100 Z-40˚C/Z+20˚C 8 6 4 3
Load life (after application of the rated voltage for 10000 hours at 105˚C)	Leakage current: Less than specified value Capacitance change: Within ±25% of initial value tanδ: Less than 200% of specified value ØD: ØD = 5, 6.3 / ØD = 8, 10 / ØD ≧ 12.5 Life time: 5000 hours / 7000 hours / 10000 hours
Shelf life (at 105˚C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value.

DRAWING

Unit : mm



ØD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
β	1.5			2.0			

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

μF \ Frequency(Hz)	120	1k	10k	100k≦
~ 33	0.40	0.65	0.82	1.00
39 ~ 270	0.50	0.70	0.84	1.00
330 ~ 680	0.55	0.75	0.86	1.00
820 ~ 1800	0.60	0.80	0.88	1.00
2200 ~ 15000	0.70	0.85	0.90	1.00

SAMWHA

WF series

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV \ Item / μF	6.3			10			16			25		
	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz
33										5×11	0.90	150
47							5×11	0.90	150	5×11	0.90	150
100	5×11	0.90	150	5×11	0.90	150	6.3×11	0.40	250	6.3×11	0.40	250
220	6.3×11	0.40	250	6.3×11	0.40	250	8×11.5	0.25	400	8×11.5	0.25	400
330	6.3×11	0.40	250	8×11.5	0.25	400	8×11.5	0.25	400	10×12.5	0.16	580
470	8×11.5	0.25	400	8×11.5	0.25	400	10×12.5	0.16	580	10×16	0.120	770
1000	10×12.5	0.16	580	10×16	0.120	770	10×20	0.078	1050	12.5×20	0.062	1300
2200	12.5×20	0.062	1300	12.5×20	0.062	1300	12.5×25	0.048	1650	16×25	0.034	1850
3300	12.5×20	0.062	1300	12.5×25	0.048	1650	16×25	0.034	1850	16×31.5	0.029	2000
4700	16×25	0.034	1850	16×25	0.034	1850	16×31.5	0.029	2000	18×35.5	0.025	2200
6800	16×25	0.034	1850	16×31.5	0.029	2000	18×35.5	0.025	2200			
10000	16×31.5	0.029	2000	18×35.5	0.025	2200						
15000	18×35.5	0.025	2200									

WV \ Item / μF	35			50			63			100		
	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20˚C 100kHz	Ripple current (mA rms) 105˚C 100kHz
0.47				5×11	5.5	17				5×11	6.0	15
1.0				5×11	4.0	30				5×11	4.5	20
2.2				5×11	2.5	43				5×11	3.0	30
3.3				5×11	2.2	53				5×11	2.7	40
4.7				5×11	1.9	88				5×11	2.5	65
10				5×11	1.5	100	5×11	2.3	87	6.3×11	1.2	140
22				5×11	0.9	150	6.3×11	1.30	140	8×11.5	0.63	160
33	5×11	0.90	150	6.3×11	0.40	250	6.3×11	1.20	140	10×12.5	0.43	230
47	6.3×11	0.40	250	6.3×11	0.40	250	8×11.5	0.63	210	10×16	0.31	290
100	8×11.5	0.25	400	8×11.5	0.25	400	10×12.5	0.43	300	12.5×20	0.16	430
220	10×12.5	0.16	580	10×16	0.12	770	10×25	0.210	520	16×25	0.073	900
330	10×16	0.120	770	10×20	0.08	1050	12.5×20	0.160	660	16×25	0.073	900
470	10×20	0.078	1050	12.5×20	0.062	1300	12.5×25	0.120	750			
1000	12.5×25	0.048	1650	16×25	0.034	1850	16×31.5	0.054	1390			
2200	16×31.5	0.029	2000	18×35.5	0.025	2200						
3300	18×35.5	0.025	2200									