SPF Series

Features

By using Functional Polymer cathode,Frequency & Temp. Characteristics are greatly improved.

- Low ESR at a high frequency range.
- High ripple current capability.
- Long life and high reliability.(Reliability:0.05%/10000Hrs).

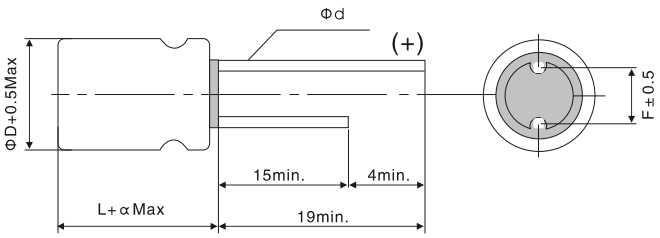
Applications

- Switching Power supply and DC/DC Converter
- Power Supplies of CPU(VRM etc.)

Specificatilons

Item	Characteristics
Operating Temperature Range	–55℃~+105℃
Rated Voltage Range	6.3V ~ 25V
Capacitance Tolerance	M (± 20%) (20℃, 120Hz)
Leakage Current	Not more than the values in Table 1
Dissipation Factor	Not more than the values in Table 1
ESR	Not more than the values in Table 1
Load Life *	After 2000 hours' application of rated voltage at 105℃, the capacitors shall meet the following requirement:
	Capacitance change: Within ± 20% of the value before test
	Dissipation factor: Not to exceed 150% of the value specified
	Leakage current: Not to exceed the value specified
Moisture Resistance (1000h,Stored at 60℃,90 to 95%R.H)	Capacitance change: Within ± 20% of the value before test
	Dissipation factor: Not to exceed 150% of the value specified
	Leakage current: Not to exceed the value specified

Dimensions



(mm)

ΦD×L	Φd	F	α
6.3×7	0.45	2.5	1.0
6.3×10	0.6	2.5	1.0
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

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Table 1: SPF Series Characteristics List

WV	μF	ΦD(mm)	L(mm)	ESR(mΩ)max at 20℃ 100kHz	Ripple current (mΩ)max at 105℃ 100kHz	Dissipation factor at 20℃ 120Hz	Leakage current (μA)max after 2 minutes
4.0	560	8	11.5	14	4080	0.08	224
	820	10	12.5	12	5040	0.08	328
	1200	10	12.5	12	5040	0.15	960
6.3	47	6.3	7	60	1430	0.07	5.9
	150	8	11.5	30	2780	0.07	18.9
	220	8	11.5	30	3000	0.07	27.7
	330	10	12.5	25	3500	0.08	41.6
	390	8	11.5	16	3810	0.08	245.7
	680	10	12.5	13	4840	0.12	428.4
	820	10	12.5	12	5040	0.12	516.6
	1000	10	12.5	12	5040	0.07	630
10	33	6.3	7	70	1370	0.07	6.6
	68	6.3	10	50	2000	0.07	13.6
	100	8	11.5	30	2670	0.07	20
	220	10	12.5	27	3370	0.07	44
	470	10	12.5	15	4510	0.08	470
16	22	6.3	7	70	1350	0.06	7.1
	33	6.3	7	70	1370	0.06	10.6
	47	6.3	10	60	1830	0.06	15.1
	68	8	11.5	36	2700	0.06	21.8
	100	8	11.5	30	2740	0.06	32
	150	10	12.5	28	3260	0.06	48
	330	10	12.5	17	4580	0.08	792

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WV	μF	ΦD(mm)	L(mm)	ESR(mΩ)max at 20℃ 100kHz	Ripple current (mΩ)max at 105℃ 100kHz	Dissipation factor at 20℃ 120Hz	Leakage current (μA)max after 2 minutes
20	15	6.3	7	90	1200	0.06	6.0
	22	6.3	7	70	1300	0.06	8.8
	33	6.3	10	70	1710	0.06	13.2
	47	8	11.5	40	2450	0.06	18.8
	68	8	11.5	36	2600	0.06	27.2
	100	10	12.5	30	3210	0.06	40
25	10	6.3	7	90	1150	0.06	5.0
	15	6.3	10	70	1650	0.06	7.5
	22	8	11.5	40	2330	0.06	11
	33	10	12.5	35	2900	0.06	16.5
	47	10	12.5	35	2980	0.06	23.5