ORGANIC SEMICONDUCTOR SOLID ELECTROLYTIC CAPACITORS

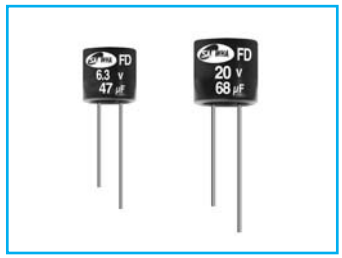
UPGRADE

FD

Lead type, High CV
Series

· Large capacitance and low ESR compared with FX series
· High CV value
· Suitable for high frequency switching power supplies, computer, audio equipment etc.

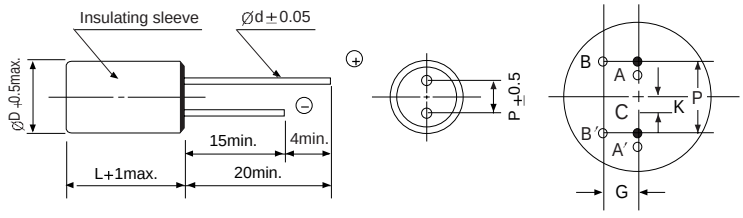
APRO-CAP



Item	Characteristics
Operating temperature range	-55 ~ +105℃
Leakage current max.	Not more than the values in Table 1
Capacitance tolerance	±20% at 120Hz, 20℃
Dissipation factor max. (at 120Hz, 20℃)	Not more than the values in Table 1
ESR	Not more than the values in Table 1
Low temperature characteristics (Impedance ratio at 100kHz)	Z-55℃ / Z+20℃: 0.75 ~ 1.25; Z+105℃ / Z+20℃: 0.75 ~ 1.25
Load life* (after application of the rated voltage for 2000 hours at 105℃)	Leakage current: Less than specified value; Capacitance change: Within ±20% of initial value; tanδ: Less than 150% of specified value
Moisture resistance (after leaving capacitors under no load at 60℃ for 1000 hours 90~95% R.H.)	Leakage current: Less than specified value; Capacitance change: Within ±20% of initial value; tanδ: Less than 200% of specified value

* Note: 1. To use an APRO-CAP when the operating temperature exceeds 85℃ on a component with a rated voltage of 25V, reduce the voltage by 0.25V for every degree (1℃) relative to the value 85℃ (25V).
2. If any doubt arises, measure the current after applying voltage (voltage treatment) for 30 minutes at 105℃. The rated voltage should be applied for 6.3 to 20WV, while a temperature reduction voltage should be applied for 25WV.

DRAWING (Unit : mm)



C: The central point of A-A′

PART NUMBER SYSTEM (See Page 50)

ØD×L	Code	P	Ød	K max.	G max.
6.3×9.8	6L09H	2.5±0.5	0.5	0.5	0.5
8×10.5	0810M	3.5±0.5	0.6	0.8	0.8
10×10.5	1010M	5.0±0.5	0.6	0.8	0.8
10×20	10020	5.0±0.5	0.8	0.8	0.8
12.5×22	12022	5.0±1.0	0.8	0.8	0.8

DIMENSIONS

μF \ WV	2	4	6.3	10	16	20	25
33							8×10.5
56							10×10.5
68						6.3×9.8	
100					6.3×9.8		
120						8×10.5	
150				6.3×9.8			
180					8×10.5	10×10.5	
220			8×10.5				
270		6.3×9.8		8×10.5	10×10.5		
470				10×10.5			
560		8×10.5					
680			10×10.5				
820		10×10.5					
1000	10×10.5						
1500		10×20					
1800	10×20						
2200		12.5×22					

FD Series

● Table1. FD Series Characteristics List

WV	uF	øD(mm)	L(mm)	ESR(mΩ)max. at 20°C 100~300kHz	Ripple current (mA rms)at 45°C 100kHz	Dissipation factor at 20°C 120Hz	Leakage Current (uA)(max.) after 2minutes
2	1000	10	10.5	11	5260	0.08	400
2	1800	10	20	8	6500	0.10	720
4	270	6.3	9.8	20	3160	0.08	108
4	560	8	10.5	14	4080	0.08	224
4	820	10	10.5	12	5040	0.08	328
4	1500	10	20	8	6500	0.10	600
4	2200	12.5	22	10	7100	0.12	880
6.3	220	8	10.5	30	3000	0.07	69.3
6.3	680	10	10.5	13	4840	0.08	428.4
10	150	6.3	9.8	25	2820	0.08	150
10	270	8	10.5	18	3600	0.08	270
10	470	10	10.5	15	4510	0.08	470
16	100	6.3	9.8	25	2820	0.08	160
16	180	8	10.5	20	3410	0.08	288
16	270	10	10.5	18	4400	0.08	432
20	68	6.3	9.8	30	2580	0.08	136
20	120	8	10.5	24	3110	0.08	240
20	180	10	10.5	20	4280	0.08	360
25	33	8	10.5	30	2780	0.08	82.5
25	56	10	10.5	25	3260	0.08	140