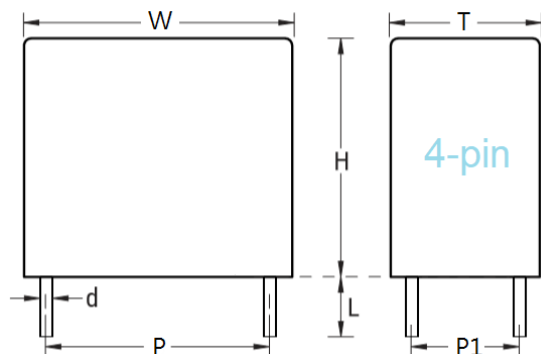


■ 外形圖 Outline Drawing (For Example)



■ 典型應用 Typical Applications

適用於小功率交流濾波器，即 UPS，
帶 LCL 濾波器的太陽能光伏直流/交流逆變器

Suitable for small power AC filter, i.e. UPS,
Solar Photovoltaic DC/AC inverter with LCL filter

■ 特徵 Features

金屬化聚丙烯膜結構
採用矩形塑料盒型設計
塑料外殼封裝 (UL94V-0) · 環氧樹脂密封
使用 2 或 4 根鍍錫引線

Metalized polypropylene film membrane structure
with a rectangular, plastic box-type design,
Plastic shell package (UL94v-0), Epoxy resin sealing
and uses 2 or 4 tinned wires.

■ 規格 Specifications

參考標準 Reference Standard	GB/T 17702 (IEC 61071)		
氣候類別 Climatic Category	40/85/56		
最大允許外殼溫度 (T_{case})	-40°C~105°C		
Maximum permissible case temperature (T_{case})	85°C (85°C~105°C: Decreasing factor 1.5% per °C for U_{NAC})		
應用 Application	AC Filtering 250VAC rating recommended ONLY for controlled output filtering		
容值範圍 Capacitance Range	1μF ~ 40μF		
額定均方根電壓 Rated RMS Voltage (U_{RMS})	250 Vac	310 Vac	350 Vac
額定交流電壓 Rated AC Voltage (U_N) 50/60Hz	350 Vac	425 Vac	480 Vac
最大連續直流電壓 Continuous DC voltage (U_{NDC})	475 Vdc	560 Vdc	600 Vdc
容值公差 Capacitance Tolerance	±5%(J) 、 ±10%(K)		
引線 Leads	Tinned wires - standard lead wire length 6 (+1/-2) mm		
包裝 Packaging	Packed in cardboard trays with protection for the terminals		

Metallized Polypropylene Film Capacitor (For AC Filter)

■ 電氣特性 Electrical Characteristics

端子間耐受電壓 Withstanding voltage (V _{TT})		1.5 x U _{NDC} for 10 s, cut off current 10 mA		
絕緣電阻 Insulation Resistance (IR x C _N)		≥ 3 000 s (25°C, 100Vdc, 60 seconds)		
浪湧電壓 Surge Voltage		1.5 * V _{NDC} for maximum 10 times in lifetime at T = 25°C ±5°C		
過電壓 Over voltage	1.1 x U _N	有負荷時間的 30%	一天內最長持續時間 Maximum duration within one day	30% of on-load duration
	1.15 x U _N	30 分鐘		30 minutes
	1.2 x U _N	5 分鐘		5 minutes
	1.3 x U _N	1 分鐘		1 minutes
自感 Self Inductance (L _S)		< 1nH per mm of lead spacing)		
最大峰值電流 Maximum peak current ↑ (A)		↑ = C x dV/dt		

■ 產品代碼構成 Product code system (For Example)

SMCA	G	505	J	0310	A	2	28	06
型號 Type	內部使用 Internal use	容值 Capacitance	公差 Tolerance	額定電壓 Rated Voltage	交直流 AC/DC	引線類型 Lead form	引線間距 Lead Pitch	引線長度 Lead Length
SMCA=	--	505	J=±5%	0250=250V	A=AC	2=2 pins	28=27.5mm	06=6.0mm
AC Filter		=5,000nF	K=±10%	0310=310V		4=4 pins P1=10.2mm	38=37.5mm	08=8.0mm
Capacitor		=5μF		0350=350V		5=4 pins P1=12.7mm	53=52.5mm	DP=
(Boxed)						6=4 pins P1=20.3mm		Flat quick-connectors

■ 標示 Mark (For Example)

Marking



1. Manufacturer's name: WINDAY	2. SMCA: Type Construction
3. Capacitance: 10μF	4. Capacitors Tolerance: ±5%
5. Rated Voltage: 350VAC	6. Climatic Category: 40/85/56
7. Self-Healing in nature such as SH	8. Date Code : 2138, Years = 2021, Weeks = 38

■ 尺寸 Dimensions (mm)

U _{RMS} 250Vac / U _N 350Vac / U _{NDC} 475Vdc												
Cap. μF	W _{±1.0}	H _{±1.0}	T _{±1.0}	P _{±1.0}	P1 _{±0.5}	Pins	d _{±0.05}	ESR @10kHz	dV/dt (V/us)	I _{PEAK} (A)	I _{RMS} @10kHz (A)	Part number
								(mΩ)				
1.0	32	18	9	27.5	--	2	1.0	19.3	90	90	3	SMCA_105+0250A22806
1.5	32	20	11	27.5	--	2	1.0	12.9	90	135	4	SMCA_155+0250A22806
2.0	32	22	13	27.5	--	2	1.0	9.6	90	180	5	SMCA_205+0250A22806
2.2	32	22	13	27.5	--	2	1.0	8.8	90	198	6	SMCA_225+0250A22806
2.5	32	22	13	27.5	--	2	1.0	7.7	90	225	6	SMCA_255+0250A22806
3.0	32	24.5	15	27.5	--	2	1.0	6.4	90	270	7	SMCA_305+0250A22806
3.3	32	24.5	15	27.5	--	2	1.0	5.8	90	297	8	SMCA_335+0250A22806
3.5	32	28	14	27.5	--	2	1.0	5.5	90	315	8	SMCA_355+0250A22806
4.0	32	33	18	27.5	--	2	1.2	4.8	90	360	10	SMCA_405+0250A22806
4.5	32	33	18	27.5	--	2	1.2	4.3	90	405	10	SMCA_455+0250A22806
5.0	32	33	18	27.5	--	2	1.2	3.9	90	450	11	SMCA_505+0250A22806
6.8	32	37	22	27.5	--	2	1.2	2.8	90	612	14	SMCA_685+0250A22806
4.7	41	26	15	37.5	--	2	1.2	7.8	60	282	7	SMCA_475+0250A23806
5.0	42	28	14	37.5	--	2	1.2	7.3	60	300	8	SMCA_505+0250A23806
6.0	41	32	17	37.5	--	2	1.2	6.1	60	360	9	SMCA_605+0250A23806
6.5	41	32	17	37.5	--	2	1.2	5.6	60	390	10	SMCA_655+0250A23806
6.8	41	33.5	18.5	37.5	--	2	1.2	5.4	60	408	10	SMCA_685+0250A23806
7.5	41	33.5	18.5	37.5	--	2	1.2	4.9	60	450	11	SMCA_755+0250A23806
8.0	41	37	22	37.5	--	2	1.2	4.6	60	480	12	SMCA_805+0250A23806
10	41	37	22	37.5	--	2	1.2	3.7	60	600	13	SMCA_106+0250A23806
12	41	41	26	37.5	--	2	1.2	3.0	60	720	14	SMCA_126+0250A23806
15	41	41	26	37.5	--	2	1.2	2.4	60	900	14	SMCA_156+0250A23806
18	41	43	28	37.5	--	2	1.2	2.0	60	1080	14	SMCA_186+0250A23806
20	42	45	30	37.5	--	2	1.2	1.8	60	1200	14	SMCA_206+0250A23806
22	42	45	30	37.5	--	2	1.2	1.7	60	1320	14	SMCA_226+0250A23806
25	57	43.5	29.5	52.5	20.3	4	1.2	3.3	30	750	18	SMCA_256+0250A65306
30	57	43.5	29.5	52.5	20.3	4	1.2	2.7	30	900	20	SMCA_306+0250A65306
35	57	50	35	52.5	20.3	4	1.2	2.3	30	1050	23	SMCA_356+0250A65306
40	57	50	35	52.5	20.3	4	1.2	2.0	30	1200	25	SMCA_406+0250A65306

■ 尺寸 Dimensions (mm)

U _{RMS} 310Vac / U _N 425Vac / U _{NDC} 560Vdc												
Cap. μF	W _{±1.0}	H _{±1.0}	T _{±1.0}	P _{±1.0}	P1 _{±0.5}	Pins	d _{±0.05}	ESR @10kHz	dV/dt (V/us)	I _{PEAK} (A)	I _{RMS} @10kHz (A)	Part number
								(mΩ)				
1.0	32	20	11	27.5	--	2	1.0	15.9	100	100	4	SMCA_105+0310A22806
1.5	32	22	13	27.5	--	2	1.0	10.6	100	150	5	SMCA_155+0310A22806
2.0	32	24.5	15	27.5	--	2	1.0	8.9	100	200	6	SMCA_205+0310A22806
2.2	32	24.5	15	27.5	--	2	1.0	8.0	100	220	7	SMCA_225+0310A22806
2.5	32	28	14	27.5	--	2	1.0	7.2	100	250	8	SMCA_255+0310A22806
3.0	32	33	18	27.5	--	2	1.2	6.4	100	300	9	SMCA_305+0310A22806
3.3	32	33	18	27.5	--	2	1.2	5.3	100	330	10	SMCA_335+0310A22806
3.5	32	33	18	27.5	--	2	1.2	4.8	100	350	10	SMCA_355+0310A22806
4.0	32	33	18	27.5	--	2	1.2	4.6	100	400	11	SMCA_405+0310A22806
4.7	32	37	22	27.5	--	2	1.2	4.0	100	470	13	SMCA_475+0310A22806
5.0	32	37	22	27.5	--	2	1.2	3.4	100	500	13	SMCA_505+0310A22806
6.8	32	37	22	27.5	--	2	1.2	3.2	100	680	14	SMCA_685+0310A22806
3.0	41	26	15	37.5	--	2	1.2	10.1	70	210	6	SMCA_305+0310A23806
3.3	41	26	15	37.5	--	2	1.2	9.2	70	231	7	SMCA_335+0310A23806
3.5	42	28	14	37.5	--	2	1.2	8.6	70	245	7	SMCA_355+0310A23806
4.0	41	32	17	37.5	--	2	1.2	7.6	70	280	8	SMCA_405+0310A23806
4.5	41	32	17	37.5	--	2	1.2	6.7	70	315	9	SMCA_455+0310A23806
4.7	41	32	17	37.5	--	2	1.2	6.4	70	329	9	SMCA_475+0310A23806
5.0	41	33.5	18.5	37.5	--	2	1.2	6.0	70	350	10	SMCA_505+0310A23806
6.0	41	33.5	18.5	37.5	--	2	1.2	5.0	70	420	11	SMCA_605+0310A23806
6.8	41	37	22	37.5	--	2	1.2	4.4	70	476	12	SMCA_685+0310A23806
8.0	41	37	22	37.5	--	2	1.2	3.8	70	560	13	SMCA_805+0310A23806
10	41	41	26	37.5	--	2	1.2	3.0	70	700	14	SMCA_106+0310A23806
12	41	43	28	37.5	--	2	1.2	2.5	70	840	14	SMCA_126+0310A23806
15	42	45	30	37.5	--	2	1.2	2.1	70	1050	14	SMCA_156+0310A23806
18	57	43.5	29.5	52.5	20.3	4	1.2	3.8	40	720	17	SMCA_186+0310A65306
20	57	43.5	29.5	52.5	20.3	4	1.2	3.4	40	800	18	SMCA_206+0310A65306
22	57	43.5	29.5	52.5	20.3	4	1.2	3.1	40	880	20	SMCA_226+0310A65306
25	57	50	35	52.5	20.3	4	1.2	2.7	40	1000	21	SMCA_256+0310A65306
28	57	50	35	52.5	20.3	4	1.2	2.4	40	1120	23	SMCA_286+0310A65306

■ 尺寸 Dimensions (mm)

U _{RMS} 350Vac / U _N 480Vac / U _{NDC} 600Vdc												
Cap. μF	W _{±1.0}	H _{±1.0}	T _{±1.0}	P _{±1.0}	P1 _{±0.5}	Pins	d _{±0.05}	ESR @10kHz	dV/dt	I _{PEAK}	I _{RMS} @10kHz	Part number
								(mΩ)	(V/us)	(A)	(A)	
0.33	32	18	9	27.5	--	2	0.8	53.9	50	16.5	1.6	SMCA_334+0350A22806
0.39	32	18	9	27.5	--	2	0.8	46	50	19.5	1.7	SMCA_394+0350A22806
0.47	32	18	9	27.5	--	2	0.8	38.6	50	23.5	1.9	SMCA_474+0350A22806
0.68	32	20	11	27.5	--	2	0.8	27.5	50	34	2.5	SMCA_684+0350A22806
0.82	32	22	13	27.5	--	2	0.8	23.3	50	41	3.0	SMCA_824+0350A22806
1.0	32	22	13	27.5	--	2	0.8	19.6	50	50	3.2	SMCA_105+0350A22806
1.5	32	24.5	15	27.5	--	2	0.8	14.0	50	75	4.2	SMCA_155+0350A22806
2.0	32	30	16	27.5	--	2	0.8	11.1	50	100	5.0	SMCA_205+0350A22806
2.2	32	30	16	27.5	--	2	0.8	10.4	50	110	5.2	SMCA_225+0350A22806
2.5	32	33	18	27.5	--	2	1.0	7.0	50	125	6.2	SMCA_255+0350A22806
3.0K	32	33	18	27.5	--	2	1.0	6.1	50	150	6.5	SMCA_305+0350A22806
3.0	32	37	22	27.5	--	2	1.0	5.8	50	150	7.4	SMCA_305+0350A22806
3.3	32	37	22	27.5	--	2	1.0	5.3	50	165	7.7	SMCA_335+0350A22806
3.5	32	37	22	27.5	--	2	1.0	5.0	50	175	7.9	SMCA_355+0350A22806
4.0	32	37	22	27.5	--	2	1.0	4.4	50	200	8.2	SMCA_405+0350A22806
1.0	41	22	11	37.5	--	2	1.0	28	35	35	2.8	SMCA_105+0350A23806
1.5	41	24	13	37.5	--	2	1.0	19.3	35	53	3.7	SMCA_155+0350A23806
2.0	41	26	15	37.5	--	2	1.0	14.9	35	70	4.6	SMCA_205+0350A23806
2.2	41	26	15	37.5	--	2	1.0	13.7	35	77	4.8	SMCA_225+0350A23806
2.5	41	30	16	37.5	--	2	1.0	12.3	35	88	5.3	SMCA_255+0350A23806
3.0	41	30	16	37.5	--	2	1.0	10.5	35	105	5.7	SMCA_305+0350A23806
3.3	41	32	17	37.5	--	2	1.0	9.7	35	116	6.2	SMCA_335+0350A23806
3.5	41	32	17	37.5	--	2	1.0	9.3	35	123	6.4	SMCA_355+0350A23806
4.0	41	33.5	18.5	37.5	--	2	1.0	8.3	35	140	7.0	SMCA_405+0350A23806
4.5	41	37	22	37.5	--	2	1.0	7.6	35	158	8.0	SMCA_455+0350A23806
5.0	41	37	22	37.5	--	2	1.0	7.0	35	175	8.3	SMCA_505+0350A23806
5.5	41	37	22	37.5	--	2	1.0	6.6	35	193	8.6	SMCA_555+0350A23806
6.0	41	41	26	37.5	--	2	1.0	6.2	35	210	9.7	SMCA_605+0350A23806
6.5	41	41	26	37.5	--	2	1.0	5.8	35	228	10	SMCA_655+0350A23806
7.0	41	41	26	37.5	--	2	1.0	5.5	35	245	10.3	SMCA_705+0350A23806

■ 尺寸 Dimensions (mm)

U _{RMS} 350Vac / U _N 480Vac / U _{NDC} 600Vdc												
Cap. μF	W _{±1.0}	H _{±1.0}	T _{±1.0}	P _{±1.0}	P1 _{±0.5}	Pins	d _{±0.05}	ESR @10kHz	dV/dt	I _{PEAK}	I _{RMS} @10kHz	Part number
								(mΩ)				
7.5	41	41	26	37.5	--	2	1.0	5.3	35	263	10.5	SMCA_755+0350A23806
8.0	41	41	26	37.5	--	2	1.0	5.1	35	280	10.5	SMCA_805+0350A23806
8.5	41	43	28	37.5	--	2	1.0	4.9	35	298	10.5	SMCA_855+0350A23806
9.0	41	43	28	37.5	--	2	1.0	4.7	35	315	10.5	SMCA_905+0350A23806
9.5	42	45	30	37.5	--	2	1.0	4.5	35	333	10.5	SMCA_955+0350A23806
10	42	45	30	37.5	--	2	1.0	4.4	35	350	10.5	SMCA_106+0350A23806
10	57	45	25	52.5	--	2	1.2	5.7	25	250	11.6	SMCA_106+0350A25306
11	57	45	25	52.5	--	2	1.2	5.3	25	275	11.9	SMCA_116+0350A25306
12	57	43.5	29.5	52.5	20.3	4	1.2	4.4	25	300	14.1	SMCA_126+0350A65306
15	57	45	35	52.5	20.3	4	1.2	3.7	25	375	16.4	SMCA_156+0350A65306
16	57	45	35	52.5	20.3	4	1.2	3.5	25	400	16.8	SMCA_166+0350A65306
18	57	50	35	52.5	20.3	4	1.2	3.2	25	450	18.1	SMCA_186+0350A65306
20	57	50	40	52.5	20.3	4	1.2	2.9	25	500	19.8	SMCA_206+0350A65306

Notes

- (1) The symbol + means capacitance tolerance (J=±5%, K=±10%)
- (2) Equivalent series resistance typical values at f = 10 kHz
- (3) Rated voltage pulse slope (dV/dt) at voltage U_{NDC}
- (4) Maximum RMS current at 10 kHz, θ_{amb}=70 °C (cooling-air temperature), Δθ_{case}=15°C (container temperature rise)
- (5) Tinned wires - standard lead wire length 6 (+1/-2) mm