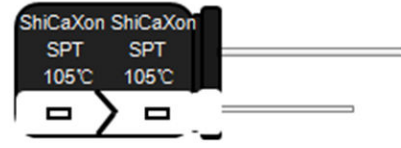




ALUMINUM ELECTROLYTIC CAPACITORS

SPT General Purpose (+105°C 标准品) Series

- Features : 105°C 2000 hours
特点:105°C 2000小时
- Recommended Applications: For general purpose , decoupling , by pass and filtering circuit in entertainment electronics
适用于:一般电子信号线路中的去耦, 旁路和滤波电路.
- Corresponding product to RoHS (2011/65/EU)
符合RoHS要求的相应产品(2011/65/EU)

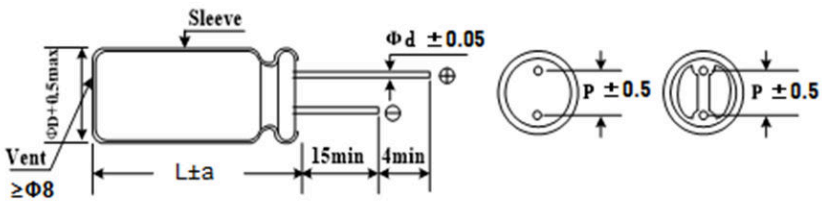


Specifications(技术性能)

Item 项目	Characteristics 性能											
Operating Temperature Range 温度范围	-40 ~ +105°C	-25 ~ +105°C										
Rated Voltage Range 电压范围	6.3 ~ 100VDC	160 ~ 250VDC										
Rated Capacitance Range 容量范围	1 ~ 33000μF	1 ~ 470μF										
Capacitance Tolerance 容量偏差	± 20 % at 120Hz , 20°C											
Leakage Current (MAX) (20°C) 泄漏电流	I=0.01CV or 3(μA) whichever is greater.	I=0.03CV+10(μA) or 3(mA) , whichever is smaller.										
	After rated voltage applied for 2 min 取较大值, 2分钟测试	After rated voltage applied for 2 min 两者 取较小值, 2分钟测试										
Dissipation Factor 损耗角 (tanδ) (120Hz , 20°C)	WV(V)	6.3	10	16	25	35	50	63	100	160~250	350~500	
	tan δ	0.24	0.22	0.18	0.16	0.14	0.12	0.12	0.10	0.15	0.20	
Capacitance > 1000μF, add 0.02 per another 1000μF. 容量大于1000uF, 每增加1000uF损耗角增加0.02.												
Low Temperature Stability Impedance Ratio (MAX) 低温阻抗比	WV	6.3	10	16	25	35	50	63	100	160~250	350~400	450~
	Z(120Hz)											
	Z-25°C / Z+20°C	8	6	5	3	3	3	3	3	7	10	15
	Z-40°C / Z+20°C	10	8	6	4	3	3	3	3	-	-	-
High Temperature Load Life 高温负荷耐久性	After applying rated voltage for 2000 hours at 105°C. the capacitors shall meet the following requirements. 在105°C环境下连续施加额定电压2000小时后, 符合以下要求.											
	Capacitance Change 容量	Within ± 20 % of initial value 在初始值的±20%										
	Dissipation Factor 损耗角	Not more than 200% of the specified value 不超过标准值的200%										
	Leakage Current 泄漏电流	Initial specified value or less 标准值内										
High Temperature Shelf Life 高温放置耐久性	After leaving capacitors under no load at 105°C for 1000 hours.the capacitors shall meet the same requirement as Endurance. 在105°C环境下不加负载放置1000小时后电性能同耐久性要求.											

Diagram of Dimensions

外形尺寸



Unit: mm

ΦD	5	6.3	8	10	13	16	18	22
P	2.0	2.5	2.5/3.5	5.0	5.0	7.5	7.5	10
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8	1.0
a	(L < 20) 1.5 (L ≥ 20) 2.0							

Multiplier for Ripple Current

(1) Frequency Coefficient (频率系数)

Rated Voltage(V)	Freq. (Hz)					
	Cap(μf)	50	120	300	1k	10k~
6.3~100	≤68	0.75	1.00	1.20	1.30	1.50
	82~680	0.80	1.00	1.10	1.15	1.20
	≥820	0.85	1.00	1.05	1.13	1.15
160~450	≤220	0.80	1.00	1.25	1.40	1.40
	>220	0.90	1.00	1.05	1.10	1.15

(2) Temperature Coefficient(温度系数)

Temperature (°C)	-40	65	70	85	105
Factor	2.23	2.17	2.00	1.75	1.00



ShiCaXon

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Capacitance (μ F)	Rated (Surge) Voltage (V)													
	6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)		63 (79)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1														
0.22														
0.33														
0.47														
1											5x11	11		
2.2											5x11	18		
3.3											5x11	27		
4.7							5x11	21	5x11	24	5x11	33		
10					5x11	36	5x11	32	5x11	36	5x11	49	5x11	53
22			5x11	45	5x11	49	5x11	51	5x11	60	5x11	71	5x11	71
33			5x11	52	5x11	56	5x11	67	5x11	72	6.3x12	104	6.3x12	110
47			5x11	62	5x11	72	5x11	76	5x11	90	6.3x12	140	6.3x12	131
68			5x11	70	5x11	81	5x11	83						
100	5x11	89	5x11	100	5x11	118	5x11	115	6.3x12	151	6.3x12	171	8x16	207
							6.3x12	143	8x12	170	8x12	206	10x13	226
220	5x11	144	5x11	162	6.3x12	178	6.3x12	227	8x12	264	8x16	365	10x16	405
			6.3x12	184	8x12	228	8x12	256			10x13	399	10x20	454
330	6.3x12	205	6.3x12	228	6.3x12	264	8x12	306	8x14	327	10x16	523	10x20	519
					8x12	298			8x16	365	10x20	585	13x20	620
470	6.3x12	245	6.3x12	271	6.3x12	289	8x12	352	8x16	392	10x20	645	13x20	809
			8x12	305	8x12	348	8x14	379	10x13	428				
							10x13	424	10x16	484				
680	8x12	347	6.3x12	332	8x12	408	8x14	420	10x16	492	13x20	867		
			8x12	400	10x13	456	8x16	468	10x20	563				
1000	8x12	420	8x10	442	8x14	520	8x16	543	10x20	630	13x25	1158	16x25	1411
	8x14	454	8x12	502	8x16	581	10x16	648	13x17	816	16x20	1125		
			8x14	532	10x16	646	10x20	738	13x20	921				
1500			10x16	620	10x16	676								
2200	10x16	684	10x16	756	10x20	893	13x20	981	16x25	1347	16x25	1432	18x30	1701
	10x20	776	10x20	842	13x20	1052	13x25	1168	18x20	1365	16x30	1570		
3300	10x20	950	10x25	1130	13x20	1204	13x25	1402	16x30	1627	18x36	2070	18x40	2117
			13x20	1146	13x25	1328	16x25	1481	18x25	1528				
4700	13x20	1216	13x25	1417	16x25	1653	16x25	1653	16x35	1970	18x40	2619		
							16x30	1809	18x30	1866				
6800	13x25	1476	16x25	1732	16x30	1976	18x30	2206						
10000	16x25	1802	16x30	1796	18x30	2043	18x35	2250						
15000	16x35	2227	16x40	2071	18x35	2340								
22000	18x36	2375	18x35	2152										
33000	18x40	2428												

☆ Size: Φ Dx L (mm) ☆ Ripple Current: (mA/rms), 105°C, 120Hz



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Cap(μF)	Rated (Surge) Voltage (V)							
	100 (125)		160 (200)		200 (250)		250 (300)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1	5x11	14	5x11	11	6.3x12	13	6.3x12	15
2.2	5x11	19	6.3x12	16	6.3x12	18	6.3x12	24
3.3	5x11	31	6.3x12	20	6.3x12	27	6.3x12	32
4.7	5x11	36	6.3x12	37	6.3x12	36	8x12	41
			8x12	41				
10	5x11	45	8x12	54	8x12	58	8x16	65
	6.3x12	55	10x13	60			10x13	68
22	6.3x12	81	10x13	86	8x16	73	10x16	101
	8x12	99	10x16	99	10x16	83		
33	8x12	130	10x16	125	10x16	149	10x20	162
47	8x12	159	10x16	152	10x20	167	13x20	184
	10x13	180					13x25	215
68	8x16	203	10x20	201	13x20	225	16x20	243
	10x13	224	13x20	225				
100	10x13	242	13x25	324	13x25	307	16x25	334
	10x16	278						
150							16x30	396
220	13x17	455	16x30	612	16x30	522	18x30	506
	13x20	513			18x30	471		
330	13x25	720	18x35	630	18x30	601	18x40	525
					18x35	681		
470	16x25	880	18x35	673	18x35	622		
	16x30	965						
1000	18x35	918						

☆ Size: φDx L (mm) ☆ Ripple Current: (mA/rms), 105°C, 120Hz

Cap(μF)	Rated (Surge) Voltage (V)							
	350 (400)		400 (450)		450 (500)		500 (550)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1	6.3x12	16	6.3x12	17	6.3x12	14		
2.2	6.3x12	22	6.3x12	22	6.3x12	17	8x12	24
			8x12	26	8x12	20	10x13	30
3.3	8x12	36	6.3x12	26	8x12	28	10x13	38
			8x12	30			8x16	36
4.7	8x12	41	6.3x12	30	8x12	31	10x16	42
	10x13	44	8x12	36	10x13	33		
6.8	8x12	51	8x10	36	8x16	47	10x20	54
			8x12	42	10x13	48		
8.2			8x12	41			10x20	65
			8x14	46				
10	8x12	58	8x12	47	10x13	54	10x20	84
	10x13	62	8x14	51	10x17	63	13x17	86
			10x13	58			13x20	92
15	10x16	72	8x16	62	10x17	76	13x20	98
			10x16	74	10x20	87		
22	13x17	132	10x17	108	13x20	116	16x25	116
	13x20	134	13x17	132	13x25	136		
			13x20	142				
33	13x17	160	13x17		13x25	188	16x25	180
	13x20	180	13x20	156	16x20	203		
47	16x20	236	16x18	222	16x25	260	16x30	207
	16x25	275	16x25	268				
68	16x30	329	18x18	270	16x30	312	18x30	334
	18x20	335	16x25	275	18x25	317		
82	16x30	354	16x30	356	18x30	396	18x35	418
	18x25	356	18x25	364				
100	16x35	367	18x30	387	18x35	441	18x40	476
	18x30	370						
120	18x35	402	18x30	455	18x40	349		
			18x35	513				
150	18x35	543	18x35	554				
180			18x40	602				
220								

☆ Size: φDx L (mm) ☆ Ripple Current: (mA/rms), 105°C, 120Hz