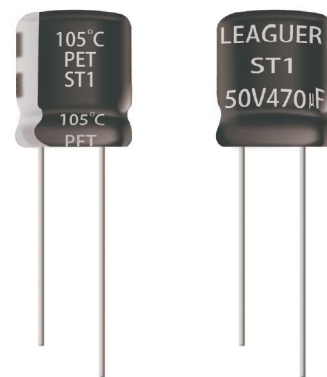




鋁電解電容器

Aluminum Electrolytic Capacitor



ST1 Series 引线型铝电解电容器

Super Miniature Size Aluminum Electrolytic Capacitor of Radial Lead Type

- 寿命: +105 °C 1000 小时 Life time: +105 °C 1000 Hrs
- 超小型. 高度为 7mm Miniature size • 7mm height
- 符合 RoHS 指令 RoHS compliance

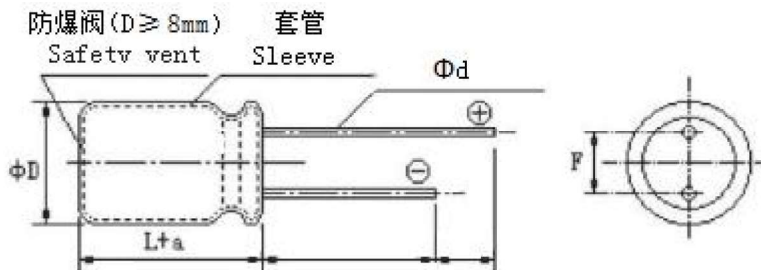


主要技术性能 Specifications

项目 Items	特性 Characteristics							
使用温度范围 Operating Temperature Range	-40~+105°C							
额定电压范围 Rated Voltage Range	6.3~63V DC							
标称容量允许偏差 Capacitance Tolerance	±20% (120Hz, 20°C)							
漏电流(20°C) Leakage Current	$I \leq 0.01CV (\mu A)$ 或 $3\mu A$ 取较大者, (施加额定电压 2 分钟后) $I \leq 0.01CV (\mu A)$ or $3\mu A$ Whichever is greater (After 2 minutes application of rated voltage) I =Leakage Current(μA) C =Capacitance(μF) V =Rated Voltage(Vdc)							
损耗角正切值 Dissipation Factor (120Hz 20°C)	WV	6.3	10	16	25	35	50	63
	tgδ	0.26	0.20	0.16	0.14	0.12	0.10	0.08
温度特性 (120Hz) Temperature Characteristics Impedance Ratio (120Hz)	WV	6.3	10	16	25	35	50	63
	$Z_{-25^\circ C} / Z_{+20^\circ C}$	3	2	2	2	2	2	2
	$Z_{-40^\circ C} / Z_{+20^\circ C}$	6	5	4	3	3	3	3
耐久性 Load Life	+105°C施加额定电压 1000 小时, 恢复 16 小时后, 电容器应满足要求 After applying rated voltage for 1000 hours at +105°C and then resumed 16 hours. The capacitor shall meet the following limits.							
	电容量变化率 Capacitance Change	≤±25%初始测量值 ≤±25% of Initial measured value						
	漏电流值 Leakage	≤规定值 ≤The specified value						
	损耗角正切值 Dissipation Factor	≤2 倍规定值 ≤200% of the specified value						
高温贮存 Shelf Life	+105°C, 1000 小时, 恢复 16 小时后, 电容器应满足下列要求。 After storage for 1000 hours at +105°C and then resumed 16 hours, the capacitor shall meet the following limits.							
	电容量变化率 Capacitance Change	≤±20%初始测量值 ≤±20% of Initial measured value						
	漏电流值 Leakage	≤2 倍规定值 ≤200% of the specified value						
	损耗角正切值 Dissipation Factor	≤2 倍规定值 ≤200% of the specified value						
额定纹波电流的频率系数 Frequency coefficient of rated ripple current	频率 (Hz)	60 (50)	120	500	1K	10K≤		
	CAP(μF)	60 (50)	120	500	1K	10K≤		
	≤1μF	0.50	1.0	1.20	1.30	1.50		
	2.2~4.7μF	0.65	1.0	1.20	1.30	1.50		
	10~47μF	0.80	1.0	1.20	1.30	1.50		
100~330μF	0.80	1.0	1.10	1.15	1.20			

ST1 Series

■外形图及尺寸 Case size table



	mm			
$\Phi D \pm 0.5$	4	5	6.3	8
L	7	7	7	7
$F \pm 0.5$	1.5	2.0	2.5	3.5
$\Phi d \pm 0.05$	0.45			0.5
a	1.0			

■ 规格壳号、最大允许纹波电流

Standard sizes & Maximum permissible ripple current

WV CAP(μF)	6.3V		10V		16		25V		35V		50V		63V	
	ΦDxL (mm)	I (mA)	ΦDxL (mm)	I (mA)	ΦDxL (mm)	I (mA)	ΦDxL (mm)	I (mA)	ΦDxL (mm)	I (mA)	ΦDxL (mm)	I (mA)	ΦDxL (mm)	I (mA)
0.47											4x7	6.3	4x7	6.3
1.0											4x7	12	4x7	12
2.2											4x7	16	4x7	16
3.3							4x7	18	4x7	18	4x7	19	4x7	21
4.7							4x7	21	4x7	22	4x7	24	5x7	26
10					4x7	28	4x7	31	4x7	30	5x7	42	6.3x7	45
22	4x7	34	4x7	38	5x7	44	5x7	55	5x7	55	6.3x7	64		
33	4x7	42	4x7	46	5x7	62	6.3x7	66	6.3x7	73	8x7	75		
47	4x7	50	5x7	66	5x7 6.3x7	61 70	6.3x7	80	8x7	95	8x7	85		
100	5x7 6.3x7	67 77	6.3x7	91	6.3x7	91	8x7	115	8x7	115				
220	6.3x7	120	8x7	155	8x7	110								
330	8x7	160	8x7	190										

I-额定纹波电流 Rated ripple current: (mA, 105°C, 120Hz)

编带产品规格 Taping Specifications (Radial Type)

■ Taping Specifications

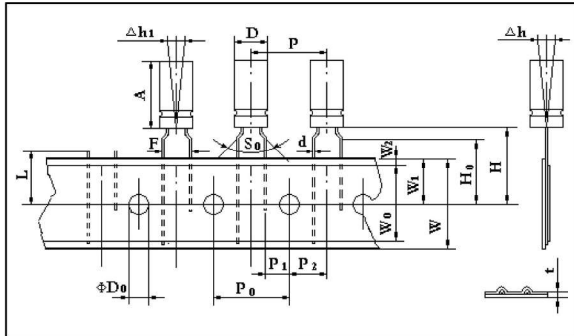


Figure 1

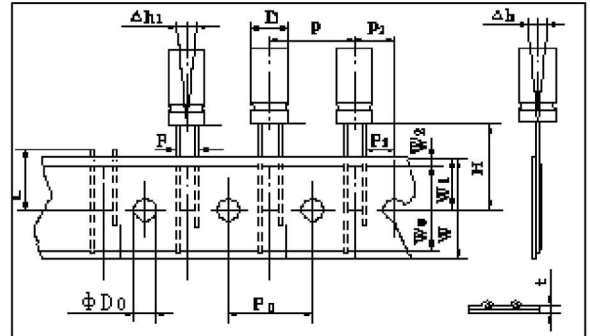


Figure 2

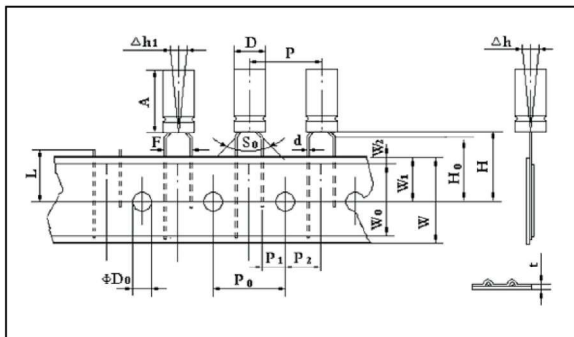


Figure 3

■ Packaging Specification

Diameter	Ammunition	Ammunition packing dimensions(mm)
	Quantity/Box(pcs)	
φ 4	3000	330 × 296 × 49
φ 5	2000	330 × 250 × 49
φ 6.3	2000	330 × 296 × 49
φ 8	1000	330 × 250 × 49

Code F1	Case Size				Tol
	4*5 4*7	5*5 5*7 5*11	6.3*5 6.3*7 6/6.3*11	8*5 8*7 8*11.5	
Reference figure	Figure 1				--
φ d	0.45	0.45 0.5 (5*11)	0.45 0.5 (6*11)	0.45 0.5(8*7) 0.5(8*11.5)	± 0.05
p	12.7				± 1.0
P ₀	12.7				± 0.3
P ₁	3.85				± 0.5
F	5.0				+0.6/-0.2
Δh	0				± 1.0
W	18.0				± 0.5
W ₀	12min				--
W ₁	9.0				± 0.5
W ₂	2.0 max				--
H	18.5 (17.5) *				± 0.5
H ₀	16.0				± 0.5
D ₀	4.0				± 0.3
t	0.6				± 0.2
Δh1	0				± 0.2

Code F2	Case Size					Tol
	4*5 4*7	5*5 5*7 5*11	6.3*5 6.3*7 6/6.3*11	8*5 8*7 8*11.5	ϕ 10	
Reference figure	Figure 2					--
ϕ d	0.45	0.45 0.5 (5*11)	0.45 0.5 (6*11)	0.45 0.5(8*7) 0.5(8*11.5)	0.60	± 0.05
p	12.7					± 1.0
P ₀	12.7					± 0.3
P ₁	5.6	5.35	5.1	4.6	3.85	± 0.5
F	1.5	2.0	2.5	3.5	5.0	+0.6/-0.2
Δ h	0					± 1.0
W	18.0					± 0.5
W ₀	12min					--
W ₁	9.0					± 0.5
W ₂	2.0 max					--
H	18.5 (17.5) *					± 0.5
H ₀	--					--
D ₀	4.0					± 0.3
t	0.6					± 0.2
Δ h1	0					± 0.2

Code F3	Case Size			Tol
	4*5 4*7	5*5 5*7 5*11	8*5 8*7	
Reference figure	Figure 3		Figure 2	--
ϕ d	0.45	0.45 0.5 (5*11)	0.45 0.5(8*7)	± 0.05
p	12.7			± 1.0
P ₀	12.7			± 0.3
P ₁	5.1			± 0.5
F	2.5			+0.6/-0.2
Δ t	0			± 1.0
W	18.0			± 0.5
W _c	12min			--
W ₁	9.0			± 0.5
W ₂	2.0 max			--
H	18.5 (17.5) *			± 0.5
H ₀	16.0	--		± 0.5
D ₀	4.0			± 0.3
t	0.6			± 0.2
Δ h1	0			± 0.2

成型产品规格

Lead Forming Specifications (Radial Type)

■ Lead Forming Specifications

Code		Case Size				Shape Figure
		D	d ± 0.05	s ± 0.5	h	
C	1	φ 4	φ 0.45	1.5	h ± 0.3	
		φ 5	φ 0.45/0.5	2.0		
		φ 6.3	φ 0.45/0.5	2.5		
		φ 8	φ 0.45/0.5	3.5		
C	B	φ 4	φ 0.45	5	h ± 0.3	
		φ 5	φ 0.45/0.5	5	h ± 0.3	
		φ 6.3	φ 0.45/0.5	5	h ± 0.3	
		φ 8	φ 0.45/0.5	5	h ± 0.3	
C	K	φ 4	φ 0.45	1.5	h ± 0.5	
		φ 5	φ 0.45	2.0	h ± 0.5	
		φ 6.3	φ 0.45	2.5	h ± 0.5	
		φ 8	φ 0.45	3.5	h ± 0.5	
φ 0.50						
C	N	φ 4	φ 0.45	1.5	h ± 0.5	
		φ 5	φ 0.45	2.0	h ± 0.5	
		φ 6.3	φ 0.45	2.5	h ± 0.5	
C	M	φ 4	φ 0.45	1.5	h ± 0.5	
		φ 5	φ 0.45	2.0	h ± 0.5	
		φ 6.3	φ 0.45	2.5	h ± 0.5	

Note: "h" depends on customer's requirement.