鋁電解電容器

Aluminum Electorlytic Capacitor

MT1 Series 引线型铝电解电容器

Super Miniature Size Aluminum Electrolytic Capacitor of Radial Lead Type

- 寿命：+105 ℃ 1000 小时 Life time:+105 ℃ 1000 Hrs
- 超小型.高度为 5mm Miniature size • 5mm 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℃
额定电压范围 Rated Voltage Range	6.3～50V DC
标称电容量允许偏差 Capacitance Tolerance	±20% (120Hz, 20℃)
漏电流(20℃) Leakage Current	I≤0.01CV (μA)或 3μA 取较大者，（施加额定电压 2 分钟后） I≤0.01CV (μA) or 3μA 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℃)

WV	6.3	10	16	25	35	50
tgδ	0.28	0.24	0.20	0.16	0.13	0.12

温度特性（120Hz）
Temperature Characteristics Impedance Ratio (120Hz)

WV	6.3	10	16	25	35	50
$Z_{-25℃}/Z_{+20℃}$	3	3	2	2	2	2
$Z_{-40℃}/Z_{+20℃}$	8	5	4	3	3	3

耐久性
Load Life

+105℃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℃ 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℃, 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℃ and then resumed 16 hours, the capacitor shall meet the following limits.

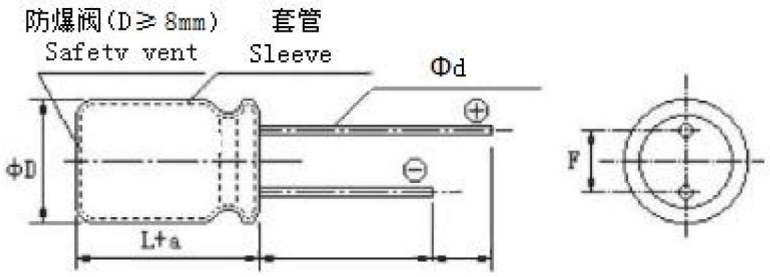
电容量变化率 Capacitance Change	≤±20%初始测量值 ≤±20% of Initial measured value
漏电流值 Leakage	≤2 倍规定值 ≤200% of the specified value
损耗角正切值 Dissipation Factor	≤2 倍规定值 ≤200% of the specified value

额定纹波电流的频率系数
Frequency coefficient of rated ripple current

频率(Hz) / 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

MT1 Series

■外形图及尺寸 Case size table



mm

ΦD±0.5	4	5	6.3	8
L	5	5	5	5
F±0.5	1.5	2.0	2.5	3.5
Φd±0.05	0.45			
a	1.0			

■ 规格壳号、最大允许纹波电流
Standard sizes & Maximum permissible ripple curren

Wv / CAP(μF)	6.3V		10V		16V		25V		35V		50V	
	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											4x5	4
1.0											4x5	8
2.2											4x5	13
3.3											4x5	14
4.7					4x5	10	4x5	13	4x5	17	5x5	18
10	4x5	18	4x5	20	4x5	20	4x5	20	5x5	24	5x5	28
22	4x5	23	4x5	23	4x5	25	5x5	30	5x5	35	6.3x5	50
33	4x5	25	4x5	25	5x5	36	5x5	38	6.3x5	50	8x5	80
47	4x5	27	5x5	40	5x5	40	6.3X5	65	8x5	85		
100	5x5 6.3x5	42 57	6.3x5	85	6.3x5	86	8x5	120				
220	6.3x5	89	8x5	120	8x5	130						
330	8x5	130										

I~额定纹波电流 Rated ripple current：(mA , 105℃,120Hz)

编带产品规格 Taping Specifications (Radial Type)

■ Taping Specifications

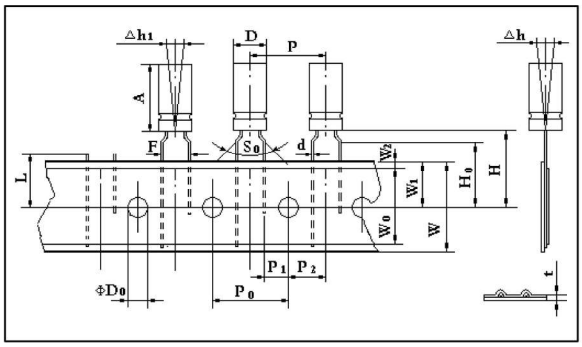


Figure 1

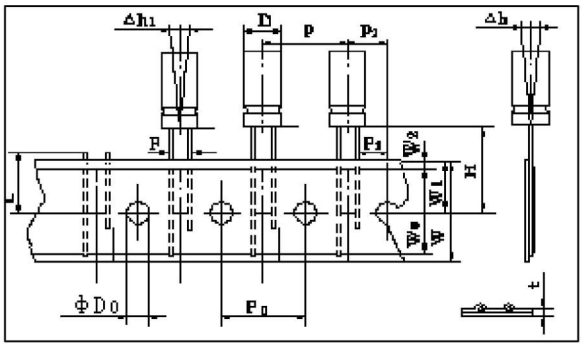


Figure 2

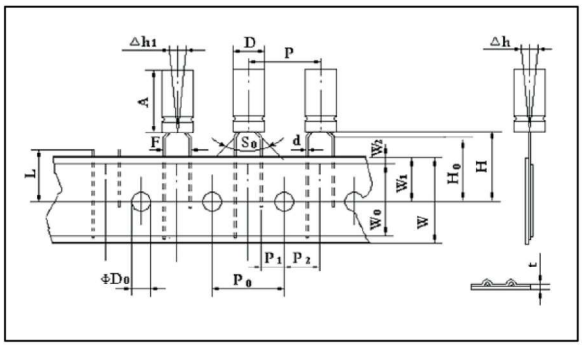


Figure 3

■ Packaging Specification

Diameter	Ammunition Quantity/Box(pcs)	Ammunition packing dimensions(mm)
ϕ4	3000	330×296×49
ϕ5	2000	330×250×49
ϕ6.3	2000	330×296×49
ϕ8	1000	330×250×49

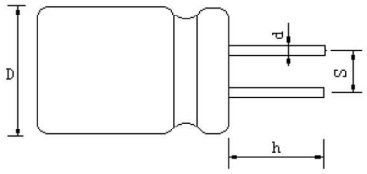
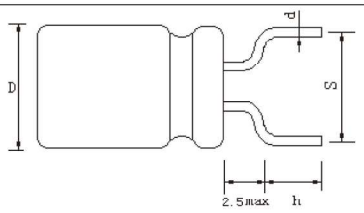
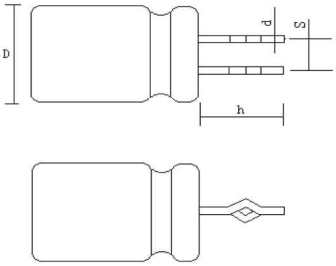
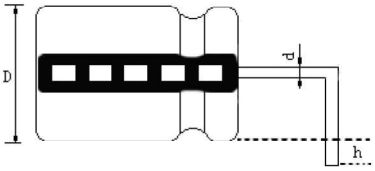
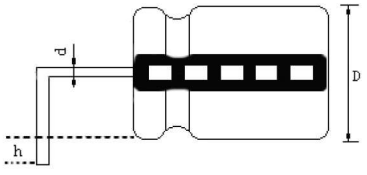
Code **F1**	Case Size				Tol
	4*5 4*7	5*5 5*7 5*11	6.3*5 6.3*7 6/6.3*11	8*5 8*7 8*11.5	
Reference figure	Figure 1				––
ϕd	0.45	0.45 0.5（5*11）	0.45 0.5（6*11）	0.45 0.5(8*7) 0.5(8*11.5)	±0.05
p	12.7				±1.0
P_0	12.7				±0.3
P_1	3.85				±0.5
F	5.0				+0.6/–0.2
△h	0				±1.0
W	18.0				±0.5
W_0	12min				––
W_1	9.0				±0.5
W_2	2.0 max				––
H	18.5（17.5）*				±0.5
H_0	16.0				±0.5
D_0	4.0				±0.3
t	0.6				±0.2
△h1	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
△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
△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
△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	16.0		––	± 0.5
D_0	4.0			± 0.3
t	0.6			± 0.2
△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	ϕ4	ϕ0.45	1.5	h ± 0.3	
		ϕ5	ϕ0.45/0.5	2.0		
		ϕ6.3	ϕ0.45/0.5	2.5		
		ϕ8	ϕ0.45/0.5	3.5		
C	B	ϕ4	ϕ0.45	5	h ± 0.3	
		ϕ5	ϕ0.45/0.5	5	h ± 0.3	
		ϕ6.3	ϕ0.45/0.5	5	h ± 0.3	
		ϕ8	ϕ0.45/0.5	5	h ± 0.3	
C	K	ϕ4	ϕ0.45	1.5	h ± 0.5	
		ϕ5	ϕ0.45	2.0	h ± 0.5	
		ϕ6.3	ϕ0.45	2.5	h ± 0.5	
		ϕ8	ϕ0.45	3.5	h ± 0.5	
			ϕ0.50			
C	N	ϕ4	ϕ0.45	1.5	h ± 0.5	
		ϕ5	ϕ0.45	2.0	h ± 0.5	
		ϕ6.3	ϕ0.45	2.5	h ± 0.5	
C	M	ϕ4	ϕ0.45	1.5	h ± 0.5	
		ϕ5	ϕ0.45	2.0	h ± 0.5	
		ϕ6.3	ϕ0.45	2.5	h ± 0.5	

Note: “h” depends on customer’s requirement.