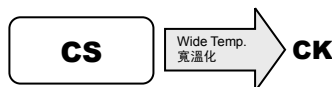


STANDARD

標準品

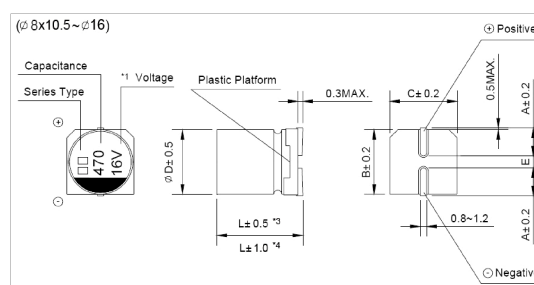
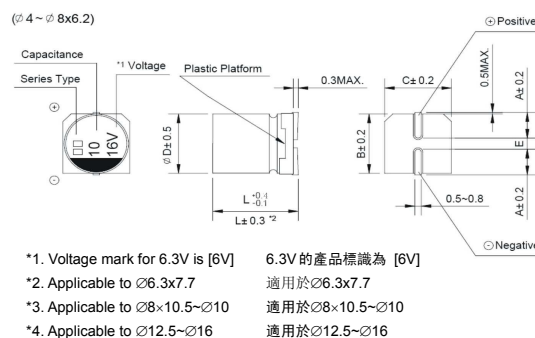
- Operating with general temperature range -40 ~ +85°C
適用於 -40 ~ +85°C 的常規溫度範圍
- Load life of 2000 hours
負荷壽命 2000 小時
- Comply with the RoHS directive
符合 RoHS 指令



SPECIFICATIONS 特性表

Items 項目	Characteristics 主要特性																																																						
Operation Temperature Range 使用溫度範圍	-40 ~ +85°C																																																						
Voltage Range 額定工作電壓範圍	4 ~ 100V																																																						
Capacitance Range 靜電容量範圍	0.1 ~ 6800Mf																																																						
Capacitance Tolerance 靜電容量允許偏差	±20% at 120Hz, 20°C																																																						
Leakage Current 漏電流	Leakage current (Ø4~Ø10) ≦0.01CV or 3µA, whichever is greater (after 2 minutes application of rated voltage) Leakage current (Ø12.5~Ø16) ≦0.03CV or 4µA, whichever is greater (after 1 minute application of rated voltage) 漏電流 (Ø4~Ø10) ≦0.01CV 或 3µA，取較大值（施加額定工作電壓 2 分鐘後） 漏電流 (Ø12.5~Ø16) ≦0.03CV 或 4µA，取較大值（施加額定工作電壓 1 分鐘後）																																																						
Dissipation Factor (tan δ) 損耗角正切	Measurement frequency 測試頻率: 120Hz, Temperature 溫度: 20°C <table><tr><td>Rated Voltage (V) 額定工作電壓</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>tan δ (max.)</td><td>Ø4~Ø10</td><td>0.35</td><td>0.30</td><td>0.24</td><td>0.20</td><td>0.16</td><td>0.14</td><td>0.14</td><td>0.12</td><td>0.10</td></tr><tr><td>最大損耗角正切</td><td>Ø12.5~Ø16</td><td>0.42</td><td>0.38</td><td>0.34</td><td>0.30</td><td>0.26</td><td>0.22</td><td>0.18</td><td>0.14</td><td>0.10</td></tr></table>										Rated Voltage (V) 額定工作電壓	4	6.3	10	16	25	35	50	63	100	tan δ (max.)	Ø4~Ø10	0.35	0.30	0.24	0.20	0.16	0.14	0.14	0.12	0.10	最大損耗角正切	Ø12.5~Ø16	0.42	0.38	0.34	0.30	0.26	0.22	0.18	0.14	0.10													
Rated Voltage (V) 額定工作電壓	4	6.3	10	16	25	35	50	63	100																																														
tan δ (max.)	Ø4~Ø10	0.35	0.30	0.24	0.20	0.16	0.14	0.14	0.12	0.10																																													
最大損耗角正切	Ø12.5~Ø16	0.42	0.38	0.34	0.30	0.26	0.22	0.18	0.14	0.10																																													
Stability at Low Temperature 低溫特性	Measurement frequency 測試頻率: 120Hz <table><tr><td colspan="2">Rated Voltage (V) 額定工作電壓</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td colspan="2">50~100</td></tr><tr><td rowspan="3">Impedance Ratio 阻抗比 ZT/Z20 (max.)</td><td rowspan="2">Ø4~Ø10</td><td>Z(-25°C) / Z(20°C)</td><td>7</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40°C) / Z(20°C)</td><td>15</td><td>8</td><td>6</td><td>4</td><td>4</td><td>3</td><td>3</td></tr><tr><td rowspan="2">Ø12.5~Ø16</td><td>Z(-25°C) / Z(20°C)</td><td>7</td><td>5</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40°C) / Z(20°C)</td><td>17</td><td>12</td><td>10</td><td>8</td><td>5</td><td>4</td><td>3</td></tr></table>										Rated Voltage (V) 額定工作電壓		4	6.3	10	16	25	35	50~100		Impedance Ratio 阻抗比 ZT/Z20 (max.)	Ø4~Ø10	Z(-25°C) / Z(20°C)	7	4	3	2	2	2	2	Z(-40°C) / Z(20°C)	15	8	6	4	4	3	3	Ø12.5~Ø16	Z(-25°C) / Z(20°C)	7	5	4	3	2	2	2	Z(-40°C) / Z(20°C)	17	12	10	8	5	4	3
Rated Voltage (V) 額定工作電壓		4	6.3	10	16	25	35	50~100																																															
Impedance Ratio 阻抗比 ZT/Z20 (max.)	Ø4~Ø10	Z(-25°C) / Z(20°C)	7	4	3	2	2	2	2																																														
		Z(-40°C) / Z(20°C)	15	8	6	4	4	3	3																																														
	Ø12.5~Ø16	Z(-25°C) / Z(20°C)	7	5	4	3	2	2	2																																														
Z(-40°C) / Z(20°C)		17	12	10	8	5	4	3																																															
Load Life 高溫負荷特性	After 2000 hours application of the rated voltage at 85°C, they meet the characteristics listed below. 在 85°C 環境中施加額定工作電壓 2000 小時後，電容器的特性符合下表的要求。 <table><tr><td>Capacitance Change 靜電容量變化率</td><td colspan="9">Within ±20% of initial value (Within ±30% of initial value for 4V) 初始值的±20%以內（4V 為±30%以內）</td></tr><tr><td>Dissipation Factor 損耗角正切</td><td colspan="9">200% or less of initial specified value 不大於規範值的 200%</td></tr><tr><td>Leakage Current 漏電流</td><td colspan="9">initial specified value or less 不大於規範值</td></tr></table>										Capacitance Change 靜電容量變化率	Within ±20% of initial value (Within ±30% of initial value for 4V) 初始值的±20%以內（4V 為±30%以內）									Dissipation Factor 損耗角正切	200% or less of initial specified value 不大於規範值的 200%									Leakage Current 漏電流	initial specified value or less 不大於規範值																							
Capacitance Change 靜電容量變化率	Within ±20% of initial value (Within ±30% of initial value for 4V) 初始值的±20%以內（4V 為±30%以內）																																																						
Dissipation Factor 損耗角正切	200% or less of initial specified value 不大於規範值的 200%																																																						
Leakage Current 漏電流	initial specified value or less 不大於規範值																																																						
Shelf Life 高溫貯存特性	After leaving capacitors under no load at 85°C for 1000 hours, they meet the specified value for load life characteristics listed above. 在 85°C 環境中無負荷放置 1000 小時後，電容器的特性符合高溫負荷特性中所列的規定值。																																																						
Resistance to Soldering Heat 耐焊接熱特性	After reflow soldering and restored at room temperature, they meet the characteristics listed below. 經過回流焊並冷卻至室溫後，電容器的特性符合下表的要求。 <table><tr><td>Capacitance Change 靜電容量變化率</td><td colspan="9">Within ±10% of initial value 初始值的±10%以內</td></tr><tr><td>Dissipation Factor 損耗角正切</td><td colspan="9">initial specified value or less 不大於規範值</td></tr><tr><td>Leakage Current 漏電流</td><td colspan="9">initial specified value or less 不大於規範值</td></tr></table>										Capacitance Change 靜電容量變化率	Within ±10% of initial value 初始值的±10%以內									Dissipation Factor 損耗角正切	initial specified value or less 不大於規範值									Leakage Current 漏電流	initial specified value or less 不大於規範值																							
Capacitance Change 靜電容量變化率	Within ±10% of initial value 初始值的±10%以內																																																						
Dissipation Factor 損耗角正切	initial specified value or less 不大於規範值																																																						
Leakage Current 漏電流	initial specified value or less 不大於規範值																																																						
Humidity Life 恒濕特性	After leaving capacitors under no load at 85°C and 85%RH for 500 hours, they meet the specified value for resistance to soldering heat characteristics listed above. 在 85°C 與 85%RH 環境中無負荷放置 500 小時後，電容器的特性符合耐焊接熱特性中所列的規定值																																																						
Storage 儲存	Storage conditions should be: Temperature: +5°C~+35°C; Humidity: lower than 75%; Place: indoor. 儲存環境應為：溫度：+5°C~+35°C；相對濕度<75%；儲存場所：室內。																																																						
Working conditions 工作條件	Make sure that no higher than the rated voltage and temperature is applied the capacitor. 確認無超過額定電壓和額定溫度通過電容器																																																						
Marking 標示	Black print on the case top. 鋁殼頂部黑字印刷。																																																						

DRAWING (Unit: mm) 外形圖



□ DIMENSIONS (Unit: mm) 尺寸表

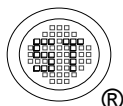
∅D x L	4 x 5.4	5 x 5.4	6.3 x 5.4	6.3 x 7.7	8 x 6.2	8 x 10.5	10 x 10.5	10 x 13.5	12.5 x 13.5	12.5 x 16	16 x 16.5
A	1.8	2.1	2.4	2.4	3.3	2.9	3.2	3.2	4.7	4.7	5.5
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	13.0	13.0	17.0
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	13.0	13.0	17.0
E ± 0.2	1.0	1.3	2.2	2.2	2.2	3.1	4.4	4.4	4.4	4.4	6.7
L	5.4	5.4	5.4	7.7	6.2	10.5	10.5	13.5	13.5	16.0	16.5

□ DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT 規格尺寸及最大允許紋波電流

WV Code 代碼	μF	4		6.3		10		16		25	
		0G		0J		1A		1C		1E	
		Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流
4.7	4R7									4 x 5.4	19
10	100							4 x 5.4	25	5 x 5.4 (4 x 5.4)	28 (20)
15	150							4 x 5.4	28	5 x 5.4	34
22	220			4 x 5.4	31	5 x 5.4 (4 x 5.4)	35 (28)	5 x 5.4 (4 x 5.4)	39 (28)	6.3 x 5.4 (5 x 5.4)	52 (35)
33	330	4 x 5.4	26	5 x 5.4 (4 x 5.4)	39 (31)	5 x 5.4 (4 x 5.4)	43 (32)	6.3 x 5.4 (5 x 5.4)	57 (40)	6.3 x 5.4 (5 x 5.4)	63 (42)
47	470	4 x 5.4	34	5 x 5.4 (4 x 5.4)	47 (36)	6.3 x 5.4 (5 x 5.4)	59 (43)	6.3 x 5.4 (5 x 5.4)	68 (44)	6.3 x 5.4	68
56	560	4 x 5.4	39	5 x 5.4	46	6.3 x 5.4	57	6.3 x 5.4	74	6.3 x 5.4	82
68	680	5 x 5.4	45	6.3 x 5.4 (5 x 5.4)	62 (52)	6.3 x 5.4	72	6.3 x 5.4	80	6.3 x 5.4	94
100	101	5 x 5.4	61	6.3 x 5.4 (5 x 5.4)	71 (55)	6.3 x 5.4	76	6.3 x 5.4 (8 x 6.2)	86 (200)	6.3 x 7.7 (8 x 6.2)	130 (91)
150	151	6.3 x 5.4	74	6.3 x 5.4	78	6.3 x 5.4	88	6.3 x 7.7	135	8 x 10.5 (6.3 x 7.7)	200 (130)
220	221	6.3 x 5.4	82	6.3 x 5.4	95	6.3 x 5.4 (8 x 6.2)	95 (150) (250)	8 x 10.5 (6.3 x 7.7) (8 x 6.2)	215 (150) (135)	8 x 10.5	250
330	331	6.3 x 7.7	150	6.3 x 7.7 (8 x 6.2)	150 (300)	8 x 10.5	280	8 x 10.5	280	10 x 10.5 (8 x 10.5)	340 (310)
470	471	6.3 x 7.7	150	8 x 10.5 (6.3 x 7.7)	300 (150)	10 x 10.5 (8 x 10.5)	320 (300)	10 x 10.5 (8 x 10.5)	420 (330)	10 x 10.5	400
680	681	8 x 10.5	300	8 x 10.5	300	10 x 10.5	380	10 x 10.5	450	10 x 13.5	550
1000	102	8 x 10.5	330	10 x 10.5 (8 x 10.5)	430 (330)	10 x 10.5	450	12.5 x 13.5 (10 x 13.5) (10 x 10.5)	710 (550) (490)	12.5 x 13.5	820
1500	152	10 x 10.5	450	10 x 13.5 (10 x 10.5)	650 (450)	10 x 13.5	650	12.5 x 13.5	750	12.5 x 16	1000
2200	222	10 x 13.5 (10 x 10.5)	620 (480)	12.5 x 13.5 (10 x 13.5)	890 (720)	12.5 x 13.5	960	16 x 16.5 (12.5 x 16)	1150 (1000)	16 x 16.5	1250
3300	332	10 x 13.5	700	12.5 x 16 (12.5 x 13.5)	1000 (900)	16 x 16.5 (12.5 x 16)	1300 (1050)	16 x 16.5	1350		
4700	472	12.5 x 13.5	850	16 x 16.5	1400	16 x 16.5	1450				
6800	682	16 x 16.5 (12.5 x 16)	1350 (900)								

WV Code 代碼	μF	35		50		63		100	
		1V		1H		1J		2A	
		Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流
0.1	0R1			4 x 5.4	1.0	4 x 5.4	1.0		
0.22	R22			4 x 5.4	2.3	4 x 5.4	2.3		
0.33	R33			4 x 5.4	3.5	4 x 5.4	3.5		
0.47	R47			4 x 5.4	5.0	4 x 5.4	5.0		
1	010			4 x 5.4	10	4 x 5.4	10	4 x 5.4	10
1.5	1R5			4 x 5.4	12	4 x 5.4	12	6.3 x 5.4	15
2.2	2R2			4 x 5.4	15	4 x 5.4	15	6.3 x 5.4	20
3.3	3R3	4 x 5.4	18	4 x 5.4	18	5 x 5.4	20	6.3 x 7.7 (6.3 x 5.4) (8 x 6.2)	45 (28) (50)
4.7	4R7	4 x 5.4	20	5 x 5.4 (4 x 5.4)	23 (19)	6.3 x 5.4 (5 x 5.4)	30 (23)	6.3 x 7.7 (6.3 x 5.4) (8 x 6.2)	50 (30) (50)
10	100	5 x 5.4 (4 x 5.4)	30 (20)	6.3 x 5.4 (5 x 5.4)	34 (27)	6.3 x 7.7 (6.3 x 5.4)	55 (34)	8 x 10.5 (6.3 x 7.7) (8 x 6.2)	110 (50) (50)
22	220	6.3 x 5.4 5 x 5.4	54 35	6.3 x 5.4 (8 x 6.2)	60 (120)	8 x 10.5 (6.3 x 7.7) (8 x 6.2)	140 (70) (35)	10 x 10.5 (8 x 10.5)	180 (120)
33	330	6.3 x 5.4 (8 x 6.2)	60 (130)	6.3 x 7.7 (8 x 6.2)	85 (65)	8 x 10.5 (6.3 x 7.7)	160 (85)	10 x 10.5	190
47	470	6.3 x 5.4 (8 x 6.2)	70 (165)	10 x 10.5 (8 x 10.5) (6.3 x 7.7)	130 (110) (90)	10 x 10.5 (8 x 10.5)	230 (170)		

• Case size ∅D x L (mm), ripple current (mA rms) at 85°C 120Hz • 尺寸 ∅D x L (mm), 紋波電流 (mA rms) 於 85°C 120Hz



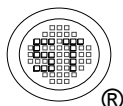
□ DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT 規格尺寸及最大允許紋波電流

WV Code 代碼 μF		35		50		63		100	
		1V		1H		1J		2A	
		Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流	Case size 尺寸	Ripple current 紋波電流
56	560	6.3 × 7.7	80	6.3 × 7.7	110	10 × 10.5	250		
68	680	6.3 × 7.7	110	8 × 10.5	170	10 × 10.5	260		
100	101	8 × 10.5 (6.3 × 7.7)	175 (120)	10 × 10.5 (8 × 10.5)	240 (200)	12.5 × 13.5 (10 × 13.5) (10 × 10.5)	380 (290) (280)	12.5 × 13.5	440
150	151	8 × 10.5	220	10 × 10.5	240	10 × 13.5	310		
220	221	10 × 10.5 (8 × 10.5)	310 (270)	10 × 13.5 (10 × 10.5)	400 (320)	12.5 × 13.5 (10 × 13.5)	580 (330)	16 × 16.5	700
330	331	10 × 10.5	350	12.5 × 13.5 (10 × 13.5)	600 (420)	16 × 16.5 (12.5 × 16)	820 (720)		
470	471	12.5 × 13.5 (10 × 13.5) (10 × 10.5)	600 (530) (400)	16 × 16.5 (12.5 × 16)	850 (740)	16 × 16.5	950		
680	681	12.5 × 13.5 (10 × 13.5)	750 (560)	16 × 16.5	950				
1000	102	16 × 16.5 (12.5 × 16)	1100 (800)						

•Case size ØD×L(mm), ripple current (mA rms) at 85°C 120Hz •尺寸ØD×L(mm), 紋波電流(mA rms)於 85°C 120Hz

□ FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT 紋波電流頻率補償系數

Frequency 頻率			50Hz	120Hz	300Hz	1KHz	10KHz~
Coefficient 系數	Ø4 ~ Ø10	0.1 ~ 68μF	0.70	1.00	1.17	1.36	1.50
		100 ~ 3300μF	0.85	1.00	1.08	1.20	1.30
	Ø12.5 ~ Ø16	~ 68μF	0.75	1.00	1.35	1.57	2.00
		100 ~ 680μF	0.80	1.00	1.23	1.34	1.50
		1000 ~ 6800μF	0.85	1.00	1.10	1.13	1.15

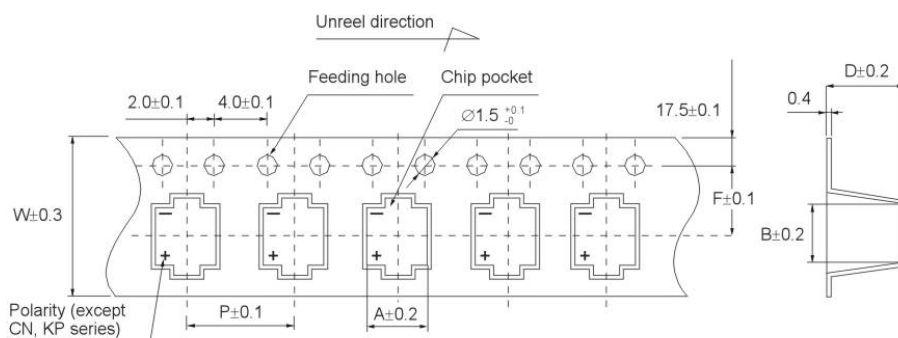


TAPING SPECIFICATIONS 編帶標準

□ For Chip Type Aluminum Electrolytic Capacitors 貼片式鋁電解電容器

■ Carrier Tape 載帶

●Drawing 1 (for $\varnothing 4 \sim \varnothing 10$) 外形圖 1

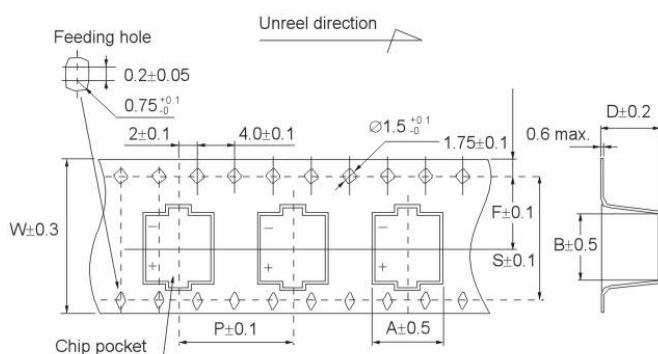


Dimension 尺寸表

(Unit: mm)

$\varnothing D \times L$	4×5.4/5.8	5×5.4/5.8	6.3×5.4/5.8	6.3×7.7	8×6.2	8×10.5	10×10.5/13.5
W	12.0	12.0	16.0	12.0	16.0	24.0	24.0
P	8.0	12.0	12.0	12.0	12.0	16.0	16.0
F	5.5	5.5	7.5	7.5	7.5	11.5	11.5
A	5.0	6.0	7.0	7.0	8.7	8.7	10.7
B	5.0	6.0	7.0	7.0	8.7	8.7	10.7
D	5.8/6.3	5.8/6.3	5.8/6.3	8.4	6.8	11.0	11.0/14.0

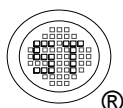
●Drawing 2 (for $\varnothing 12.5 \sim \varnothing 16$) 外形圖 2



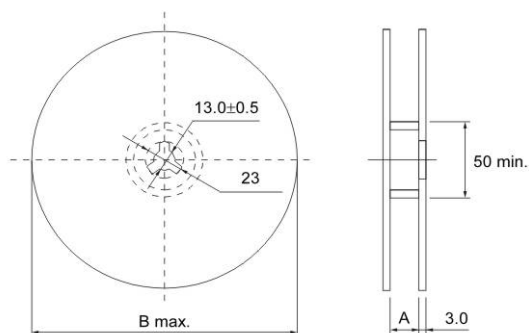
Dimension 尺寸表

(Unit: mm)

$\varnothing D \times L$	12.5×13.5	12.5×16	16×16.5/21.5
W	32.0	32.0	44.0
P	24.0	24.0	28.0
F	14.2	14.2	20.2
A	14.0	14.0	17.5
B	14.0	14.0	17.5
D	14.0	16.5	17.5/22.5
S	28.4	28.4	40.4



■ Reel 卷盤

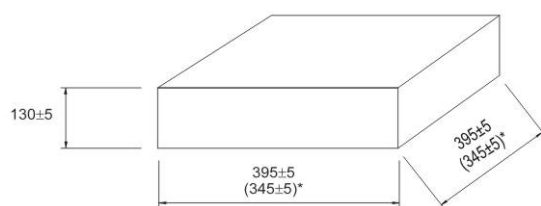


(Unit: mm)

∅D×L	4×5.4/5.8	5×5.4/5.8	6.3×5.4/5.8/7.7	8×6.2/10.5	10×10.5	10×13.5	12.5×13.5/16	16×16.5
A	14	14	18	26	26	26	34	46
B	382	382	382	382	382	382/332*	382/332*	332*

*For a small package *為小盤包裝

■ In-box 內盒

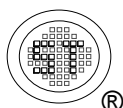


■ Package Quantity 包裝數量

(Unit: mm)

Size (∅D×L) 尺寸	Reel (pcs) 卷盤 (個)	In-box (reels) 內盒 (卷)	Quantity/In-box (pcs) 數量/內盒 (個)	4 In-boxes/Carton (pcs) 4 個內盒/箱 (個)
4 × 5.5/5.8	2,000	6	12,000	48,000
5 × 5.4/5.8	1,000	6	6,000	24,000
6.3 × 5.4/5.8	1,000	5	5,000	20,000
6.3 × 7.7	1,000	5	5,000	20,000
8 × 6.2	1,000	5	5,000	20,000
8 × 10.5	500	4	2,000	8,000
10 × 10.5	500	4	2,000	8,000
10 × 13.5	300/250*	4	1,200/1,000*	4,800/4000*
12.5 × 13.5	200/150*	3	600/450*	2,400/1,800*
12.5 × 16	200/150*	3	600/450*	2,400/1,800*
16 × 16.5	125*	2	250*	1,000*

*For a small package *為小盤包裝



REFLOW SOLDERING CONDITIONS 回流焊條件

□ Applicable to Chip Type Aluminum Electrolytic Capacitors 適用於貼片式鋁電解電容器

■ Recommended Conditions for Reflow Soldering 推薦回流焊條件

- (1) A thermal condition system such as infrared radiation (IR) or hot blast shall be adopted, and vapor heat transfer systems(VPS) are not recommended.

應採用紅外線或熱風回流焊接，而不宜採用汽相加熱回流焊接。

- (2) Reflow soldering shall be done within 2 cycles. Please make sure that the parts have enough cooling time.
回流焊次數最多 2 次，請確保在第一次和第二次之間產品有足夠的冷卻時間。

- (3) ■ The time of preheating from 150°C to 200°C shall be within 180 seconds;

從 150°C 至 200°C 的預熱時間在 180 秒以內；

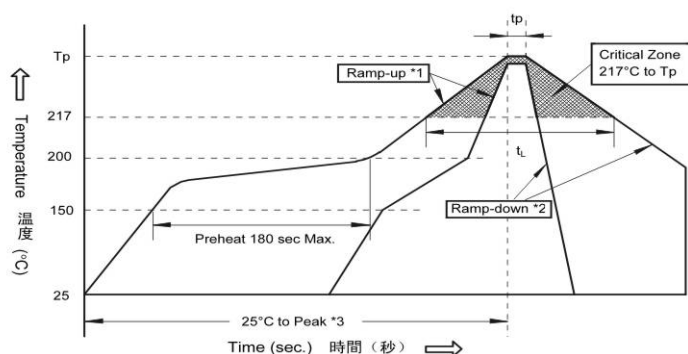
- The time of soldering temperature at 217°C measured on capacitors' top shall not exceed t_L (second);

電容器頂部溫度超過 217°C 的焊接時間不得超過 t_L (秒)；

- The peak temperature on capacitors' top shall not exceed T_p (°C), and the time within 5°C of actual peak temperature shall not exceed t_p (second).

電容器頂部的峰值溫度不得超過 T_p (°C)，在 5°C 範圍內的實際峰值溫度時間不得超過 t_p (秒)。

■ Classification Reflow Profile 回流焊曲線圖



- *1. Average ramp-up rate is 3°C/second max.
*2. Ramp-down rate is 6°C /second max.
*3. Time from 25°C to peak temperature is 8 minutes max.

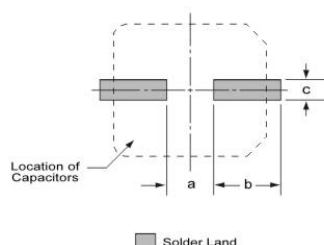
- *1. 溫度上升平均每秒鐘最多 3°C;
*2. 溫度下降平均每秒鐘最多 6°C;
*3. 從 25°C 上升到峰值溫度的時間最多 8 分鐘。

■ Classified at Temperature and Time Only for Standard Size without ()

溫度和時間分類只適用於沒有 () 的標準尺寸產品

Size 尺寸	Thickness(mm) 厚度	Volume(mm ³) 體積	Tp (°C)	tL (second 秒)	Tp (second 秒)
Ø4~Ø6.3, Ø8×6.2L	≥2.5	<350	250±0	60	5
Ø8×10.5L	≥2.5	350~2000	240±0	60	5
Ø10×10.5L/13.5L	≥2.5	350~2000	235±0	60	5
Ø12.5, Ø16	≥2.5	>2000	230±0	30	5

■ Recommended Solder Land Size no PC Board(Unit: mm) 推薦安裝尺寸



Size 尺寸	a	b	c
Ø4	1.0	2.6	1.6
Ø5	1.4	3.0	1.6
Ø6.3	2.1	3.5	1.6
Ø8×6.2L	2.1	4.5	1.6
Ø8×10.5L	3.0	3.5	2.5
Ø10	4.0	4.0	2.5
Ø12.5	4.0	5.7	3.0
Ø16	6.0	6.5	3.5

NOTE: All designs and specifications are for reference only and are subject to change without prior notice. If any doubt about safety for your application, please contact us immediately for technical assistance before purchase.

注：以上所提供的設計及特性參數僅供參考作用，任何修改不作預先通知。如果在使用上有疑問，請在採購前與我們聯絡，以便提供技術上的協助。

