



广东容硕半导体有限公司

Guangdong Roso Semiconductor Co.,Ltd

系列规格书

系列类型：标准品 **RVT**

产品名称：贴片铝电解电容器

APPROVAL		
APPROVAL	CHECK	PREPARE
技术部 陈小英	副 总 黄 杰	总经理 徐永康

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貼片鋁電解電容器代碼標志

Code Sign SMD(V-Chip) Aluminum Electrolytic Capacitor

代碼解釋 Explanation of Part Number

1 2 3			產品型號 Series		RVS		RVK		RVT		RVE		RVW		RVH		RVN		RVZ		RVL			
4 5			額定電壓 R.W.Voltage(V)		4		6.3		10		16		25		35		50		63		100		400	
			代號 Code		0G		0J		1A		1C		1E		1V		1H		1D		2A		2G	
6 7 8			標稱容量 Capacitance(uf)		1	2.2	3.3	4.7	6.8	8.2	10	22	33	47	100	150	220	330	470	680	1000	1500		
			代號 Code		1R0	2R2	3R3	4R7	6R8	8R2	100	220	330	470	101	151	221	331	471	681	102	152		
9			容量允許誤差 Cap. Tol		±5%			±10%			±20%			0~20%			-10~30%			-10~20%				
			代號 Code		J			K			M			A			Q			V				
10 11 12 13			尺寸 Size		4×5.4		5×5.4		6.3×5.4		6.3×7.7		8×6.5		8×10.2		10×10.2		8×12		10×12			
			代號 Code		0405		0505		0605		0607		0806		0810		1010		0812		1012			

實例 For Example: RVT 100μF 10V

1 2 3 4 5 6 7 8 9 10 11 12 13
R V T 1 A 1 0 1 M 0 5 0 5

產品型號
Series RVT

工作電壓
R.W.Voltage 10V

標稱容量
Capacitance 100μF

容量允許誤差
Cap. Tol ±20%

尺寸
Size Φ5×5.4

Series

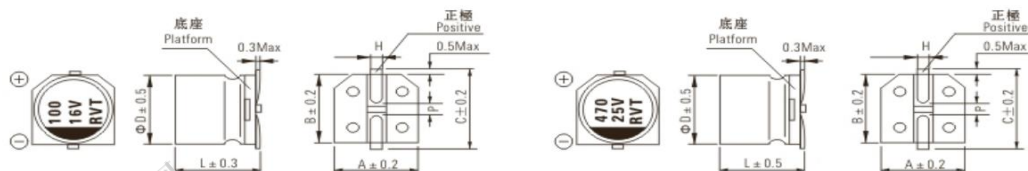


- A. 適用於回流焊
Reflow soldering available for reflow soldering.
- B. 適用於高密度表面組裝
Available for high density surface mounting.
- C. 性能可靠、可靠性高
High stability and reliability
- D. 壽命：105℃, 2000小時
Lifetime: 105℃, 2000Hr
- E. ROHS.REACH指令已對應完畢
Adapted to the ROHS.REACH directive.

■ 主要技術性能 Specifications

使用溫度範圍 Operating temperature range	-55~+105℃																																			
額定電壓範圍 Rated voltage range	6.3V~100V DC																																			
標稱電容量範圍 Nominal capacitance range	1~1500 μ F																																			
標稱電容量允許偏差 Nominal capacitance tolerance	± 20% (120Hz, 20℃)																																			
漏電流(20℃) Leakage current	I≤0.01CV(μ A) 或3 μ A取較大者(2分鐘) Less than 0.01CV(μ A) or 3 μ A whichever is greater (after 2 minutes)																																			
損耗角正切值 Dissipation factor (120Hz 20℃)	<table><tr><td>Rated Voltage(V)</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>0.30</td><td>0.24</td><td>0.20</td><td>0.18</td><td>0.16</td><td>0.14</td><td>0.14</td><td>0.14</td></tr></table>									Rated Voltage(V)	6.3	10	16	25	35	50	63	100	Tan δ (max)	0.30	0.24	0.20	0.18	0.16	0.14	0.14	0.14									
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溫度特性(120Hz) Temperature characteristics impedance ratio(120Hz)	<table><tr><td>Rated Voltage(V)</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>Z_{-25℃}/Z_{+20℃}</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>3</td></tr><tr><td>Z_{-55℃}/Z_{+20℃}</td><td>10</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td><td>4</td></tr></table>									Rated Voltage(V)	6.3	10	16	25	35	50	63	100	Z _{-25℃} /Z _{+20℃}	4	3	2	2	2	2	2	3	Z _{-55℃} /Z _{+20℃}	10	8	6	4	3	3	3	4
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Z _{-55℃} /Z _{+20℃}	10	8	6	4	3	3	3	4																												
耐久性 Load life	+105℃施加額定電壓2000小時，恢復16小時後，電容器應滿足下要求 After applying rated voltage for 2000 hours at +105℃ and then resumed 16 hours, the capacitor shall meet the following limits. <table><tr><td>電容量變化率 Capacitance change</td><td>≤ ± 30%初始值以內 ≤ ± 30% of initial measured value</td></tr><tr><td>漏電流值 Leakage</td><td>≤ 初始規定值 ≤ Initial specified value</td></tr><tr><td>損耗角正切值 Dissipation factor</td><td>≤ 300%初始規定值 ≤ 300% of initial specified value</td></tr></table>									電容量變化率 Capacitance change	≤ ± 30%初始值以內 ≤ ± 30% of initial measured value	漏電流值 Leakage	≤ 初始規定值 ≤ Initial specified value	損耗角正切值 Dissipation factor	≤ 300%初始規定值 ≤ 300% of initial specified value																					
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高溫儲存 Shelf life	+105℃，1000小時，恢復16小時後，電容器應滿足下要求 After storage for 1000 hours at +105℃ and then resumed 16 hours, the capacitor shall meet the following limits. <table><tr><td>電容量變化率 Capacitance change</td><td>≤ ± 30%初始值以內 ≤ ± 30% of initial measured value</td></tr><tr><td>漏電流值 Leakage</td><td>≤ 2倍初始規定值 ≤ 200% of initial specified value</td></tr><tr><td>損耗角正切值 Dissipation factor</td><td>≤ 300%初始規定值 ≤ 300% of initial specified value</td></tr></table>									電容量變化率 Capacitance change	≤ ± 30%初始值以內 ≤ ± 30% of initial measured value	漏電流值 Leakage	≤ 2倍初始規定值 ≤ 200% of initial specified value	損耗角正切值 Dissipation factor	≤ 300%初始規定值 ≤ 300% of initial specified value																					
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耐焊性 Resistance to soldering heat	在250℃的條件下，電容器應在熱板上保持30秒，然後從熱板上取出電容器，讓其在溫室下恢復，電容器應滿足以下要求。 The capacitors shall be kept on the hot plate maintained at 250℃ for 30 seconds. After removing from the hot plate and restored at room temperature, then meet the following requirement. <table><tr><td>電容量變化率 Capacitance change</td><td>≤ ± 10%初始值以內 ≤ ± 10% of initial measured value</td></tr><tr><td>漏電流值 Leakage</td><td>≤ 初始規定值 ≤ Initial specified value</td></tr><tr><td>損耗角正切值 Dissipation factor</td><td>≤ 初始規定值 ≤ Initial specified value</td></tr></table>									電容量變化率 Capacitance change	≤ ± 10%初始值以內 ≤ ± 10% of initial measured value	漏電流值 Leakage	≤ 初始規定值 ≤ Initial specified value	損耗角正切值 Dissipation factor	≤ 初始規定值 ≤ Initial specified value																					
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尺寸及印字 Dimensions & Marking



Φ4.0~Φ6.3

Φ8.0~Φ10.0

ΦD	A	B	C	P	L	g
4.0	4.3	4.3	5.0	1.0	5.4	0.5~0.8
5.0	5.3	5.3	6.0	1.5	5.4	0.5~0.8
6.3	6.6	6.6	7.2	2.1	5.4	0.5~0.8
6.3	6.6	6.6	7.2	2.1	7.7	0.5~0.8
8.0	8.3	8.3	9.1	3.1	6.5	0.8~1.1
8.0	8.3	8.3	9.1	3.1	10.2	0.8~1.1
10.0	10.3	10.3	11.1	4.5	10.2	0.8~1.1

標稱電容量、額定電壓、額定紋波電流與外形尺寸對應表

Nominal capacitance, rated voltage, rated ripple current and case size table

WV	6.3V		10V		16V		25V		35V		50V		63V		100V	
uF	D × Lmm	mA	D × Lmm	mA	D × Lmm	mA	D × Lmm	mA	D × Lmm	mA	D × Lmm	mA	D × Lmm	mA	D × Lmm	mA
1											4 × 5.4	8.0				
2.2											4 × 5.4	12			6.3 × 5.4	15
3.3									4 × 5.4	14	4 × 5.4	14	5 × 5.4	14	6.3 × 5.4	22
4.7							4 × 5.4	14	4 × 5.4	15	4 × 5.4	14	5 × 5.4	17	6.3 × 5.4	23
10					4 × 5.4	17	4 × 5.4	15	4 × 5.4	15	5 × 5.4	17	6.3 × 5.4	26	6.3 × 7.7	38
22	4 × 5.4	22	4 × 5.4	21	4 × 5.4	21	5 × 5.4	21	5 × 5.4	22	6.3 × 5.4	25	6.3 × 7.7	41	8 × 10.2	80
33	4 × 5.4	23	4 × 5.4	23	5 × 5.4	29	5 × 5.4	30	6.3 × 5.4	45	6.3 × 7.7	63	8 × 10.2	116	10 × 10.2	136
47	4 × 5.4	26	5 × 5.4	31	5 × 5.4	33	6.3 × 5.4	49	6.3 × 5.4	54	6.3 × 7.7	66	8 × 10.2	125	8 × 10.2	148
68	5 × 5.4	40	5 × 5.4	40	6.3 × 5.4	63	6.3 × 7.7	93	6.3 × 7.7	87	8 × 10.2	146	10 × 10.2	200		
100	6.3 × 5.4	52	6.3 × 5.4	55	6.3 × 7.7	93	8 × 6.5	93	8 × 10.2	125	10 × 10.2	178				
150	6.3 × 5.4	56	6.3 × 5.4	65	6.3 × 7.7	100	6.3 × 7.7	100	8 × 10.2	158	10 × 10.2	178				
220	6.3 × 5.4	69	6.3 × 5.4	69	6.3 × 7.7	110	8 × 10.2	183	8 × 10.2	195	10 × 10.2	230				
330	6.3 × 7.7	108	6.3 × 7.7	110	8 × 6.5	110	10 × 10.2	230	10 × 10.2	230						
470	6.3 × 7.7	125	8 × 10.2	214	8 × 10.2	240	10 × 10.2	286	10 × 10.2	286						
680	8 × 10.2	214	10 × 10.2	266	10 × 10.2	300										
1000	8 × 10.2	235	10 × 10.2	320	10 × 10.2	347										
1500	10 × 10.2	320														

額定紋波電流 Rated ripple current (mA, 105°C, 120Hz)

額定紋波電流的頻率系數 Frequency coefficient of rated ripple current

頻率 Frequency	30Hz	120Hz	300Hz	1KHz	≥10KHz
系數 Coefficient	0.70	1.00	1.17	1.36	1.50

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

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.

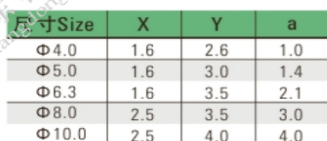
Taping of Chip Type Aluminum Electrolytic Capacitor And Size

■ **編帶** Carrier Tape

■ 編帶包裝卷盤 Reel

■ 焊接方法和再流焊允許範圍 Soldering method and allowable range of the reflow

- ### ■ 表面安裝推薦尺寸 Recommended land size



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