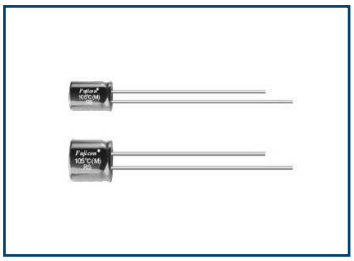
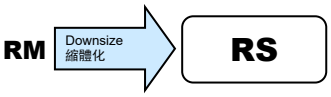
RS Series

WIDE TEMPERATURE RANGE, HEIGHT 5MM
5MM 高，寬溫品





- Super miniature series with 5mm height
  5mm 高，超小型系列
- Suitable to replace tantalum capacitors at low cost
  可替換價格較高的鉭電容器
- Endurance 1000 hours
  耐久性 1000 小時
- Comply with the RoHS & REACH
  符合 RoHS 與 REACH



☐ SPECIFICATIONS 特性表

Items 項目	Characteristics 主要特性
Category Temperature Range 工作温度範圍	-40 ~ +105°C
Voltage Range 額定工作電壓範圍	4 ~ 50V
Capacitance Range 靜電容量範圍	0.1 ~ 470μF
Capacitance Tolerance 靜電容量允許偏差	±20% at 120Hz, 20°C
Leakage Current 漏電流	Leakage current ≤0.01CV or 3μA, whichever is greater (after 2 minutes application of rated voltage at 20°C) 漏電流 ≤0.01CV 或 3μA，取較大值（在 20°C 環境中施加額定工作電壓 2 分鐘後） C: Nominal capacitance (μF) 標稱靜電容量, V: Rated voltage (V) 額定電壓
Dissipation Factor (tan δ) 損耗角正切	Measurement frequency 測試頻率: 120Hz, Temperature 温度: 20°C

Rated Voltage (V) 額定工作電壓	4	6.3	10	16	25	35	50
tan δ (max.) 最大損耗角正切	0.35	0.27	0.23	0.19	0.15	0.13	0.11

Stability at Low Temperature
低温特性

Measurement frequency 測試頻率: 120Hz

Rated Voltage (V) 額定工作電壓		4	6.3	10	16	25~50
Impedance Ratio 阻抗比	Z(-25°C) / Z(+20°C)	7	3	3	2	2
	Z(-40°C) / Z(+20°C)	12	8	5	4	3

Endurance
耐久性

When the capacitors are restored to 20°C after 1000 hours application of the rated voltage at 105°C, they meet the characteristics listed below.
在 105°C 環境中施加額定工作電壓 1000 小時後，待電容器恢復至 20°C 時進行測量，電容器的特性符合下表要求。

Capacitance Change 靜電容量變化率	Within ±25% of initial measured value 初始值的±25%以內
Dissipation Factor 損耗角正切	≤200% of initial specified value 不大於規範值的 200%
Leakage Current 漏電流	≤initial specified value 不大於規範值

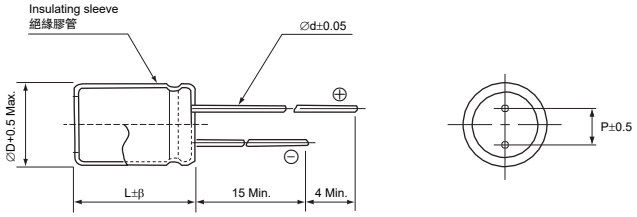
Shelf Life
高温貯存特性

When the capacitors are restored to 20°C after leaving under no load at 105°C for 1000 hours, they meet the specified value for endurance characteristics listed above.
在 105°C 環境中無負荷放置 1000 小時後，待電容器恢復至 20°C 時進行測量，電容器的特性符合耐久性特性中所列的規定值。

Marking
標識

Printed with white colour on black sleeve (PVC) or printed with white colour on green and brown (∅3×5) sleeve (PET).
黑色膠管白字印刷（PVC）或綠色和褐色（∅3×5）膠管白字印刷（PET）。

☐ DRAWING & DIMENSIONS 外形圖及尺寸 (Unit: mm)



∅D	3	4	5	6.3	8
p	1.0	1.5	2.0	2.5	3.5
∅d	0.45				
β	1.0				

Note: All design and specifications are for reference only and is 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，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繫，以便提供技術上的協助。

RS Series

☐ DIMENSIONS & STANDARD RATINGS 規格尺寸及標準參數

WV / Code 代碼 / μF		4		6.3		10		16		25		35		50	
		0G		0J		1A		1C		1E		1V		1H	
0.1	0R1													3 x 5 (4 x 5)	2.0 (2.4)
0.22	R22													3 x 5 (4 x 5)	3.0 (3.6)
0.33	R33													3 x 5 (4 x 5)	3.7 (4.4)
0.47	R47													3 x 5 (4 x 5)	4.4 (5.2)
0.68	R68													3 x 5 (4 x 5)	5.3 (6.3)
1	010													3 x 5 (4 x 5)	6.4 (7.7)
2.2	2R2													3 x 5 (4 x 5)	9.5 (11)
3.3	3R3											3 x 5 (4 x 5)	9 (11)	4 x 5	14
4.7	4R7									3 x 5 (4 x 5)	10 (12)	4 x 5	13	4 x 5 (5 x 5)	16 (19)
6.8	6R8					3 x 5	11	3 x 5	14	4 x 5	15	4 x 5	17	5 x 5	23
10	100			3 x 5 (4 x 5)	13 (15)	3 x 5 (4 x 5)	14 (17)	3 x 5 (4 x 5)	16 (16)	4 x 5	19	5 x 5	22	5 x 5 (6.3 x 5)	28 (33)
22	220	3 x 5 (4 x 5)	16 (16)	3 x 5 (4 x 5)	18 (19)	3 x 5 (4 x 5)	20 (22)	4 x 5	29	5 x 5	34	5 x 5	36	6.3 x 5	40
33	330	4 x 5	20	4 x 5	23	4 x 5	29	5 x 5	37	5 x 5	45	6.3 x 5	50	8 x 5	58
47	470	4 x 5	24	4 x 5	28	5 x 5	35	5 x 5 (6.3 x 5)	46 (49)	6.3 x 5	54	6.3 x 5	62	8 x 5	71
68	680	5 x 5	36	5 x 5	46	5 x 5	47	6.3 x 5	52	6.3 x 5	63	8 x 5	105		
100	101	5 x 5	41	5 x 5	50	5 x 5 (6.3 x 5)	50 (52)	6.3 x 5 (8 x 5)	58 (72)	8 x 5	90				
220	221	6.3 x 5	56	6.3 x 5	60	6.3 x 5 (8 x 5)	65 (78)	8 x 5	86						
330	331	8 x 5	80	8 x 5	86	8 x 5	90							Case size 尺寸	Ripple current 紋波電流
470	471	8 x 5	88	8 x 5	96										

•Case size ∅D×L(mm), ripple current (mA rms) at 105°C, 120Hz •尺寸∅D×L(mm)，紋波電流(mA rms)於 105°C, 120Hz

- Please refer to page 21 “Taping Specifications” & page 23 “Lead Forming & Cutting” about the taped or formed product spec. 編帶與引線成型標準請查閱第 21 頁“編帶標準”及第 23 頁“引線成型與剪腳”。
- Please refer to page 22 “Packaging Specifications” for the minimum package quantity. 最小包裝數量請查閱第 22 頁“包裝標準”。
- Please refer to page 18 for the Part Number System. 產品編碼規則請查閱第 18 頁。

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