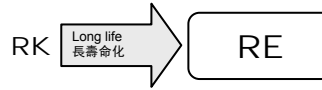


WIDE TEMPERATURE

寬溫品

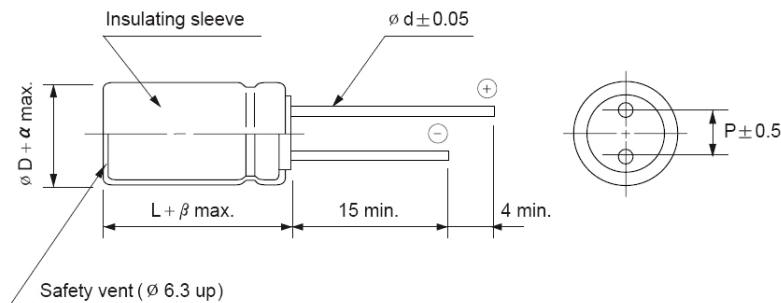
- Wide temperature range of $-40 \sim +105^{\circ}\text{C}$
適用於 $-40 \sim +105^{\circ}\text{C}$ 的寬溫範圍
- Standard series for general purposes
標準品通用型
- Load life of 2000 hours at 105°C
在 105°C 環境中負荷壽命 2000 小時
- Comply with the RoHS directive
符合 RoHS 指令



□ SPECIFICATIONS 特性表

Items 項目	Characteristics 主要特性	
Operation Temperature Range 使用溫度範圍	$-40 \sim +105^{\circ}\text{C}$	$-25 \sim +105^{\circ}\text{C}$
Voltage Range 額定工作電壓範圍	6.3 ~ 100V	160 ~ 450V
Capacitance Range 靜電容量範圍	0.47 ~ 1000 μF	0.47 ~ 33 μF
Capacitance Tolerance 靜電容量允許偏差	$\pm 20\%$ at 120Hz, 20°C	
Leakage Current 漏電流	Leakage current = 0.01CV or 3 μA , whichever is greater (after 2 minutes application of rated voltage) 漏電流 = 0.01CV 或 3 μA , 取較大值 (施加額定工作電壓 2 分鐘後)	Leakage current = 0.02CV + 15 μA (after 5 minutes application of rated voltage) 漏電流 = 0.02CV + 15 μA (施加額定工作電壓 5 分鐘後)
Dissipation Factor (tan δ) 損耗角正切	When nominal capacitance is over 1000 μF , tan δ shall be added 0.02 to the listed value with increase of every 1000 μF . 當標稱靜電容量大於 1000 μF , 其標稱靜電容量每增加 1000 μF , 損耗角正切增加 0.02. Measurement frequency 測試頻率: 120Hz, Temperature 溫度: 20°C	
Stability at Low Temperature 低溫特性	Measurement frequency 測試頻率: 120Hz	
	Rated Voltage (V) 額定工作電壓	6.3 10 16 25 35 50 63 100 160~250 350~450
Load Life 高溫負荷特性	Impedance Ratio $Z(-25^{\circ}\text{C}) / Z(20^{\circ}\text{C})$	4 3 2 2 3 8
	Resistance Ratio $Z(-40^{\circ}\text{C}) / Z(20^{\circ}\text{C})$	8 6 4 3 4 —
Shelf Life 高溫貯存特性	After 2000 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 2000 小時後, 電容器的特性符合下表的要求。	
	Capacitance Change 靜電容量變化率	Within $\pm 20\%$ of initial measured value 初始值的 $\pm 20\%$ 以內
	Dissipation Factor 損耗角正切	$\leq 200\%$ of initial specified value 不大於規範值的 200%
	Leakage Current 漏電流	\leq initial specified value 不大於規範值
Marking 標識	Printed with white colour on black sleeve (PVC) or printed with white colour on green sleeve (PET). 黑色膠管白字印刷 (PVC) 或綠色膠管白字印刷 (PET).	

□ DRAWING (Unit: mm) 外形圖



ϕD	5	6.3	8
P	2.0	2.5	3.5
ϕd	0.5		
β	1.5		
α	0.5		

□ 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	0.47 ~ 47 μF	0.75	1.00	1.35	2.00
	68 ~ 680 μF	0.80	1.00	1.25	1.50
	1000 μF	0.85	1.00	1.10	1.13

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。

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

WV Code 代碼	6.3		10		16		25		35		50		63		
	0J	1A	1C	1E	1V	1H	1J								
0.47	R47										5 x 11	8	5 x 11	8	
0.68	R68										5 x 11	9	5 x 11	9	
1	010										5 x 11	11	5 x 11	13	
2.2	2R2										5 x 11	14	5 x 11	15	
3.3	3R3										5 x 11	17	5 x 11	19	
4.7	4R7										5 x 11	20	5 x 11	22	
6.8	6R8										5 x 11	25	5 x 11	34	
10	100				5 x 11	50	5 x 11	38	5 x 11	41	5 x 11	46	5 x 11	50	
22	220			5 x 11	50	5 x 11	54	5 x 11	57	5 x 11	61	5 x 11 (6.3x11.5)	68 (75)	6.3 x 11.5	82
33	330			5 x 11	60	5 x 11	64	5 x 11	69	5 x 11	75	6.3 x 11.5	90	6.3 x 11.5	85
47	470	5 x 11	62	5 x 11	71	5 x 11	80	5 x 11	106	5 x 11 (6.3x11.5)	106 (110)	6.3 x 11.5	125	6.3 x 11.5	90
68	680	5 x 11	80	5 x 11	83	5 x 11	85	5 x 11	114	6.3 x 11.5	121	8 x 11.5	144	8 x 11.5	128
100	101	5 x 11	95	5 x 11	100	5 x 11 (6.3x11.5)	120 (135)	5 x 11 (6.3x11.5)	120 (145)	6.3 x 11.5 (8x11.5)	165 (210)	8 x 11.5	180	8 x 16	210
220	221	5 x 11	150	5 x 11 (6.3x11.5)	155 (165)	6.3 x 11.5	175	6.3 x 11.5 (8x11.5)	175 (185)	8 x 11.5	250				
330	331	6.3 x 11.5	170	6.3 x 11.5	180	8 x 11.5	195	8 x 11.5	245						
470	471	6.3 x 11.5	205	6.3 x 11.5 (8x11.5)	260 275	8 x 11.5	305	8 x 11.5 (8x16)	270 (320)						
680	681	8 x 11.5	314	8 x 11.5 (8x16)	345 (390)	8 x 16	480								
1000	102	8 x 11.5	380	8 x 11.5 (8x16)	400 (425)										

WV Code 代碼	100		160		200		250		350		400		450		
	2A	2C	2D	2E	2V	2G	2W								
0.47	R47	5 x 11	14	5 x 11	12	5 x 11	12	5 x 11	12	6.3 x 11.5	12	6.3 x 11.5	12	6.3 x 11.5	12
0.68	R68	5 x 11	15	5 x 11	13	5 x 11	13	5 x 11	13	6.3 x 11.5	13	6.3 x 11.5	13	8 x 11.5	13
1	010	5 x 11	19	5 x 11	16	5 x 11	16	6.3 x 11.5	16	6.3 x 11.5	16	6.3 x 11.5 (8x11.5)	16 (20)	8 x 11.5	17
2.2	2R2	5 x 11	25	6.3 x 11.5	23	6.3 x 11.5	23	6.3 x 11.5	24	8 x 11.5	24	8 x 11.5	26		
3.3	3R3	5 x 11	32	6.3 x 11.5	34	6.3 x 11.5	34	8 x 11.5	34	8 x 11.5	34	8 x 11.5	30		
4.7	4R7	5 x 11	38	6.3 x 11.5	40	8 x 11.5	40	8 x 11.5	40						
6.8	6R8	5 x 11	52	8 x 11.5	48	8 x 11.5	52								
10	100	5 x 11 (6.3x11.5)	66 (73)												
22	220	6.3 x 11.5	104												
33	330	8 x 11.5	150											Case size 尺寸	Ripple current 紋波電流

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

- Please refer to page 16, 18 about the formed or taped product spec. 編帶與引線成型標準請參閱第 16, 18 頁。
- Please refer to page 17 for the minimum package quantity. 最小包裝數量請參閱第 17 頁。

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