

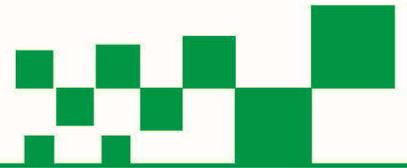


KS series

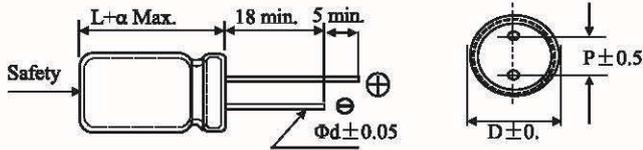
- 微型系列產品 7mm高度。
- 105°C負荷壽命達1000小時。
- 符合RoHS要求。
- Miniature series 7mm height.
- Load life 1000 hours at 105°C.
- RoHS Compliant.
- SPECIFICATIONS



項目Item	特性Performance Characteristics	
適用溫度範圍 Operating Temperature Range	-40to+105°C	-25to+105°C
工作電壓範圍 Rated Voltage Range	6.3to100VDC	160to450VDC
靜電容量誤差 Capacitance Range	0.1to4700 µF	0.47to220 µF
電容量允差 Capacitance Tolerance	±20% (100Hz or 120Hz, +20°C)	
洩漏電流 Leakage Current (+20°C, 最大max)	I ≤ 0.01CV或5 (µA) 額定工作電壓充電1分鐘後讀數, 取 I ≤ 0.01CV or 5 (µA) After 1 minutes, whichever is greater measured with rated working voltage applied	I ≤ 0.03CV+10 (µA) 額定工作電壓充電1分鐘後讀數, 取大者 I ≤ 0.03CV+10 (µA) After 1 minutes, whichever is greater measured with rated working voltage applied
散逸因素 (tan δ) Dissipation Factor (tg δ)	工作電壓 Working Voltage (VDC)	6.3 10 16 25 35 50 63 100 160 200 250 350 400 450
	D.F.(%)最大	22 20 18 14 14 12 12 10 14 14 14 15 15 17
容量>1000 µF時, 每增加1000 µF D.F值增加2%(100Hz or 120Hz, +20°C) For capacitance >1000 µF, Add 2% per another 1000 µF (100Hz or 120Hz, +20°C)		
低溫特性 Low Temperature Characteristics (120Hz)	阻抗比, 最大 Impedance ratio, max	
	工作電壓 Working Voltage (VDC)	6.3 10 16 25 35 50 63 100 160 200 250 350 400 450
	Z - 25°C / Z+20 °C	4 3 2 2 2 2 2 2 2 2 3 5 6 15
Z - 40°C / Z+20 °C	8 6 4 3 3 3 3 3 - - - - -	
容量>1000 µF時, 每增加1000 µF, Z - 25°C / Z+20 °C值增加0.5%, Z - 40°C / Z+20 °C值增加1% For capacitance >1000 µF, and 0.5% per another 1000 µF for Z-25°C/Z+20°C, add 1% per another 1000 µF for Z-40°C/Z+20°C		
負荷壽命 Load Life	試驗條件	Test conditions
	持續時間: 8000~12000小時	Duration time: 1000hours
	環境溫度: +105°C	Ambient temperature: +105°C
	施加電壓: 額定工作電壓 (VDC)	Applied voltage: Rated Working Voltage (VDC)
	施加額定紋波電流	Applied voltage: Rated Working Voltage (mA)
	試驗後要求: 室溫下恢復16小時, +20°C測試	After test requirements: Resume 16 hours at normal temperature
	電容量變化: ≤20%規定值	Capacitance change: ≤20% of the initial measured value
	損耗角正切值: ≤200%初始值	Dissipation Factor: ≤200% of the initial specified value
放置壽命 Shelf Life	試驗條件	Test conditions
	持續時間: 500小時	Duration time: 500hours
	環境溫度: +105°C	Ambient temperature: +105°C
	施加電壓: 無	Applied voltage: None
	試驗後要求: 室溫下恢復16小時, +20°C測試	After test requirements: Resume 16 hours at normal temperature
	電容量變化: ≤20%規定值	Capacitance change: ≤20% of the initial measured value
	損耗角正切值: ≤200%初始值	Dissipation Factor: ≤200% of the initial specified value
	試驗條件漏電流: ≤200%規定值	Leakage Current: ≤200% of the initial specified value

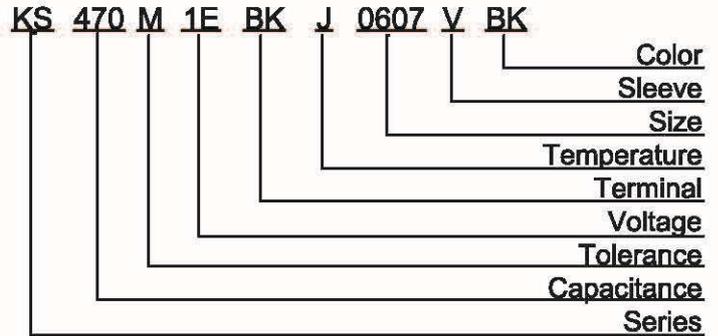


●DIMENSIONS(mm)



Dφ	4	5	6.3	8
F	1.65	2	2.5	3.5
dφ	0.5			

●PART NUMBER SYSTEM



●試驗條件紋波電流頻率調整系數

Multiplier for ripple current vs. frequency

容量 (μF) / Hz		60(50)	120	400	1K	10K	50K~100K
系數	≤10	0.8	1	1.30	1.30	1.65	1.70
	10~100	0.8	1	1.23	1.23	1.48	1.53
	100~1000	0.8	1	1.16	1.16	1.35	1.38
	>1000	0.8	1	1.11	1.11	1.25	1.28

●紋波電流溫度調整系數

Multiplier for ripple current vs. temperature

溫度℃	45	60	70	85	105
系數	2.10	1.90	1.40	1.25	1.00

●標準額定值 STANDARD RATINGS

WV (vdc)	Cap (uF)	Case size φD X L(mm)	tanδ	Ripple current (mA rms/105°C · 120HZ)
6.3V (0J)	22	4x7	0.22	34
	33	5x7	0.22	42
	47	5x7	0.22	50
	100	6.3x7	0.22	77
10V (1A)	22	4x7	0.20	38
	33	5x7	0.20	47
	47	5x7	0.20	65
	100	6.3x7	0.20	87
	220	6.3x7	0.20	135
	330	8x7	0.20	175
16V (1C)	470	8x7	0.20	245
	10	4x7	0.18	29
	22	4x7	0.18	44
	33	5x7	0.18	50
	47	5x7	0.18	60
	100	6.3x7	0.18	105
	220	8x7	0.18	125
	330	8x7	0.18	170
470	8x9	0.18	215	

WV (vdc)	Cap (uF)	Case size φD X L(mm)	tanδ	Ripple current (mA rms/105°C · 120HZ)
25V (1E)	10	5x7	0.14	33
	22	5x7	0.14	51
	33	6.3x7	0.14	65
	47	6.3x7	0.14	80
	100	8x7	0.14	105
35V (1V)	10	5x7	0.14	36
	22	6.3x7	0.14	60
	47	6.3x7	0.14	75
	100	8x7	0.14	110
50V (1H)	0.1	4x7	0.12	1.0
	0.22	4x7	0.12	2.3
	0.33	4x7	0.12	3.5
	0.47	4x7	0.12	5
	1.0	4x7	0.12	10
	2.2	4x7	0.12	19
	3.3	4x7	0.12	24
	4.7	5x7	0.12	29
	10	5x7	0.12	44
	22	6.3x7	0.12	60