

# UK series

- High-temperature resistance, high ripple current.
- 105°C for general purposes, 3000 hours standard product.
- RoHS Compliance
- 耐高溫、高紋波。
- 105°C 3000hours 標準品



## SPECIFICATIONS

Items 項目	Characteristics 特性													
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20°C)													
Operating Temperature Range 適用溫度範圍	-40 ~ +105°C				-40 ~ +105°C				-25 ~ +105°C					
Rated Voltage Range 額定電壓範圍	6.3 ~ 100VDC				160 ~ 250VDC				350 ~ 450VDC					
Leakage Current 洩漏電流	I ≤ 0.01CV or 3 (µA) which is greater.( After 2 minutes application of DC rated voltage, at 20 °C)							I ≤ 0.03CV +20 (µA) ( After 3 minutes application of DC rated voltage, at 20 °C)						
Dissipation Factor 散逸因素( tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C													
	Rated Voltage(V)	6.3	10	16	25	35	50	63	80	100	120	160~250	350~450	500
	tan δ(Max)	0.24	0.20	0.16	0.15	0.12	0.10	0.09	0.08	0.08	0.08	0.20	0.25	0.25
When nominal capacitance over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF .														
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.													
	Rated Voltage(V)	6.3	10	16	25	35	50~100	160~250	350~400	450				
	Z(-25°C)/(20°C)	5	4	3	2	2	2	3	6	15				
	Z(-40°C)/(20°C)	10	8	6	4	3	3	4	-	-				
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 3,000 hours at 105°C.													
	Capacitance Change	Within ± 20% of Initial Value												
	tan δ	200% or less of Initial Specified Value												
	Leakage Current	Initial Specified Value or less												
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.													
	Capacitance Change	Within ± 20% of Initial Value												
	tan δ	200% or less of Initial Specified Value												
	Leakage Current	Initial Specified Value or less												
Standards 參照標準	JIS C 5101-4 (IEC 60384)													

## Frequency Coefficient of Permissible Ripple Current

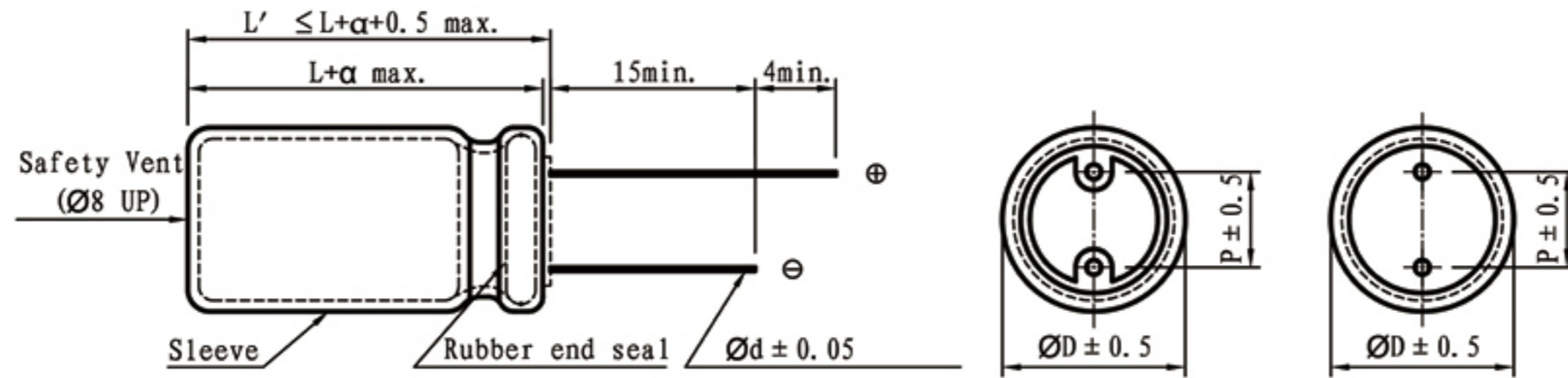
Rated Voltage (V)	Capacitance (µF)	Frequency (Hz)			
		50	120	1K	≥20K
≤ 100	< 100	0.75	1.00	1.57	2.00
	100 ~ 470	0.80	1.00	1.34	1.50
	> 470	0.85	1.00	1.10	1.15
≥ 160	0.47 ~ 1000	0.85	1.00	1.40	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use , the rms ripple current has to be reduced.



# UK series

DIMENSIONS(mm)



φD	5	6.3	8	10	13	16	18	20	22
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	10
φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8	0.8

$\alpha$	(L < 16) 1.0
	(L ≥ 16) 2.0

STANDARD RATINGS

DxL(mm) ; R.C.(mA rms) at 105°C 120Hz.

Cap (μF)	V	6.3		10		16		25		35		50		63	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
0.1~0.47												5x11	12		
1												5x11	16		
2.2												5x11	25		
3.3												5x11	35		
4.7								5x11	32	5x11	33	5x11	38		
6.8								5x11	37	5x11	39	5x11	50	5x11	52
10						5x11	44	5x11	45	5x11	49	5x11	56	5x11	68
22	5x11	56	5x11	61	5x11	65	5x11	67	5x11	76	5x11	89	6.3x11	112	
33	5x11	68	5x11	79	5x11	81	5x11	85	5x11	93	6.3x11	130	8x12	145	
47	5x11	80	5x11	89	5x11	97	5x11	100	6.3x11	133	6.3x11	152	8x12	174	
56	5x11	92	5x11	103	5x11	107	5x11	121	6.3x11	136	6.3x11	171	8x12	187	
68	5x11	105	5x11	121	5x11	150	5x11	158	6.3x11	173	6.3x11	208	8x12	234	
100	5x11	113	5x11	145	6.3x11	157	6.3x11	179	8x12	197	8x14	270	10x13	292	
220	5x11	176	6.3x11	223	8x12	248	8x12	318	10x13	347	10x16	583	10x20	693	
330	6.3x11	240	6.3x11	275	8x12	361	10x13	391	10x16	490	10x20	737	13x21	770	
470	6.3x11	292	8x12	339	8x14	427	8x16	523	10x20	627	13x21	902	13x25	1012	
560	8x12	350	8x12	443	8x14	475	10x16	594	10x20	644	13x21	963	13x25	1177	
680	8x12	413	8x12	538	8x16	548	10x20	704	13x21	770	13x25	1040	16x26	1337	
1000	8x14	502	10x13	645	10x16	768	10x20	919	13x21	1194	13x25	1485	16x32	1848	
1500	10x16	669	10x20	798	10x20	993	13x21	1155	13x25	1370	16x32	1810	18x32	1975	
2200	10x20	912	10x20	988	13x21	1231	13x25	1447	16x26	1678	16x36	2200	18x35	2288	
3300	10x20	1154	13x21	1395	13x25	1560	16x26	1847	16x36	2145	18x35	2541	22x40	2695	
4700	13x21	1447	13x25	1671	16x26	1958	16x32	2310	18x35	2640	22x40	2915	22x50	3069	
6800	13x25	1795	16x26	2056	16x36	2374	18x35	2767	22x40	2761	22x50	3080			
10000	16x26	2112	16x36	2265	18x35	2903	22x40	2860	22x50	3210					
15000	16x36	2629	18x35	2820	22x40	2991	22x50	3350							
22000	18x40	2805	22x40	3620	22x50	3650									

Cap (μF)	V	100		160		200		250		350		400		450	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
0.1		5x11	1.7												
0.22		5x11	3.7												
0.33		5x11	5.5												
0.47		5x11	12	6.3x11	22	6.3x11	22	6.3x11	26	6.3x11	24	8x12	26	8x12	25
1		5x11	18	6.3x11	30	6.3x11	25	6.3x11	28	8x12	45	8x12	46	10x16	75
2.2		5x11	28	6.3x11	35	6.3x11	30	8x12	62	8x12	62	8x12	70	10x16	80
3.3		5x11	40	8x12	65	8x12	70	8x12	75	10x13	90	10x13	105	10x20	125
4.7		5x11	46	8x12	70	8x12	75	10x13	120	10x13	95	10x16	130	10x20	135
6.8		5x11	54	8x12	75	8x12	85	10x13	125	10x13	105	10x16	150	13x21	165
10		6.3x11	69	10x13	90	10x16	140	10x16	150	10x20	145	10x20	175	13x21	175
22		8x12	127	10x16	145	10x20	200	13x21	250	13x25	245	13x25	280	16x26	410
33		8x12	167	10x20	200	13x21	250	13x21	260	16x26	420	16x26	420	16x32	470
47		10x16	231	13x21	240	13x25	340	13x25	350	16x26	450	16x26	470	18x32	540
68		10x16	271	13x21	303	13x25	360	16x26	540	16x32	490	16x32	510	18x35	570
82		10x16	299	13x25	365	13x25	385	16x26	550	16x32	510	18x32	580	18x35	590
100		10x20	402	16x26	520	16x26	550	16x32	630	18x32	620	18x35	650	18x40	750
120		10x25	457	16x26	550	16x26	570	16x32	650	18x35	650	18x40	780	18x45	820
150		13x21	579	16x26	580	16x32	650	18x32	720	18x40	850	22x40	920		
220		13x25	762	16x26	660	18x35	800	18x40	850						
330		16x26	952	18x35	957	22x35	1100								
470		16x32	1238	18x40	1100	22x40	1238								
1000		18x35	2321	22x50	1760										

※ 13mm may be replaced by 12.5mm upon customer's request.