

●広使用温度範囲130°C品

●WIDE OPERATING TEMP. RANGE TYPE 130°C USE

UCWKT シリーズ

JIS C 5101
CE-04

TYPE UCWKT

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CE-04

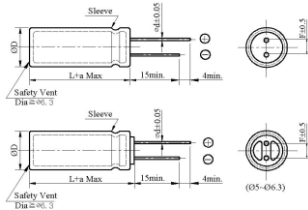
■特徴

- UCWKTシリーズは、広温度範囲（-40~+130°C）で極めて安定した性能をもつ製品です。
- 苛酷な使用条件が要求される自動車電装機器、通信機器、各種産業用機器等に最適です。

■FEATURES

- The UCWKT series constitutes products which show extraordinary stabilization in performance at a wide temperature range of -40 to +130°C.
- This series is most suitable for use in automobile electric devices, communications equipment and various types of industrial machinery and equipment which are subjected to rigorous using conditions.

■寸法図/DIAGRAM OF DIMENSIONS



ΦD	6.3	8	10	12.5	16	18
ΦD	ΦD + 0.5Max					
Φd	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5
a	L + 1.5Max			≤35 L+1.5Max ≥40 L+2.0Max		L + 1.5Max

■性能/PERFORMANCE SPECIFICATIONS

カテゴリ	温度範囲	CATEGORY	温度範囲																										
標準静電容量許容差		STANDARD CAPACITANCE TOLERANCE	-20 ~ +20%																										
漏れ電流 (最大値)		LEAKAGE CURRENT (MAX. VALUE)	$I \leq 0.01CV$ or $2\mu A$ whichever is greater (10~100V) $I \leq 0.03CV + 10\mu A$ (200~450V) I: Leakage current (μA) C: Rated capacitance (μF) V: Rated voltage (V) Impress the rated voltage for 2 minutes																										
損失角の正接 (最大値) (tan δ)		DISSIPATION FACTOR (MAX. VALUE) (tan δ)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>200</td> <td>250</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>tan δ (Max)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.09</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> </tr> </table>	Rated Voltage (V)	10	16	25	35	50	63	100	200	250	400	420	450	tan δ (Max)	0.20	0.16	0.14	0.12	0.10	0.10	0.09	0.20	0.20	0.24	0.24	0.24
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耐久性 130°C 1000~4000時間 定格使用電圧印加		ENDURANCE APPLICATION OF RATED OPERATING VOLTAGE AT 130°C FOR 1000~4000 HOURS.	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage with the rated ripple current is applied for 1,000~4,000 hours at 130°C <table border="1"> <tr> <td></td> <td>10~100 Vdc</td> <td>200~450 Vdc</td> <td>Case Size</td> <td colspan="2">Lifetime (hours)</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±30% of the initial value</td> <td>≤ ±20% of the initial value</td> <td>ΦD=6.3</td> <td>—</td> <td>1,000</td> </tr> <tr> <td>Dissipation factor (tan δ)</td> <td>≤ ±300% of the specified value</td> <td>≤ ±200% of the specified value</td> <td>ΦD=8, 10</td> <td>2,000</td> <td>2,000</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">≤ Specified value</td> <td>ΦD ≥ 12.5</td> <td>4,000</td> <td>3,000</td> </tr> </table>		10~100 Vdc	200~450 Vdc	Case Size	Lifetime (hours)		Capacitance change	≤ ±30% of the initial value	≤ ±20% of the initial value	ΦD=6.3	—	1,000	Dissipation factor (tan δ)	≤ ±300% of the specified value	≤ ±200% of the specified value	ΦD=8, 10	2,000	2,000	Leakage current	≤ Specified value		ΦD ≥ 12.5	4,000	3,000		
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低温特性 (+20°Cにおける120Hzのインピーダンスに対する比) (最大値)		ENDURANCE APPLICATION OF WITHOUT VOLTAGE FOR 1,000 HOURS.	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 1,000 hours at 130°C without voltage applied. After test : UR to be applied for 30 minutes, 24 to 48 hours before measurement. <table border="1"> <tr> <td></td> <td>10~100 Vdc</td> <td>200~450 Vdc</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±30% of the initial value</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor (tan δ)</td> <td>≤ ±300% of the specified value</td> <td>≤ ±200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">≤ Specified value</td> </tr> </table>		10~100 Vdc	200~450 Vdc	Capacitance change	≤ ±30% of the initial value	≤ ±20% of the initial value	Dissipation factor (tan δ)	≤ ±300% of the specified value	≤ ±200% of the specified value	Leakage current	≤ Specified value															
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その他の特性はJIS C 5101-4に準ずる		THE OTHER CHARACTERISTICS	THE OTHER CHARACTERISTICS ARE BASED ON JIS C 5101-4.																										

■定格リップル電流補正係数

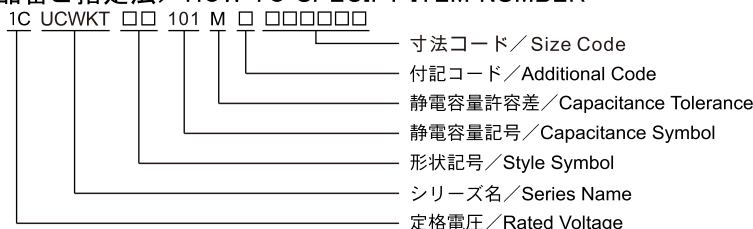
リップル周波数が標準品一覧表の規定値と異なる場合には、下表の係数を乗じた値以下でご使用下さい。
 When the ripple frequency differs from the specification shown in the list of standard products, multiply the value with the coefficient shown below, and use the products under the obtained value.

周波数補正係数/FREQUENCY CORRECTION FACTOR

Vdc	Cap (μF)	Frequency (Hz)			
		120K	1K	10K	≥100K
10 ~ 100	< 100	0.40	0.75	0.90	1.00
	100 ~ 470	0.50	0.85	0.94	1.00
	> 470	0.60	0.87	0.95	1.00

Vdc	Cap (μF)	Frequency (Hz)			
		120	1K	10K	100K
200 ~ 450	3.3~15	0.30	0.60	0.90	1.00
	22~100	0.50	0.80	0.90	1.00

■品番ご指定法/HOW TO SPECIFY ITEM NUMBER



■寸法表/CASE SIZE TABLE

uF \ Vdc	10		16		25	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
220					8×11.5	360
330	8×11.5	360	8×11.5	360	10×12.5	620
470	10×12.5	620	10×12.5	620	10×16	800
1000	10×20	960	10×20	960	12.5×20	1100
2200	12.5×25	1430	12.5×25	1430	16×31.5	2300
3300	16×25	1900	16×31.5	2300	16×35.5	2550
4700	16×31.5	2300	16×35.5	2550		

uF \ Vdc	35		50		63	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
4.7			8×11.5	100		
10			8×11.5	200		
22			8×11.5	260		
33			8×11.5	300	8×11.5	250
47			8×11.5	300	10×12.5	400
100	8×11.5	360	10×12.5	520	10×16	450
220	10×12.5	620	10×20	890	12.5×25	820
330	10×16	800	12.5×20	1000	12.5×30	1000
470	10×25	960	12.5×25	1200	16×25	1500
1000	12.5×30	1430	16×31.5	2180	18×35.5	1850
1500	16×31.5	1800	18×35.5	2450	18×45	2350
2200	16×35.5	2550	18×40	2800		
3300	18×35.5	2800				

uF \ Vdc	100		200		250	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
4.7			6.3×11	100	8×11.5	115
5.6			8×11.5	130	8×11.5	140
6.8			8×11.5	130	8×11.5	140
10	8×16	200	8×16	200	8×16	220
15	8×16	210	8×16	220	8×20	245
22	8×16	220	8×20	300	10×16	320
33	10×12.5	260	10×20	320	10×25	350
47	10×16	330	10×25	345	12.5×20	375
56	10×20	350	10×30	370	12.5×25	400
68	10×25	400	12.5×25	450	16×20	480
82	10×30	435	12.5×30	485	16×25	505
100	12.5×25	670	16×25	600		
220	16×25	1100				
330	16×31.5	1300				
470	16×40	1650				

uF \ Vdc	400		420		450	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
3.3	8×16	110	8×16	120	8×20	135
4.7	8×20	120	8×20	130	10×12.5	150
5.6	10×16	130	10×16	140	10×16	160
6.8	10×20	150	10×20	155	10×20	170
10	10×25	220	10×25	240	12.5×20	260
15	10×30	240	10×30	255	12.5×25	300
22	12.5×20	270	12.5×25	300	16×20	345
33	12.5×25	305	12.5×30	340		
47	16×25	400	16×31.5	445		
56	16×31.5	435				
68	16×35.5	480				

■Ripple Current [Max. value mA] at 130°C 100kHz