

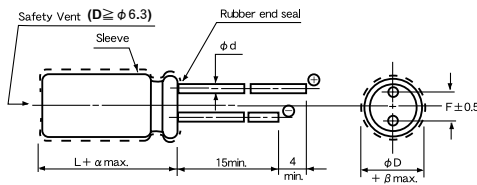
●低インピーダンス標準品

UTWRZシリーズ JIS C5101
CE-04
(耐洗浄品)

■特徴

- ・非4級塩系の電解液を使用し、高周波平滑用として小形に設計した製品です。特に高周波のインピーダンスを低く抑えてあります。
- ・寿命特性も105℃ 5000時間を保証した高安定化製品です。(但しφ5、φ6.3、φ8は2000時間、φ10は3000時間保証)

■寸法図/DIAGRAM OF DIMENSIONS



●LOW-IMPEDANCE STANDARD TYPE

TYPE UTWRZ JIS C5101
CE-04
(Washable product)

■FEATURES

- ・ This is a compact product for high-frequency smoothing, in which non-quaternary salt electrolyte is used. Especially, the impedance of high frequency is kept low.
- ・ This product is highly stable with the guaranteed service life of 5,000 hours at 105℃.
(φ 5, φ 6.3, and φ 8 : 2,000hrs ; φ 10 : 3,000hrs)

Unit : mm

| | | | | | |
|-----|-----|-----|-----|-----|------|
| φ D | 5 | 6.3 | 8 | 10 | 12.5 |
| φ d | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 |
| F | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 |
| β | 0.5 | | | | 1.0 |

L < 20 α = 1.5
L ≥ 20 α = 2

■性能/PERFORMANCE SPECIFICATIONS

| | | | | | | | | |
|---|--|--|-----------|-----------|---|-----------|-----------|------|
| カテゴリー温度範囲 | CATEGORY TEMPERATURE RANGE | -55℃ ~ +105℃ | | | | | | |
| 標準静電容量許容差 | STANDARD CAPACITANCE TOLERANCE | -20% ~ +20% (120Hz) | | | | | | |
| 漏れ電流 (最大値) | LEAKAGE CURRENT (MAX. VALUE) | I=0.01CV OR 3μA WHICHEVER IS THE GREATER (after 2 minutes) | | | C=RATED CAPACITANCE (μF) V=WORKING VOLTAGE (V) | | | |
| 損失角の正接 (最大値) (tan δ) | DISSIPATION FACTOR (MAX. VALUE) | W. V | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | | tan δ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 |
| When the capacitance exceed 1,000 μF, the value of tan δ is increased by 0.02 for each increment of 1,000 μF or its fraction. | | | | | | | | |
| 耐久性 105℃ 5000時間 定格使用電圧印加 (φD ≤ 8 : 2000時間, φ10 : 3000時間) | ENDURANCE APPLICATION OF RATED OPERATING VOLTAGE, AT 105℃ FOR 5000HOURS. (φD ≤ 8 : 2000Hr, φ10 : 3000Hr) | CAPACITANCE CHANGE : LESS THAN 20% OF THE INITIAL MEASURED VALUE. DISSIPATION FACTOR : LESS THAN 200% OF THE INITIAL SPECIFIED VALUE. LEAKAGE CURRENT : LESS THAN THE INITIAL SPECIFIED VALUE. | | | | | | |
| 低温特性 (+20℃における120Hzのインピーダンスに対する比) (最大値) | LOW TEMPERATURE STABILITY (RATIO OF IMPEDANCE AT COLD TO THAT AT 20℃, 120Hz. MAX. VALUE.) | W. V | -25℃/+20℃ | -55℃/+20℃ | W. V | -25℃/+20℃ | -55℃/+20℃ | |
| | | 6.3 | 2 | 5 | 25 | 2 | 3 | |
| | | 10 | 2 | 5 | 35 | 2 | 3 | |
| | | 16 | 2 | 4 | 50 | 2 | 3 | |
| その他の特性はJIS C5101-4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

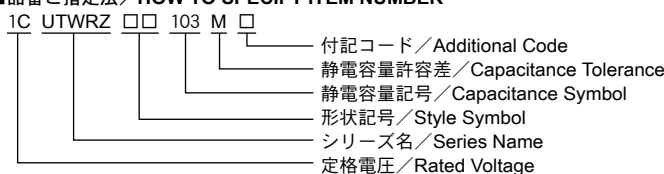
リップル周波数が標準品一覧表の規定値と異なる場合には、下表の係数を乗じた値以下でご使用下さい。

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

| μF \ f(Hz) | 50 | 120 | 1k | 10k | 100k |
|-------------|------|------|------|------|------|
| 0.47 ~ 6.8 | 0.35 | 0.42 | 0.60 | 0.80 | 1.0 |
| 10 ~ 39 | 0.45 | 0.55 | 0.75 | 0.90 | 1.0 |
| 47 ~ 390 | 0.60 | 0.70 | 0.85 | 0.95 | 1.0 |
| 470 ~ 1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.0 |
| 2200 ~ 3300 | 0.75 | 0.80 | 0.95 | 1.00 | 1.0 |

■品番ご指定法/ HOW TO SPECIFY ITEM NUMBER



■寸法表 / CASE SIZE TABLE

■Impedance [Max.Value Ω] at 20°C 100kHz

■Ripple Current [Max.Value mA] at 105°C 100kHz

(mm)

| W.V μF | 6.3(0J) | | | 10(1A) | | | 16(1C) | | | 25(1E) | | | 35(1V) | | | 50(1H) | | |
|------------|---------|-----------|--------|---------|-----------|--------|---------|-----------|--------|---------|-----------|--------|---------|-----------|--------|---------|-----------|--------|
| | φ D×L | Impedance | Ripple | φ D×L | Impedance | Ripple | φ D×L | Impedance | Ripple | φ D×L | Impedance | Ripple | φ D×L | Impedance | Ripple | φ D×L | Impedance | Ripple |
| 0.47 (R47) | | | | | | | | | | | | | | | | 5×11 | 6.0 | 130 |
| 0.68 (R68) | | | | | | | | | | | | | | | | 5×11 | 5.2 | 130 |
| 1.0 (010) | | | | | | | | | | | | | | | | 5×11 | 4.0 | 130 |
| 1.5 (1R5) | | | | | | | | | | | | | | | | 5×11 | 3.6 | 130 |
| 2.2 (2R2) | | | | | | | | | | | | | | | | 5×11 | 3.0 | 130 |
| 3.3 (3R3) | | | | | | | | | | | | | | | | 5×11 | 2.8 | 130 |
| 4.7 (4R7) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 2.5 | 130 |
| 6.8 (6R8) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 2.3 | 160 |
| 10 (100) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 2.0 | 160 |
| 12 (120) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 1.7 | 160 |
| 15 (150) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 1.6 | 200 |
| 18 (180) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 1.5 | 200 |
| 22 (220) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 1.4 | 200 |
| 27 (270) | | | | | | | | | | | | | 5×11 | 0.90 | 150 | 6.3×11 | 0.70 | 300 |
| 33 (330) | | | | | | | | | | 5×11 | 0.90 | 150 | 5×11 | 0.90 | 150 | 6.3×11 | 0.60 | 300 |
| 39 (390) | | | | | | | | | | 5×11 | 0.90 | 150 | 6.3×11 | 0.45 | 263 | 6.3×11 | 0.60 | 300 |
| 47 (470) | | | | | | | 5×11 | 0.75 | 180 | 5×11 | 0.75 | 180 | 6.3×11 | 0.35 | 290 | 6.3×11 | 0.60 | 300 |
| 56 (560) | | | | | | | 5×11 | 0.75 | 180 | 6.3×11 | 0.45 | 263 | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.38 | 305 |
| 68 (680) | | | | | | | 6.3×11 | 0.45 | 263 | 6.3×11 | 0.45 | 263 | 8×11.5 | 0.20 | 410 | 8×11.5 | 0.38 | 305 |
| 82 (820) | | | | | | | 6.3×11 | 0.45 | 263 | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.20 | 410 | 8×11.5 | 0.35 | 340 |
| 100 (101) | 5×11 | 0.75 | 180 | 5×11 | 0.75 | 180 | 6.3×11 | 0.35 | 290 | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.18 | 450 | 8×11.5 | 0.33 | 340 |
| 120 (121) | 5×11 | 0.75 | 180 | 6.3×11 | 0.45 | 263 | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.20 | 410 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.25 | 490 |
| 150 (151) | 6.3×11 | 0.35 | 290 | 6.3×11 | 0.35 | 290 | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.18 | 450 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.25 | 490 |
| 180 (181) | 6.3×11 | 0.35 | 290 | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.20 | 410 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.13 | 607 | 10×16 | 0.19 | 650 |
| 220 (221) | 6.3×11 | 0.35 | 290 | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.18 | 450 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.12 | 660 | 10×16 | 0.19 | 650 |
| 270 (271) | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.21 | 410 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.13 | 607 | 10×16 | 0.086 | 802 | 10×20 | 0.16 | 730 |
| 330 (331) | 6.3×11 | 0.35 | 290 | 8×11.5 | 0.18 | 450 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.12 | 660 | 10×16 | 0.080 | 850 | 10×20 | 0.14 | 810 |
| 390 (391) | 8×11.5 | 0.21 | 410 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.13 | 607 | 10×16 | 0.086 | 802 | 10×20 | 0.060 | 1,100 | 12.5×20 | 0.11 | 1250 |
| 470 (471) | 8×11.5 | 0.18 | 450 | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.12 | 660 | 10×16 | 0.080 | 850 | 10×20 | 0.060 | 1,100 | 12.5×20 | 0.11 | 1250 |
| 560 (561) | 8×11.5 | 0.18 | 450 | 10×12.5 | 0.14 | 607 | 10×16 | 0.086 | 802 | 10×20 | 0.060 | 1100 | 12.5×20 | 0.051 | 1,325 | 12.5×20 | 0.082 | 1250 |
| 680 (681) | 10×12.5 | 0.12 | 660 | 10×12.5 | 0.12 | 680 | 10×16 | 0.080 | 850 | 10×20 | 0.060 | 1100 | 12.5×20 | 0.050 | 1,400 | 12.5×20 | 0.082 | 1250 |
| 820 (821) | 10×12.5 | 0.12 | 660 | 10×16 | 0.086 | 802 | 10×20 | 0.060 | 1100 | 12.5×20 | 0.051 | 1325 | | | | | | |
| 1000 (102) | 10×12.5 | 0.12 | 660 | 10×16 | 0.080 | 850 | 10×20 | 0.060 | 1100 | 12.5×20 | 0.050 | 1400 | | | | | | |
| 1200 (122) | 10×16 | 0.080 | 850 | 10×20 | 0.060 | 1100 | 12.5×20 | 0.051 | 1325 | | | | | | | | | |
| 1500 (152) | 10×20 | 0.060 | 1000 | 10×20 | 0.060 | 1100 | 12.5×20 | 0.050 | 1400 | | | | | | | | | |
| 1800 (182) | 10×20 | 0.052 | 1100 | 12.5×20 | 0.051 | 1320 | | | | | | | | | | | | |
| 2200 (222) | 12.5×20 | 0.050 | 1400 | 12.5×20 | 0.050 | 1400 | | | | | | | | | | | | |
| 2700 (272) | 12.5×20 | 0.050 | 1400 | | | | | | | | | | | | | | | |
| 3300 (332) | 12.5×20 | 0.050 | 1400 | | | | | | | | | | | | | | | |