



**THT, Radial E-Cap., Extremely low Impedance, High Reliability, Enabled high ripple current by a reduction of impedance at high Frequency, Ideally suited for use in switching power supply main board, Long Lead, ROHS Conform, Packing Bulk-Ware into Polybag**

| Items                                                                           |                    | Performance Characteristics                                                                       |      |      |      |      |                                   |      |  |  |  |  |
|---------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------|------|------|------|------|-----------------------------------|------|--|--|--|--|
| Operating temperature range                                                     |                    | -40°C +105°C                                                                                      |      |      |      |      |                                   |      |  |  |  |  |
| Leakage current max.                                                            |                    |                                                                                                   |      |      |      |      |                                   |      |  |  |  |  |
|                                                                                 |                    | I = 0,01CV or 3µA whichever is greater (after 2 minutes)                                          |      |      |      |      |                                   |      |  |  |  |  |
|                                                                                 |                    |                                                                                                   |      |      |      |      |                                   |      |  |  |  |  |
| Capacitance tolerance                                                           |                    | ±20% at 120Hz, 20°C                                                                               |      |      |      |      |                                   |      |  |  |  |  |
| Dissipation factor max.<br>(at 120Hz, 20°C)                                     |                    | Capacitance > 1000µF ; tanQ increases by 0,02 for each 1000µF from below value.                   |      |      |      |      |                                   |      |  |  |  |  |
|                                                                                 |                    | WV                                                                                                | 6,3  | 10   | 16   | 25   | 35                                | 50   |  |  |  |  |
|                                                                                 |                    | TanQ                                                                                              | 0,22 | 0,19 | 0,16 | 0,14 | 0,12                              | 0,10 |  |  |  |  |
| Low temperature<br>characteristics (Impedance<br>ratio at 120Jz)                | WV                 | 6,3                                                                                               | 10   | 16   | 25   | 35   | 50                                |      |  |  |  |  |
|                                                                                 |                    |                                                                                                   |      |      |      |      |                                   |      |  |  |  |  |
|                                                                                 | Z-40°C / Z+20°C    | 8                                                                                                 | 6    | 4    | 4    | 3    | 3                                 |      |  |  |  |  |
| Load life ( after application of the<br>rated voltage for 10000hrs at<br>105°C) | Leakage Current    |                                                                                                   |      |      |      |      | Less than specified Value         |      |  |  |  |  |
|                                                                                 | Capacitance Change |                                                                                                   |      |      |      |      | Within ±20% of initial value      |      |  |  |  |  |
|                                                                                 | TanQ               |                                                                                                   |      |      |      |      | Less than 200% of specified value |      |  |  |  |  |
| Shelf life (at 105°C)                                                           |                    | After 1000 hours no load test, leakage current, capacitance and tanQ are same as load life value. |      |      |      |      |                                   |      |  |  |  |  |
|                                                                                 |                    | Ø5, Ø6,3 : 4000Hours, Ø8: 6000Hours, Ø10:7000hours                                                |      |      |      |      |                                   |      |  |  |  |  |

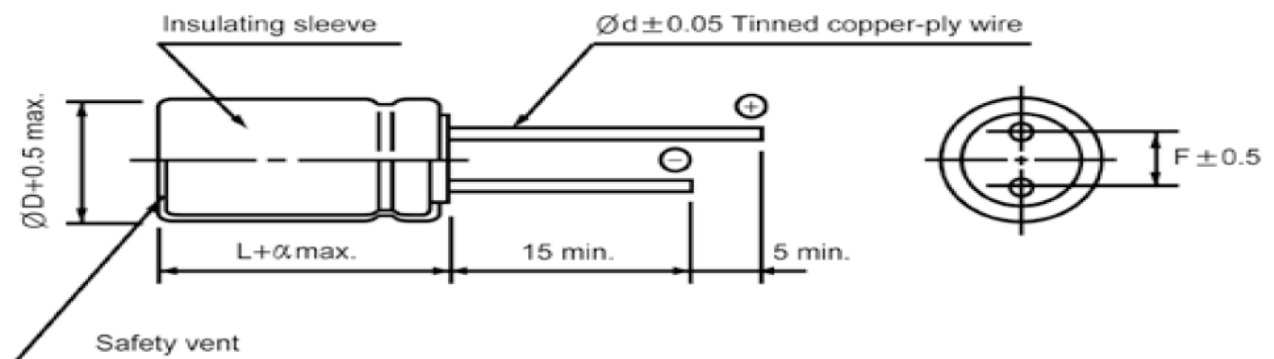
Ø5, Ø6,3 : 4000Hours, Ø8: 6000Hours, Ø10:7000hours

#### FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

| µF/Frequency | 120Hz | 1kHz | 10kHz | 100kHz≤ |
|--------------|-------|------|-------|---------|
| ~33          | 0,40  | 0,65 | 0,82  | 1,00    |
| 47~220       | 0,50  | 0,70 | 0,84  | 1,00    |
| 330~680      | 0,55  | 0,75 | 0,86  | 1,00    |
| 820~1500     | 0,60  | 0,80 | 0,88  | 1,00    |
| 2200~15000   | 0,70  | 0,85 | 0,90  | 1,00    |

#### Technical Details

|                                   |                |        |      |
|-----------------------------------|----------------|--------|------|
| Range (µF)                        | 150            | ØD(mm) | 6,3  |
| Voltage                           | 16             | L(mm)  | 11,0 |
| Impedance (Ω)                     | 0,3            | F(mm)  | 2,5  |
| Ripple Current (mA)               | 280            | Ød(mm) | 0,5  |
| ESR (Ω) max.at 20°C 10KHz         | -.-            | α(mm)  | 1,5  |
| Lifetime (hrs)                    | 4000           | -.-    | -.-  |
| Operating- Temperature Range (°C) | -40°C ~ +105°C | -.-    | -.-  |



|    |     |     |     |     |      |     |     |
|----|-----|-----|-----|-----|------|-----|-----|
| ØD | 5   | 6,3 | 8   | 10  | 12,5 | 16  | 18  |
| F  | 2,0 | 2,5 | 3,5 | 5,0 | 5,0  | 7,5 | 7,5 |
| ØD | 0,5 |     |     | 0,6 |      | 0,8 |     |
| α  | 1,5 |     |     | 2,0 |      |     |     |

|       |       |      |        |        |        |       |            |
|-------|-------|------|--------|--------|--------|-------|------------|
| DRW:  | Lexua | CHKD | Wilson | MATL:  | ChuChu | DATE  | 28.01.2025 |
| APPD: | Jimmy |      |        | FINISH | Josy   | Sheet | 1 from 2   |

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### Ordering Informations:

| Serie-No. / Voltage / Range / Size | Capacity Tolerance | ROHS | Packing |
|------------------------------------|--------------------|------|---------|
|------------------------------------|--------------------|------|---------|

|                   |   |   |    |
|-------------------|---|---|----|
| I14110-1601510611 | M | R | BU |
|-------------------|---|---|----|

| Serie | Voltage (V) | Range $\mu$ H) | D * L (mm) | Tolerance Order Code | R= ROHS     | BU= Bulk-Ware Long Lead |
|-------|-------------|----------------|------------|----------------------|-------------|-------------------------|
|       |             |                |            |                      | N= NON ROHS | T/B= Tape/Box           |
|       |             |                |            |                      |             | L3= Lead-Length 3~3,5mm |

### Soldering Information

#### Lead Solder Performance



#### Lead free Solder Performance



|       |       |      |        |        |        |       |            |
|-------|-------|------|--------|--------|--------|-------|------------|
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