



**THT, Radial E-Cap., Low Impedance, High Frequency, Temperatur-Range 105°C, Life-Time to 5000Hrs. Long Lead, ROHS Conform, Packing Bulk-Ware into Polybag**

| Items                                                                   |                 |  | Performance Characteristics                                                                       |      |      |                                   |         |      |                                      |      |         |         |         |  |
|-------------------------------------------------------------------------|-----------------|--|---------------------------------------------------------------------------------------------------|------|------|-----------------------------------|---------|------|--------------------------------------|------|---------|---------|---------|--|
| Operating temperature range                                             |                 |  | -40°C +105°C ( 6,3V~450V), -25°C ~ +105°C (500)                                                   |      |      |                                   |         |      |                                      |      |         |         |         |  |
| Leakage current max.                                                    |                 |  | WV≤100                                                                                            |      |      |                                   |         |      | WV≥100                               |      |         |         |         |  |
|                                                                         |                 |  | I = 0,01CV + 3µA whichever is greater (after 2 minutes)                                           |      |      |                                   |         |      | I = 0,02CV + 15µA ( after 5 minutes) |      |         |         |         |  |
|                                                                         |                 |  | I = 0,03CV + 4µA whichever is greater (after 1 minutes)                                           |      |      |                                   |         |      |                                      |      |         |         |         |  |
| Capacitance tolerance                                                   |                 |  | ±20% at 120Hz, 20°C                                                                               |      |      |                                   |         |      |                                      |      |         |         |         |  |
| Dissipation factor max.<br>(at 120Hz, 20°C)                             |                 |  |                                                                                                   |      |      |                                   |         |      |                                      |      |         |         |         |  |
|                                                                         |                 |  | WV                                                                                                | 6,3  | 10   | 16                                | 25      | 35   | 50                                   | 63   | 100     | 160~250 | 350~500 |  |
|                                                                         |                 |  | TanQ                                                                                              | 0,22 | 0,19 | 0,16                              | 0,14    | 0,12 | 0,10                                 | 0,09 | 0,08    | 0,15    | 0,20    |  |
| Low temperature characteristics (Impedance ratio at 120Jz)              |                 |  | 6,3                                                                                               | 10   | 16   | 25~100                            | 160~250 |      |                                      |      | 350~450 | 500     |         |  |
|                                                                         | Z-25°C / Z+20°C |  | 4                                                                                                 | 3    | 2    | 2                                 | 2       |      |                                      |      | 6       | 8       |         |  |
|                                                                         | Z-40°C / Z+20°C |  | 8                                                                                                 | 6    | 4    | 3                                 | 4       |      |                                      |      | 10      | -       |         |  |
| Load life ( after application of the rated voltage for 2000hrs at 85°C) |                 |  | Leckage Current                                                                                   |      |      |                                   |         |      | Less than specified Value            |      |         |         |         |  |
|                                                                         |                 |  | Capacitance Change                                                                                |      |      |                                   |         |      | Within ±25% off initial Value        |      |         |         |         |  |
|                                                                         |                 |  | TanQ                                                                                              |      |      | Less than 200% of specified value |         |      |                                      |      |         |         |         |  |
|                                                                         |                 |  |                                                                                                   |      |      |                                   |         |      |                                      |      |         |         |         |  |
|                                                                         |                 |  | WV≤ 100 ; Ø5, Ø6,3 (2000hour), Ø8, : 3000hours, ≥Ø10 : 5000hours ; WV≥100: 2000hours              |      |      |                                   |         |      |                                      |      |         |         |         |  |
| Shelf life (at 105°C)                                                   |                 |  | After 1000 hours no load test, leakage current, capacitance and tanQ are same as load life value. |      |      |                                   |         |      |                                      |      |         |         |         |  |

**FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT**

| µF       | Frequency | 120Hz | 1kHz | 10kHz | 50kHz | 100kHz≤ |  |
|----------|-----------|-------|------|-------|-------|---------|--|
| ~33      |           | 0,40  | 0,65 | 0,82  | 0,91  | 1,00    |  |
| 39~270   |           | 0,50  | 0,70 | 0,84  | 0,92  | 1,00    |  |
| 330~680  |           | 0,55  | 0,75 | 0,86  | 0,93  | 1,00    |  |
| 820~1800 |           | 0,60  | 0,80 | 0,88  | 0,94  | 1,00    |  |
| 2200~    |           | 0,70  | 0,85 | 0,90  | 0,95  | 1,00    |  |

**Technical Details**

|                                   |                |        |      |
|-----------------------------------|----------------|--------|------|
| Range (µF)                        | 120            | ØD(mm) | 22,0 |
| Voltage                           | 500            | L(mm)  | 45,0 |
| Impedance (Ω)                     | -.-            | F(mm)  | 10,0 |
| Ripple Current (mA)               | 1370           | Ød(mm) | 1    |
| ESR (Ω) max.at 20°C 10KHz         | -.-            | α(mm)  | 3    |
| Lifetime (hrs)                    | 2000           | -.-    | -.-  |
| Operating- Temperature Range (°C) | -25°C ~ +105°C | -.-    | -.-  |



| ØD | 5   | 6,3 | 8   | 10  | 12,5 | 16  | 18  | 22   |
|----|-----|-----|-----|-----|------|-----|-----|------|
| F  | 2   | 2,5 | 3,5 | 5,0 | 5,0  | 7,5 | 7,5 | 10,0 |
| Ød | 0,5 |     |     | 0,6 |      | 0,8 |     |      |
| α  | 1,5 |     |     | 2,0 |      |     |     | 3,0  |

|       |       |      |        |        |        |       |            |
|-------|-------|------|--------|--------|--------|-------|------------|
| DRW:  | Lexua | CHKD | Wilson | MATL:  | ChuChu | DATE  | 23.12.2024 |
| APPD: | Jimmy |      |        | FINISH | Josy   | Sheet | 1 from 2   |



THT, Radial E-Cap., Low Impedance, High Frequency, Temperatur-Range 105°C, Life-Time to 5000Hrs. Long Lead, ROHS Conform, Packing Bulk-Ware into Polybag

### Ordering Informations:

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

|                   |   |   |    |
|-------------------|---|---|----|
| I14054-5011212245 | M | R | BU |
|-------------------|---|---|----|

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

### Soldering Information

#### Lead Solder Performance



#### Lead free Solder Performance



|       |       |      |        |        |        |       |            |
|-------|-------|------|--------|--------|--------|-------|------------|
| DRW:  | Lexua | CHKD | Wilson | MATL:  | ChuChu | DATE  | 23.12.2024 |
| APPD: | Jimmy |      |        | FINISH | Josy   | Sheet | 2 from 2   |