



LEK Series 105°C LOW ESR 製品系列

Features

- Used in mother board. Computer peripheral. etc.
- Load life 2000~5000Hrs at 105°C
- Safety vent construction design.

Specifications

| Item 項目 | Character 特性 | | | | | | | | | | |
|--|--|---|------|--|------|------|------|--------------|---------|-----------|----------|
| Capacitance Tolerance | ±20% (120Hz, 20°C) | | | | | | | | | | |
| Operating Temperature Range | -55 ~ +105°C | | | -40 ~ +105°C | | | | -25 ~ +105°C | | | |
| Voltage Range | 6.3 ~ 63V | | | 160 ~ 400V | | | | 450V | | | |
| Leakage Current | I ≤ 0.01CV (uA)max After 2 minutes | | | CV ≤ 1000 : I = 0.01CV+40 (uA) max, 1 minute CV > 1000 : I = 0.04CV+40 (uA) max, 1 minute | | | | | | | |
| Dissipation Factor(tan δ) | Measurement Frequency: 120 Hz. Temperature: 20°C | | | | | | | | | | |
| | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~100 | 160~250 | 350 | 400, 450 |
| | tan δ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.15 | 0.20 | 0.25 |
| Low Temperature Stability Impedance Ratio (MAX) | Measurement Frequency: 120Hz. | | | | | | | | | | |
| | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63-100 | 160-250 | 350 · 400 | 450 |
| | Z (-25°C) / Z (20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 6 | 15 |
| | Z (-55°C) / Z (20°C) | 8 | 6 | 4 | 3 | 3 | 3 | -- | -- | -- | -- |
| Load Life | 2000 hours, with application of working voltage 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 | 1000 hours, no voltage applied, 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 | | | | | | | | | |
| Standards | JIS C 5141 and JIS C 5102 | | | | | | | | | | |

RIPPLE CURRENT COEFFICIENTS

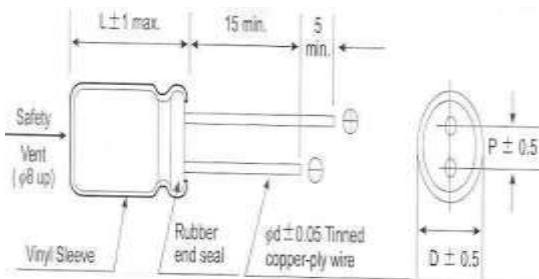
Temperature Multiplies

| | | | | | |
|-------------|------|------|------|------|------|
| TEMP (°C) | 65 | 75 | 85 | 95 | 105 |
| Coefficient | 2.10 | 1.90 | 1.75 | 1.50 | 1.00 |

Frequency Coefficient of Allowable Ripple Current

| WV (V) | Capacitance (uF) | Frequency (Hz) | | | | |
|-----------|------------------|----------------|------|------|------|------|
| | | 50 | 120 | 1K | 10K | 100K |
| 6.3 ~ 100 | 10~100 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~10000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160 ~ 450 | 10~100 | 0.55 | 0.65 | 0.80 | 0.90 | 1.00 |

Diagram of Dimensions:(Unit:mm)



| | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|
| DΦ | 5 | 6.3 | 8 | 10 | 13 | 16 | 18 |
| F | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| dΦ | 0.5 | | 0.6 | | 0.8 | | |

DIMENSIONS

D x L (mm); R.C.: (mA rms) at 105°C, 120Hz.

| Cap (uF) | WV (V) Item | 6.3 | | 10 | | 16 | | 25 | | 35 | |
|-------------|----------------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 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. |
| 0.47 | | | | | | | | | | | |
| 1.0 | | | | | | | | | | | |
| 2.2 | | | | | | | | | | | |
| 3.3 | | | | | | | | | | | |
| 4.7 | | | | | | | | | | | |
| 10 | | | | | | 5X11 | 37 | 5X11 | 56 | 5X11 | 70 |
| 22 | | | | 5X11 | 56 | 5X11 | 70 | 5X11 | 120 | 6X11 | 130 |
| 33 | | | | 5X11 | 58 | 5X11 | 130 | 6X11 | 150 | 6X11 | 175 |
| 47 | | | | 5X11 | 120 | 5X11 | 190 | 6X11 | 230 | 6X11 | 250 |
| 100 | 5X11 | 185 | | 5X11 | 225 | 5X11 | 260 | 8X11 | 300 | 6X11 | 390 |
| 220 | 6X11 | 300 | | 6X11 | 390 | 6X11 | 470 | 8X14 | 550 | 10X17 | 740 |
| 330 | 8X11 | 390 | | 8X11 | 445 | 8X11 | 555 | 10X17 | 740 | 10X15 | 935 |
| 470 | 8X11 | 435 | | 8X11 | 555 | 8X11 | 528 | 10X20 | 1040 | 10X30 | 1050 |
| 1000 | 10X17 | 625 | | 10X20 | 1040 | 10X20 | 1180 | 10X17 | 1430 | 13X30 | 1650 |
| 1500 | 10X17 | 962 | | 10X20 | 1365 | | | | | | |
| 2200 | 13X21 | 1300 | | 13X25 | 1690 | 13X30 | 1950 | 13X40 | 2390 | 16X35 | 2550 |
| 3300 | 13X30 | 1425 | | 13X35 | 1870 | 13X40 | 2110 | 16X35 | 2550 | | |
| 4700 | 16X25.5 | 1880 | | 13X21 | 2100 | 16X35 | 2550 | 18X41 | 2620 | | |

| Cap | WV (V) | 50 | | 63 | |
|------|--------|---------|------|---------|------|
| | Item | D x L | R.C. | D x L | R.C. |
| 0.47 | | 5X11 | 15 | 5X11 | 16 |
| 1.0 | | 5X11 | 25 | 5X11 | 27 |
| 2.2 | | 5X11 | 3 | 5X11 | 38 |
| 3.3 | | 5X11 | 45 | 5X11 | 48 |
| 4.7 | | 5X11 | 58 | 5X11 | 62 |
| 10 | | 5X11 | 100 | 5X11 | 105 |
| 22 | | 6X11 | 135 | 6X11 | 150 |
| 33 | | 6X11 | 230 | 8X11 | 265 |
| 47 | | 8X11 | 285 | 8X11 | 351 |
| 100 | | 8X11 | 475 | 10X20 | 630 |
| 220 | | 10X15 | 810 | 13X21 | 870 |
| 330 | | 10X30 | 990 | 13X25 | 1100 |
| 470 | | 13X25 | 1490 | 16X25.5 | 1430 |
| 1000 | | 16X31.5 | 1880 | 16X41 | 2110 |
| 2200 | | 18X41 | 2620 | | |
| 3300 | | | | | |
| 4700 | | | | | |