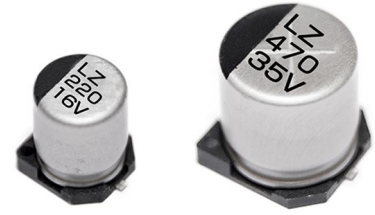


FEATURES

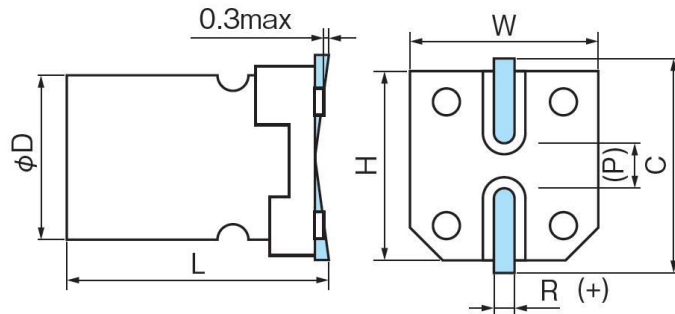
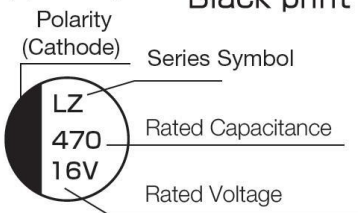
- Low Impedance
- 105°C 2000Hours
- Solvent proof (within 2 minutes)



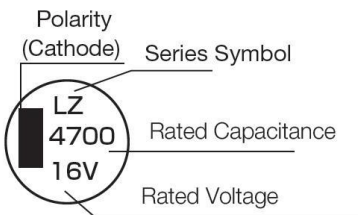
DIMENSIONS (mm)

[$\phi D \leq 10$]

Black print on the case top



[$\phi D \geq 12.5$]



A pressure relief vent is provided for $\phi D=8$ or bigger

| $\phi D \pm 0.5$ | L | $W \pm 0.2$ | $H \pm 0.2$ | $C \pm 0.2$ | R | $p \pm 0.2$ |
|------------------|----------------|-------------|-------------|-------------|---------|-------------|
| 4 | 5.4 ± 0.4 | 4.3 | 4.3 | 5.1 | 0.5~0.8 | 1 |
| 5 | 5.4 ± 0.4 | 5.3 | 5.3 | 6.1 | 0.5~0.8 | 1.3 |
| 6.3 | 5.4 ± 0.4 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.2 |
| 6.3 | 7.7 ± 0.4 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.2 |
| 8 | 6.5 ± 0.5 | 8.3 | 8.3 | 9.2 | 0.7~1.2 | 3.1 |
| 8 | 10.5 ± 0.5 | 8.3 | 8.3 | 9.2 | 0.7~1.2 | 3.1 |
| 10 | 7.7 ± 0.5 | 10.3 | 10.3 | 11.2 | 0.7~1.2 | 4.4 |
| 10 | 10.5 ± 0.5 | 10.3 | 10.3 | 11.2 | 0.7~1.2 | 4.4 |
| 10 | 13.5 ± 0.5 | 10.3 | 10.3 | 11.2 | 0.7~1.2 | 4.4 |
| 12.5 | 13.5 ± 0.5 | 13 | 13 | 14 | 1.0~1.4 | 4.4 |
| 12.5 | 16.0 ± 0.5 | 13 | 13 | 14 | 1.0~1.4 | 4.4 |
| 16 | 16.5 ± 0.5 | 17 | 17 | 18 | 1.0~1.4 | 6.4 |



SPECIFICATIONS

| Items | Condition | | Specifications | | | | | | | | | | |
|------------------------------------|--|-------------|---|---------------------------------------|------|------|------|------|------|------|------|------|--|
| Rated voltage (V) | — | | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | | |
| Surge voltage (V) | Room temperature | | 8.0 | 13 | 20 | 32 | 44 | 63 | 79 | 100 | 125 | | |
| Category temperature range (°C) | — | | -55 to +105 | | | | | | | | | | |
| Capacitance tolerance (%) | 120Hz/20°C | | M : ±20 | | | | | | | | | | |
| Dissipation Factor (tan δ) | tan δ (max) 120Hz/20°C | φ4 to φ10 | 0.24 | 0.2 | 0.18 | 0.16 | 0.14 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | |
| | | φ12.5to φ16 | 0.28 | 0.24 | 0.2 | 0.18 | 0.16 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | |
| | | | Exceeding 1,000μF, +0.02 every 1,000μF | | | | | | | | | | |
| Leakage current (LC) | μA/after 2 minutes (max) | | The greater value of either 0.01CV or 3μA | | | | | | | | | | |
| Impedance ratio at low temperature | Based on the value at 120Hz, +20°C | -25°C | Z/Z _{20°C} | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | |
| | | -55°C | Z/Z _{20°C} | 6 | 6 | 5 | 5 | 4 | 4 | 3 | 3 | 3 | |
| Endurance | 105°C, 2,000hours rated voltage applied (With the rated ripple current) | ΔC/C | | Within ±25% of the initial value | | | | | | | | | |
| | | tanδ | | Less than 250% of the specified value | | | | | | | | | |
| | | LC | | Less than the specified value | | | | | | | | | |

RATED RIPPLE CURRENT FREQUENCY COEFFICIENT

| Frequency:F(Hz) | | 100≤F<1k | 1k≤F<10k | 10k≤F<100k | 100k≤F |
|-------------------|----------|----------|----------|------------|--------|
| Capacitance:C(μF) | C≤33 | 0.35 | 0.7 | 0.9 | 1 |
| | 33<C≤150 | 0.4 | 0.85 | 0.92 | 1 |
| | 150<C | 0.6 | 0.85 | 0.95 | 1 |



STANDARD RATINGS

| μF | V | 6.3 | | | 10 | | | 16 | | | 25 | | | 35 | | |
|------|---|---------|------|---------|---------|------|---------|---------|------|---------|---------|------|---------|---------|------|-----|
| | | Size | ESR | RC | Size | ESR | RC | Size | ESR | RC | Size | ESR | RC | Size | ESR | RC |
| 4.7 | | | | | | | | | | | | | 4×5.4 | 3 | 60 | |
| 10 | | | | | | | | | | | | | 4×5.4 | 3 | 60 | |
| | | | | | | | | | | | | | 5×5.4 | 1.8 | 95 | |
| 22 | | | | | | | 4×5.4 | 3 | 60 | | | | 5×5.4 | 1.8 | 95 | |
| | | | | | | | | | | | | | 6.3×5.4 | 1 | 39 | |
| 33 | | | | | 4×5.4 | 3 | 60 | | | | 5×5.4 | 1.8 | 95 | 6.3×5.4 | 1 | 140 |
| | | | | | | | | | | | | | 6.3×7.7 | 0.6 | 230 | |
| 47 | | | | | 4×5.4 | 3 | 60 | 5×5.4 | 1.8 | 95 | 6.3×5.4 | 1 | 140 | 6.3×5.4 | 1 | 140 |
| | | | | | | | | | | | | | 6.3×7.7 | 0.6 | 230 | |
| | | | | | | | | | | | | | 8×6.5 | 0.6 | 230 | |
| 68 | | | | 5×5.4 | 1.8 | 95 | 6.3×5.4 | 1 | 140 | | | | 6.3×7.7 | 0.6 | 230 | |
| 100 | | | | 5×5.4 | 1.8 | 100 | 6.3×5.4 | 1 | 140 | 6.3×5.4 | 1 | 140 | 6.3×7.7 | 0.6 | 230 | |
| | | | | | | | | | | 6.3×7.7 | 0.6 | 230 | 8×6.5 | 0.6 | 230 | |
| 150 | | | | 6.3×5.4 | 1 | 140 | 6.3×7.7 | 0.6 | 230 | 8×6.5 | 0.6 | 230 | 8×10.5 | 0.4 | 450 | |
| | | | | | | | | | | | | | 10×7.7 | 0.4 | 450 | |
| 220 | | 6.3×5.4 | 1 | 140 | 6.3×5.4 | 1 | 140 | 6.3×7.7 | 0.6 | 230 | 8×10.5 | 0.3 | 450 | 8×10.5 | 0.4 | 450 |
| | | | | | 6.3×7.7 | 0.6 | 230 | 8×6.5 | 0.6 | 230 | 10×7.7 | 0.4 | 450 | 10×10.5 | 0.15 | 670 |
| 330 | | 6.3×7.7 | 0.6 | 230 | 6.3×7.7 | 0.6 | 230 | 8×10.5 | 0.4 | 450 | 8×10.5 | 0.4 | 450 | 10×10.5 | 0.15 | 670 |
| | | | | | 8×6.5 | 0.6 | 230 | 10×7.7 | 0.4 | 450 | 10×10.5 | 0.15 | 670 | | | |
| 470 | | 6.3×7.7 | 0.6 | 230 | 6.3×7.7 | 0.6 | 230 | 8×10.5 | 0.4 | 450 | 10×10.5 | 0.15 | 670 | 10×10.5 | 0.15 | 670 |
| | | 8×6.5 | 0.6 | 230 | 8×6.5 | 0.6 | 230 | 10×10.5 | 0.15 | 670 | | | | | | |
| | | | | | 10×7.7 | 0.4 | 450 | | | | | | | | | |
| 680 | | 8×10.5 | 0.4 | 450 | 10×10.5 | 0.15 | 670 | 10×10.5 | 0.15 | 670 | | | | | | |
| | | 10×7.7 | 0.4 | 450 | | | | | | | | | | | | |
| 1000 | | 8×10.5 | 0.4 | 450 | 8×10.5 | 0.4 | 450 | 10×10.5 | 0.15 | 670 | | | | | | |
| | | 10×7.7 | 0.4 | 450 | 10×10.5 | 0.15 | 670 | | | | | | | | | |
| 1500 | | 10×10.5 | 0.15 | 670 | | | | | | | | | | | | |



| μF | V | 50 | | | 63 | | | 80 | | | 100 | | |
|-----|---|---------|------|-----|---------|-----|-----|---------|-----|---------|---------|-----|-----|
| | | Size | ESR | RC | Size | ESR | RC | Size | ESR | RC | Size | ESR | RC |
| 1 | | 4×5.4 | 5 | 30 | | | | | | | | | |
| 2.2 | | 4×5.4 | 5 | 30 | | | | | | 5×5.4 | 5 | 25 | |
| 3.3 | | 4×5.4 | 5 | 30 | | | | | | 5×5.4 | 5 | 25 | |
| 4.7 | | 4×5.4 | 5 | 30 | 5×5.4 | 5 | 50 | | | | 5×5.4 | 5 | 25 |
| | | 5×5.4 | 3 | 50 | | | | | | 6.3×5.4 | 5 | 40 | |
| 10 | | 5×5.4 | 3 | 50 | 6.3×5.4 | 3 | 80 | 6.3×7.7 | 3 | 60 | 6.3×7.7 | 3 | 60 |
| | | | | | | | | | | | 8×6.5 | 3 | 60 |
| 22 | | 6.3×5.4 | 2 | 70 | 6.3×7.7 | 2.5 | 100 | 8×10.5 | 2 | 130 | 8×10.5 | 2 | 130 |
| | | 6.3×7.7 | 1 | 120 | | | | | | | 10×10.5 | 1.5 | 180 |
| 33 | | 6.3×7.7 | 1 | 120 | 8×10.5 | 2 | 250 | 10×10.5 | 1.5 | 180 | 10×10.5 | 1.5 | 180 |
| 47 | | 6.3×7.7 | 1 | 120 | 8×10.5 | 2 | 250 | 8×10.5 | 2 | 130 | 10×10.5 | 1.5 | 180 |
| | | 8×6.5 | 1 | 120 | 10×7.7 | 2 | 250 | 10×10.5 | 1.5 | 180 | | | |
| | | 8×10.5 | 0.8 | 280 | 10×10.5 | 1.5 | 300 | | | | | | |
| 68 | | 8×10.5 | 0.8 | 300 | 10×10.5 | 1.5 | 300 | 10×10.5 | 1.5 | 180 | | | |
| | | 10×10.5 | 0.6 | 450 | | | | | | | | | |
| 100 | | 8×10.5 | 0.8 | 300 | 10×10.5 | 1.5 | 300 | 10×10.5 | 1.5 | 180 | | | |
| | | 10×7.7 | 0.8 | 300 | | | | | | | | | |
| | | 10×10.5 | 0.6 | 450 | | | | | | | | | |
| 150 | | 10×10.5 | 0.6 | 450 | | | | | | | | | |
| 220 | | 10×10.5 | 0.45 | 500 | | | | | | | | | |

↑ Case

size:φD×L(mm)

↑

Impedance(Ω)

max at

100kHz, 20°C

↑

Rated ripple current

mArms(100kHz, 105°C)

Note: Other Values are available on request. WEET is capable of doing custom service for you.



PN Structure

| WLZ | 0J | 0R1 | M | 040054 | T | R |
|------------|---------------|-------------|-----------------------|---------------|----------|----------|
| Series | Rated Voltage | Capacitance | Capacitance Tolerance | Dimension | Packing | Pb |
| | 1. | 2. | 3. | 4. | 5. | 6. |

1. Rated Voltage

| Code | 0J | 1A | 1C | 1D | 1E | 1V | 1G | 1H | 1J | 1K | 2A |
|---------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Voltage | 6.3V | 10V | 16V | 20V | 25V | 35V | 40V | 50V | 63V | 80V | 100V |

2. Capacitance

| Code | 0R1 | R22 | R33 | R47 | 010 | 2R2 | 3R3 | 4R7 | 100 | 220 | 330 | 470 | 101 |
|------------------|-----|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Capacitance (μF) | 0.1 | 0.22 | 0.33 | 0.47 | 1 | 2.2 | 3.3 | 4.7 | 10 | 22 | 33 | 47 | 100 |

3. Capacitance Tolerance

| Code | K | L | M |
|-----------|------|------|------|
| Tolerance | ±10% | ±15% | ±20% |

4. Dimension

| Code | 040054 | 050054 | 063054 | 080105 | 100105 |
|----------------|--------|--------|---------|--------|---------|
| Dimension (mm) | 4x5.4 | 5x5.4 | 6.3x5.4 | 8x10.5 | 10x10.5 |

5. Packing

| Code | T |
|---------|-------------|
| Packing | Tape & Reel |

6. Pb

| Code | L | R |
|------|--------|------|
| Pb | Leaded | RoHS |

