

TL series

Features

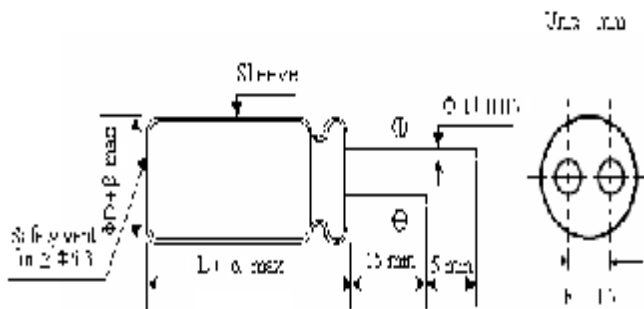
- ◆ PenCap type , High ripple current , Super long life 10000 hours at 105°C.
- ◆ Ideally suited for slim size adaptor, LCD/LED-TV and LCD-Monitor power .
- ◆ RoHS Compliant .



Specifications

| Item | Performance Characteristics |
|--|---|
| Temperature Range | -25~+105°C |
| Rated Voltage Range | 160~450Vdc |
| Capacitance Range | 22~330µF |
| Capacitance Tolerance | ±20% (120Hz, +20°C) |
| Leakage Current (+20°C,max.) | $I \leq 0.03CV + 40$ (µA) After 2 minutes, whichever is greater measured with rated working voltage applied |
| Dissipation Factor(tgδ) 120Hz, +20°C | Working Voltage(Vdc) 160 200 250 400 420 450 |
| | D.F.(%)max. 15 15 15 20 20 20 |
| Low Temperature Characteristics(120Hz) | Impedance ratio max. Working Voltage(Vdc) 160 200 250 400 420 450 |
| | Z-25°C / Z+20°C 3 3 3 6 6 6 |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 10,000 hours at 105°C |
| | Capacitance Change ≤±20% of the initial value |
| | D.F.(tgδ) ≤200% of the initial specified value Leakage Current ≤The initial specified value |
| Shelf Life | After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C. |
| | Capacitance Change ≤±20% of the initial value |
| | D.F.(tgδ) ≤200% of the initial specified value Leakage Current ≤200% The initial specified value |
| Others | JISC-5101(IEC 60384) |

Diagram of Dimensions



Frequency Multipliers

| µF \ Hz | 50/60 | 120 | 300 | 1K | ≥10K |
|---------|-------|------|------|------|------|
| 22~330 | 0.80 | 1.00 | 1.25 | 1.40 | 1.60 |

| | | |
|----|-----|-----|
| ΦD | 10 | 13 |
| F | 5.0 | 5.0 |
| Φd | 0.6 | 0.6 |
| α | 2.0 | |
| β | 0.5 | |

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Standard Ratings

| Voltage | 160 | | 200 | | 250 | |
|---------|-----------|----------------|-----------|----------------|-----------|----------------|
| Cap(μF) | Case Size | Ripple Current | Case Size | Ripple Current | Case Size | Ripple Current |
| 56 | | | | | 10×35 | 310 |
| 68 | | | 10×35 | 320 | 10×40 | 370 |
| 82 | 10×35 | 350 | 10×40 | 370 | 10×50 | 420 |
| 100 | 10×40 | 410 | 10×50 | 460 | 10×55 | 500 |
| 120 | 10×45 | 480 | 10×55 | 530 | 13×40 | 560 |
| 150 | 10×50 | 560 | 13×40 | 580 | 13×50 | 640 |
| 220 | 13×45 | 750 | 13×55 | 800 | | |
| 270 | 13×50 | 860 | | | | |
| 330 | 13×60 | 1000 | 13×62 | 1030 | | |

| Voltage | 400 | | 420 | | 450 | |
|---------|-----------|----------------|-----------|----------------|-----------|----------------|
| Cap(μF) | Case Size | Ripple Current | Case Size | Ripple Current | Case Size | Ripple Current |
| 22 | | | 10×35 | 190 | 10×40 | 210 |
| 27 | 10×40 | 230 | 10×40 | 230 | 10×45 | 245 |
| 33 | 10×45 | 270 | 10×45 | 270 | 10×50 | 280 |
| 39 | 10×50 | 310 | 10×50 | 300 | 13×40 | 320 |
| 47 | 10×60 | 370 | 13×40 | 350 | 13×45 | 380 |
| 56 | 13×40 | 420 | 13×45 | 410 | 13×50 | 430 |
| 68 | 13×50 | 470 | 13×50 | 460 | 13×60 | 500 |
| 82 | 13×60 | 520 | 13×60 | 560 | | |

Max Allowable Ripple Current (mA,rms) at 105°C 120Hz,Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.