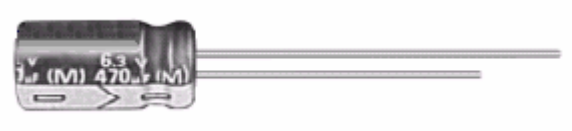
# RUL Series

**Richey**

- Load life of 2000 hours at 125°C
- Best suited to automotive electronics

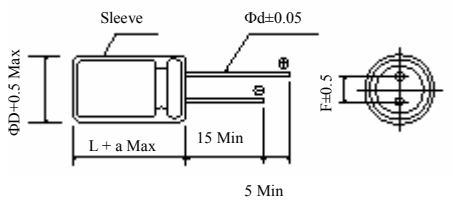


## SPECIFICATIONS

| Item | Characteristics |
|---|---|
| Operating Temperature Range (°C) | -40~+125 |
| Rated Voltage Range (V) | 10~63 |
| Capacitance Tolerance (20° C,120Hz) | ±20% |
| Leakage Current (μ A) | Less than 0.04CV(at 20°C, after 2 minutes)<br>C:Nominal Capacitance (μ F), V: Rated Voltage (V) |
| Dissipation Factor (20°C, 120Hz) | Rated Voltage (V) / tan δ: 10 / 0.20; 16 / 0.16; 25 / 0.14; 35 / 0.12; 50 / 0.10; 63 / 0.09<br>add 0.02 to every 1000μF increase over 1000μF |
| Load Life (+125°C) | Time: 2000 hours<br>Leakage current: Not more than the specified value<br>Capacitance Change: When ± 30% of the initial value<br>Dissipation factor: Not more than 300% of the specified value |
| Shelf Life (+125°C) | After leaving capacitors under no load for 1000 hours, they meet the specified value for load life characteristics listed above. * After test (V) to be applied for 30 minutes , 24 to 48 hours before measurement. |

## DIMENSIONS

mm




| ΦD | 8 | 10 | 12.5 | 16 |
|---|---|---|---|---|
| F | 3.5 | 5.0 | 5.0 | 7.5 |
| Φd | 0.6 | 0.6 | 0.6 | 0.8 |
| a | 0.5 | 0.5 | 1.0 | 1.0 |

## MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Freq(Hz) / Cap( μ F) | 120 | 1K | 10K | 100K |
|---|---|---|---|---|
| 47~100 | 0.40 | 0.75 | 0.90 | 1.00 |
| 220~330 | 0.50 | 0.85 | 0.95 | 1.00 |
| 470~1000 | 0.60 | 0.88 | 0.96 | 1.00 |
| 2200~3300 | 0.75 | 0.90 | 0.98 | 1.00 |

## STANDARD RATINGS

| Wv (V) / Cap (μ F) | 10 | | | 16 | | | 25 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Size ΦDxL | Impedance Ω | Ripple mArms | Size ΦDxL | Impedance Ω | Ripple mArms | Size ΦDxL | Impedance Ω | Ripple mArms |
| 220 | - | - | - | 8x12 | 0.33 | 340 | 8x15 | 0.23 | 480 |
| 330 | 8x12 | 0.33 | 340 | 10x12.5 | 0.24 | 500 | 10x16 | 0.2 | 630 |
| 470 | 10x12.5 | 0.24 | 500 | 10x16 | 0.2 | 630 | 10x20 | 0.12 | 770 |
| 1000 | 10x20 | 0.12 | 770 | 12.5x20 | 0.077 | 820 | 12.5x25 | 0.061 | 1250 |
| 2200 | 12.5x25 | 0.061 | 1250 | 16x25 | 0.05 | 1380 | - | - | - |
| 3300 | 16x25 | 0.05 | 1380 | - | - | | - | - | - |

| Wv (V) / Cap (μ F) | 35 | | | 50 | | | 63 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Size ΦDxL | Impedance Ω | Ripple mArms | Size ΦDxL | Impedance Ω | Ripple mArms | Size ΦDxL | Impedance Ω | Ripple mArms |
| 47 | - | - | - | - | - | - | 8x12 | 0.68 | 245 |
| 100 | 8x12 | 0.33 | 340 | 10x12.5 | 0.36 | 420 | 10x16 | 0.38 | 425 |
| 220 | 10x16 | 0.2 | 630 | 10x20 | 0.20 | 655 | 12.5x20 | 0.18 | 665 |
| 330 | 10x20 | 0.12 | 770 | 12.5x20 | 0.12 | 780 | 12.5x25 | 0.14 | 900 |
| 470 | 12.5x20 | 0.077 | 920 | 12.5x25 | 0.10 | 1060 | - | - | - |
| 1000 | 16x25 | 0.05 | 1380 | - | - | - | - | - | - |

Ripple Current: 125°C, 100KHz; Impedance : 20°C, 100KHz