

Aluminum Electrolytic Capacitors

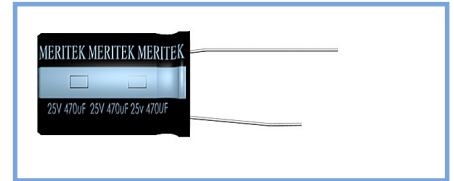


RF Series
(High R.C. , High Reliability)

MERITEK

FEATURES

- High ripple current, low E.S.R. and long life.
- Suitable for electronic ballast, adaptor and switching power



SPECIFICATIONS

| Item | Characteristic | | | | | |
|--|---|-----------------------------------|------|--|------|------|
| Operating Temp Range | - 40 ~ +105°C | | | - 25 ~ +105°C | | |
| Rated Working Voltage | 160 ~ 400VDC | | | 450VDC | | |
| Capacitance Tolerance (120Hz 20°C) | ± 20%(M) | | | | | |
| Leakage Current (20°C) | I ≤ 0.06CV+10(μA) * After 2 minutes | | | I : Leakage Current (μA) C : Rated Capacitance(μF) V : Working Voltage (V) | | |
| Surge Voltage (20°C) | W.V. | 160 | 200 | 250 | 400 | 450 |
| | S.V. | 200 | 250 | 300 | 450 | 500 |
| Dissipation Factor (tan δ) (120Hz 20°C) | W.V. | 160 | 200 | 250 | 400 | 450 |
| | tan δ | 0.15 | 0.15 | 0.15 | 0.24 | 0.24 |
| Low Temperature Stability | Impedance ratio at 120Hz | | | | | |
| | Rated Voltage (V) | 160~250 | | 400 | 450 | |
| | -25°C / +20°C | 3 | | 6 | 6 | |
| | -40°C / +20°C | 4 | | 6 | - | |
| Load Life | After hours (φD ≤ 8mm 2000hrs, φD ≥ 10mm 3000hrs) application of W.V. and +105°C ripple current value , the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rated working voltage) | | | | | |
| | Capacitance Change | ≤ ±20% of initial value. | | | | |
| | Dissipation Factor | ≤ 200% of initial specified value | | | | |
| | Leakage Current | ≤ initial specified value | | | | |
| Shelf Life | At +105°C no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (with voltage treatment) | | | | | |

PART NUMBER SYSTEM

RF 160V 101 M TA 16x25

Meritek Series

Rated Voltage

Rated Capacitance

Express in micro farad(μF). First two digits are significant figures, Third digit denotes number of zeros. 'R' denotes decimal point for values less than 10uF

Tolerance

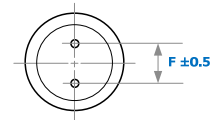
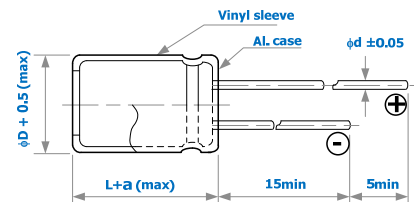
M - ±20%

Package

| Code | TA | TR | Blank |
|------|-------------|-------------|-------|
| | Tape & Ammo | Tape & Reel | |

Case size – (D) Diameter x (L) Length in mm (Optional)

DIMENSIONS (mm)



| φD | 10 | 12.5 | 16 | 18 |
|----|-----|------|-----|-----|
| F | 5.0 | 5.0 | 7.5 | 7.5 |
| d | 0.6 | 0.6 | 0.8 | 0.8 |
| a | 1.5 | 1.5 | 1.5 | 1.5 |

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RIPPLE CURRENT COEFFICIENTS

| Frequency(Hz) | | 120 | 1k | 10k | 100k |
|---------------|---------|------------|------|------|------|
| W.V. | | Multiplier | | | |
| 160~450 | φD=10mm | 0.25 | 0.61 | 0.88 | 1.0 |
| | φD>10mm | 0.35 | 0.66 | 0.89 | 1.0 |

| Temperature(°C) | 65 | 75 | 85 | 95 | 105 |
|-----------------|-----|------|------|------|------|
| Multiplier | 1.8 | 1.65 | 1.50 | 1.25 | 1.00 |

CASE SIZE & MAX RIPPLE CURRENT

Case size : DxL (mm)
 Max. impedance : Ω 20°C 100kHz
 Max. ripple current : mA(rms) 105°C 100kHz

| Cap. (uF) | V | 160 | | | 200 | | | 250 | | |
|--------------|---|---------|------|------|---------|------|------|---------|------|------|
| | | Item | DxL | IMP. | R.C. | DxL | IMP. | R.C. | DxL | IMP. |
| 4.7 | | | | | | | | 10x16 | 3.45 | 150 |
| 10 | | 10x16 | 1.47 | 220 | 10x16 | 1.47 | 220 | 10x20 | 2.70 | 240 |
| 22 | | 10x20 | 0.80 | 350 | 10x20 | 0.80 | 350 | 12.5x20 | 1.47 | 380 |
| 33 | | 10x20 | 0.62 | 430 | 12.5x20 | 0.62 | 460 | 12.5x25 | 1.15 | 510 |
| 47 | | 12.5x20 | 0.50 | 550 | 12.5x25 | 0.50 | 610 | 16x25 | 0.92 | 610 |
| 68 | | 12.5x20 | 0.39 | 660 | 12.5x25 | 0.39 | 730 | 16x31.5 | 0.71 | 810 |
| 100 | | 16x25 | 0.32 | 890 | 16x31.5 | 0.32 | 980 | 18x35.5 | 0.59 | 1110 |
| 220 | | 16x35.5 | 0.17 | 1540 | 18x35.5 | 0.17 | 1640 | 18x40 | 0.31 | 1730 |

| Cap. (uF) | V | 400 | | | 450 | | |
|--------------|---|---------|------|------|---------|------|------|
| | | Item | DxL | IMP. | R.C. | DxL | IMP. |
| 2.2 | | | | | 10x16 | 4.94 | 110 |
| 3.3 | | 10x20 | 2.60 | 170 | 10x20 | 4.11 | 150 |
| 4.7 | | 10x25 | 2.20 | 220 | 12.5x20 | 3.47 | 190 |
| 10 | | 12.5x25 | 1.72 | 340 | 12.5x25 | 2.72 | 300 |
| 22 | | 16x25 | 0.94 | 510 | 16x31.5 | 1.48 | 500 |
| 33 | | 16x31.5 | 0.73 | 690 | 16x31.5 | 1.15 | 620 |
| 47 | | 16x31.5 | 0.59 | 820 | 18x31.5 | 0.92 | 780 |
| 68 | | 16x31.5 | 0.46 | 990 | | | |
| 100 | | 18x31.5 | 0.38 | 1280 | | | |
| 120 | | 18x35.5 | 0.32 | 1480 | | | |
| 150 | | 18x40 | 0.26 | 1740 | | | |
| 180 | | 18x40 | 0.23 | 1910 | | | |