

High Performance Snap-in Electrolytic capacitor



- 105°C 2,000 hours assured
- Aluminum case, Fully insulated, PCB mounding Snap-in
- compact size , high capacitance per unit volume
- For frequency converters and switch mode power supplies in industrial and consumer electronics applications
- RoHS compliant



Specifications:

| Item | Characteristics | | | | | | | |
|--|---|------------------------------------|-----------|-----------|-------------|-------------|-------------|---------|
| Rated Voltage Range: | 16V ~100VDC | | | | 160V~500VDC | | | |
| Operating Temperature Range: | -40 ~+105°C | | | | -25~+105°C | | | |
| Capacitance Tolerance : | +/-20%(M) (at 20°C , at 120Hz) | | | | | | | |
| Leakage Current | I=0.02CV(Ua) or 3mA, whichever is smaller. where : I: max .leakage current (Ua) C: Nominal capacitance (uF) | | | | | | | |
| Dissipation Factor (tgδ) 20°C , 100/120Hz | Rated Voltage(V) | 16V | 25V ~ 35V | 50V ~ 63V | 100V | 160V ~ 400V | 420V ~ 500V | |
| | tanδ(Max) | 0.40 | 0.35 | 0.25 | 0.20 | 0.15 | 0.20 | |
| Temperature characteristics at 120Hz | Rated Voltage (VDC) | 16 | 25 | 35 | 50~63 | 100 | 160~420 | 420~500 |
| | Z-40°C/Z+20°C | 15 | 10 | 8 | 6 | 5 | - | - |
| | Z-25°C/Z+20°C | 4 | 3 | 3 | 2 | 2 | 4 | 8 |
| Shelf Life | the following specifications shall be satisfied when the capacitors are restored to 20°C after the exposing them at 105°C for 1000 hours without voltage applied . The rated voltage shall be applied to the capacitors for a minimum of 30 minutes , at least 24 hours and not more than 48 hours before the measurements. | | | | | | | |
| | Capacitance Change | ≤ Within ±20% of the initial value | | | | | | |
| | Dissipation Factor tgδ | ≤ 200% of the specified value | | | | | | |
| | Leakage Current | ≤ 200% of the specified value | | | | | | |
| Load Life | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 105 °C | | | | | | | |
| | Capacitance Change | ≤ ±20% of the initial value | | | | | | |
| | Dissipation Factor tgδ | ≤ 200% of the specified value | | | | | | |
| | Leakage Current | ≤ the specified value | | | | | | |
| Others | GB/T5993-2003 | | | | | | | |

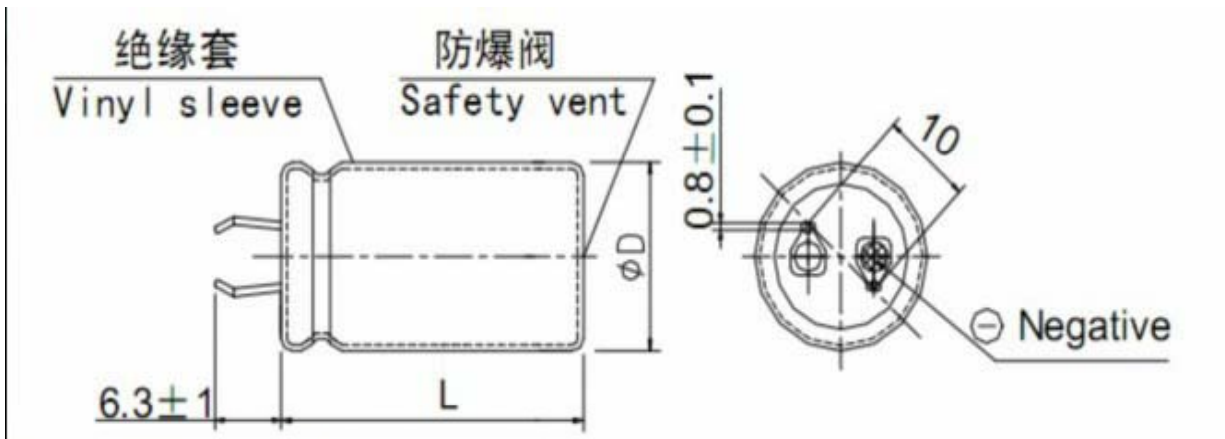
Rated Ripple Current

when capacitors are operated in any other condition at 120Hz, the maximum ripple current must be multiplied figure shown in the table.

Frequency Multiplying Factor

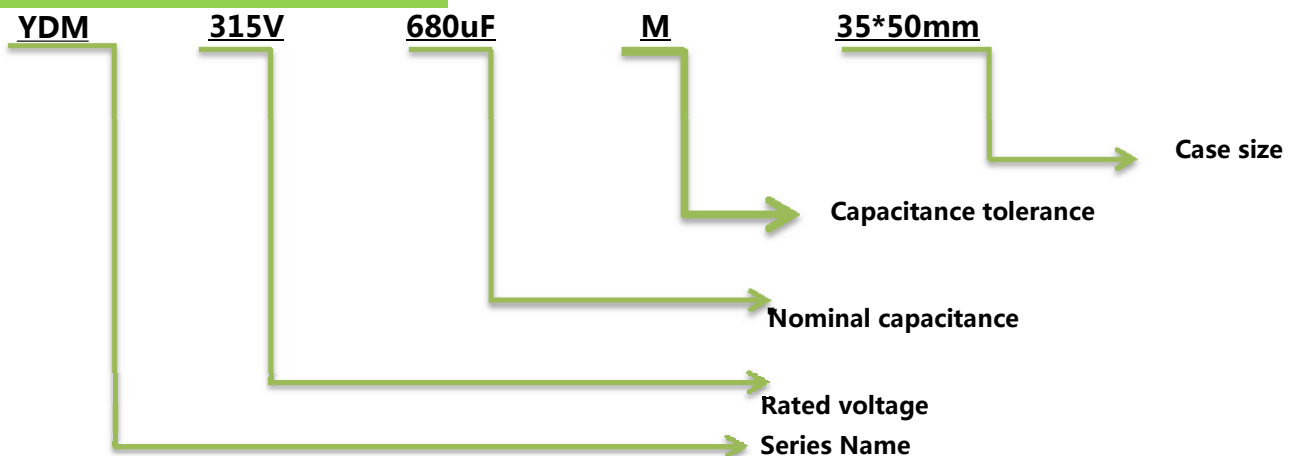
| Reted Voltage (V_{DC}) | ΦD (mm) | Frequency(Hz) | | | | |
|----------------------------|--|---------------|------|------|------|------|
| | | 60 | 120 | 300 | 1K | 10K~ |
| 16VDC~50VDC | $\Phi 22\text{mm} \sim \Phi 35\text{mm}$ | 0.95 | 1.00 | 1.03 | 1.05 | 1.08 |
| 63V.DC~100V.DC | | 0.92 | 1.00 | 1.07 | 1.13 | 1.19 |
| 160V.DC~250V.DC | | 0.81 | 1.00 | 1.17 | 1.32 | 1.45 |
| 315V.DC~400V.DC | | 0.77 | 1.00 | 1.16 | 1.30 | 1.41 |

DIMENSIONS OF YDM Series :



| | | | | |
|--------------|-------------|----------|----------|-------|
| $D^{+1.0}_0$ | 22 | 25 | 30 | 35 |
| $L^{+2.0}_0$ | 30,35,40,45 | 40,45,50 | 40,45,50 | 45,50 |

How To Order:



LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

RATINGS OF YDM Series:

| V _{DC} μF ΦD(mm) | 16V.DC | | | | 25V.DC | | | | 35V.DC | | | | | |
|------------------------------|---------------|-------------------------|-----------------------|-----------------------|---|-----------------|---------------|-----------------------|---------------|-----------------|---------------|---------------|--|--|
| | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 | | |
| 3,300uF | | | | | | | | | 22×25 1.40 | | | | | |
| 3,900uF | | | | | | | | | 22×30 1.57 | | | | | |
| 4,700uF | | | | | 22×25 1.50 | | | | 22×30 1.95 | 25.4×25 1.80 | | | | |
| 5,600uF | | | | | 22×25 1.63 | | | | 22×35 1.95 | 25.4×30 1.96 | 30×25 1.99 | | | |
| 6,800uF | 22×25 | | | | 22×30 1.86 | 25.4×25 1.87 | | | 22×40 2.20 | 25.4×35 2.23 | 30×25 2.19 | | | |
| 8,200uF | 22×30 | | | | 22×35 2.11 | 25.4×30 2.12 | 30×25 2.15 | | 22×50 2.55 | 25.4×40 2.53 | 30×30 2.53 | | | |
| 10,000uF | 22×30 1.97 | 25.4×25 | | | 22×40 2.39 | 25.4×35 2.42 | 30×25 2.39 | | | 25.4×45 2.87 | 30×35 2.90 | 35×30 2.75 | | |
| 12,000uF | 22×35 | 25.4×30 2.24 | | | 22×45 2.69 | 25.4×40 2.74 | 30×30 2.70 | 35×25 2.74 | | 25.4×50 3.24 | 30×40 3.23 | 35×30 3.23 | | |
| 15,000uF | 22×40 | 25.4×35 2.58 | | | | 25.4×45 3.15 | 30×40 3.54 | 35×30 3.27 | | | 30×45 3.72 | 35×35 3.67 | | |
| 18,000uF | 22×45 | 25.4×40 2.92 | 30×30 2.88 | | | 25.4×50 3.54 | 30×45 4.04 | 35×30 3.50 | | | | 35×40 4.37 | | |
| 22,000uF | | 25.4×45 3.32 | 30×35 3.29 | | | | | 35×35 3.97 | | | | 35×50 4.92 | | |
| 27,000uF | | 25.4×50 3.78 4.81 | 30×40 3.77 3.77 | 35×30 3.45 3.45 | | | | 35×45 4.73 4.73 | | | | | | |
| 33,000uF | | | 30×45 4.30 | 35×35 4.26 | | | | 35×50 5.39 | | | | | | |
| 39,000uF | | | 30×50 4.81 | 35×40 4.79 | | | | | | | | | | |
| 47,000uF | | | | 35×50 5.43 | ← Case Size ΦD×L(mm) | | | | | | | | | |
| | | | | | ← Rated Ripple Current(Arm/105°C,120Hz) | | | | | | | | | |

LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

| μF | V _{DC} ΦD(mm) | 50V.DC | | | | 63V.DC | | | | 100V.DC | | | | | |
|----------|---------------------------|-----------------|---------------|---------------|---|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|--|--|
| | | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 | | |
| 560uF | | | | | | | | | | 22×25 1.06 | | | | | |
| 820uF | | | | | | | | | | 22×30 1.32 | 25.4×25 1.33 | | | | |
| 1,000uF | | | | | | | | | | 22×35 1.50 | 25.4×30 1.51 | | | | |
| 12,00uF | | | | | | 22×25 1.19 | | | | 22×40 1.69 | 25.4×35 1.71 | 30×25 1.68 | | | |
| 1,500uF | | | | | | 22×25 1.33 | | | | 22×45 1.94 | 25.4×40 1.98 | 30×30 1.95 | | | |
| 18,00uF | 22×25 1.33 | | | | | 22×30 1.51 | 25.4×25 1.52 | | | | 25.4×45 2.23 | 30×35 2.26 | | | |
| 2,200uF | 22×30 1.50 | | | | | 22×35 1.73 | 25.4×30 1.74 | | | | 25.4×50 2.53 | 30×40 2.57 | 35×25 2.17 | | |
| 2,700uF | 22×30 1.69 | 25.4×25 1.70 | | | | 22×40 1.97 | 25.4×35 1.99 | 30×25 1.91 | | | | 30×45 2.88 | 35×30 2.50 | | |
| 3,300uF | 22×35 1.93 | 25.4×30 1.85 | | | | 22×50 2.29 | 25.4×40 2.27 | 30×30 2.24 | | | | 30×50 3.28 | 35×35 2.86 | | |
| 3,900uF | 22×40 2.16 | 25.4×35 2.18 | 30×25 2.15 | | | | 25.4×45 2.54 | 30×35 2.56 | 35×25 2.56 | | | | 35×40 3.27 | | |
| 4,700uF | 22×45 2.43 | 25.4×35 2.39 | 30×30 2.35 | 35×25 2.48 | | | 25.4×50 2.86 | 30×40 2.86 | 35×30 2.79 | | | | 35×45 3.67 | | |
| 5,600uF | 22×50 2.75 | 25.4×40 2.70 | 30×35 2.76 | 35×25 2.70 | | | | 30×45 3.22 | 35×35 3.19 | | | | 35×50 3.80 | | |
| 6,800uF | | 25.4×50 3.30 | 30×40 3.30 | 35×30 3.25 | | | | 30×50 3.66 | 35×40 3.64 | | | | | | |
| 8,200uF | | | 30×45 3.60 | 35×35 3.56 | | | | | 35×45 3.90 | | | | | | |
| 10,000uF | | | 30×50 4.04 | 35×40 4.03 | | | | | 35×50 4.40 | | | | | | |
| 12,000uF | | | | 35×45 4.56 | <div style="display: flex; justify-content: space-between; align-items: center;"> ← Case Size ΦD×L(mm) ← Rated Ripple Current(Arm/105°C,120Hz) </div> | | | | | | | | | | |

LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

| μF | V _{DC} ΦD(mm) | 160V.DC | | | | 200V.DC | | | | 250V.DC | | | |
|---------|---------------------------|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|---|-----------------|---------------|---------------|
| | | 22mm | 25.4mm | 30mm | 35mm | 22mm | 25.4mm | 30mm | 35mm | 22mm | 25.4mm | 30mm | 35mm |
| 100uF | | | | | | | | | | | | | |
| 120 uF | | | | | | | | | | | 25.4×20 0.48 | | |
| 150uF | | | | | | 22×20 0.53 | | | | | 25.4×20 0.59 | | |
| 180uF | | | | | | 22×20 0.62 | 25.4×20 0.64 | | | 22×25 0.78 | 25.4×20 0.75 | | |
| 220uF | | | 25.4×20 0.66 | | | 22×25 0.70 | 25.4×20 0.70 | | | 22×30 0.96 | 25.4×25 0.95 | 30×20 0.93 | |
| 270uF | | | 25.4×20 0.80 | | | 22×25 0.87 | 25.4×20 0.83 | | | 22×30 1.11 | 25.4×25 1.10 | 30×20 1.10 | |
| 330uF | | 22×25 1.2 | 25.4×20 1.10 | | | 22×30 1.20 | 25.4×25 1.21 | 30×20 1.20 | | 22×35 1.20 | 25.4×30 1.20 | 30×25 1.26 | 35×20 1.17 |
| 390uF | | 22×30 1.30 | 25.4×25 1.29 | 30×20 1.19 | | 22×30 1.28 | 25.4×25 1.27 | 30×25 1.25 | | 22×40 1.45 | 25.4×35 1.49 | 30×25 1.44 | 35×25 1.49 |
| 470uF | | 22×30 1.36 | 25.4×25 1.39 | 30×20 1.31 | 35×20 1.35 | 22×35 1.41 | 25.4×30 1.41 | 30×25 1.50 | 35×20 1.30 | 22×45 1.53 | 25.4×35 1.50 | 30×30 1.75 | 35×25 1.57 |
| 560uF | | 22×35 1.46 | 25.4×30 1.51 | 30×25 1.54 | 35×20 1.41 | 22×45 1.56 | 25.4×35 1.53 | 30×30 1.57 | 35×25 1.52 | 22×50 1.77 | 25.4×40 1.74 | 30×30 1.73 | 35×25 1.72 |
| 680uF | | 22×40 1.66 | 25.4×30 1.65 | 30×25 1.68 | 35×20 1.69 | 22×45 1.73 | 25.4×35 1.69 | 30×30 1.74 | 35×25 1.72 | | 25.4×50 1.84 | 30×35 1.94 | 35×30 1.97 |
| 820uF | | 22×45 1.99 | 25.4×30 1.95 | 30×30 2.00 | 35×25 1.91 | | 25.4×45 1.99 | 30×35 2.00 | 35×30 2.04 | | 25.4×60 2.20 | 30×40 2.10 | 35×35 1.98 |
| 1,000uF | | 22×50 2.18 | 25.4×40 2.14 | 30×30 2.15 | 35×25 2.17 | | 25.4×50 2.21 | 30×40 2.23 | 35×35 2.30 | | | 30×50 2.13 | 35×40 2.30 |
| 1,200uF | | | 25.4×45 2.39 | 30×35 2.37 | 35×30 2.41 | | 25.4×60 2.57 | 30×45 2.53 | 35×35 2.57 | | | 30×60 2.50 | 35×45 2.43 |
| 1,500uF | | | 25.4×60 2.87 | 30×40 2.74 | 35×35 2.79 | | | 30×50 3.01 | 35×40 2.99 | | | | 35×50 2.80 |
| 1,800uF | | | | 30×45 3.14 | 35×35 3.11 | | | 30×60 3.47 | 35×45 3.38 | | | | |
| 2,200uF | | | | 30×60 3.76 | 35×45 3.66 | | | | 35×60 3.60 | ← Case Size ΦD×L(mm) | | | |
| | | | | | | | | | | ← Rated Ripple Current(Arm/105°C,120Hz) | | | |

LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

| μF | V _{DC} ΦD(mm) | 315V.DC | | | | 350V.DC | | | | 400V.DC | | | |
|-------|---------------------------|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|----------------------|-----------------|---------------|---|
| | | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 |
| 47uF | | | | | | | | | | 22×20 0.22 | | | |
| 68uF | | | | | | | | | | 22×25 0.51 | 25.4×20 0.46 | | |
| 82uF | | 22×25 0.64 | | | | 22×25 0.56 | | | | 22×25 0.55 | 25.4×20 0.53 | | |
| 100uF | | 22×30 0.68 | | | | 22×25 0.67 | | | | 22×30 0.67 | 25.4×25 0.67 | 30×20 0.60 | |
| 120uF | | 22×30 0.75 | 25.4×25 0.76 | | | 22×30 0.73 | 25.4×25 0.73 | | | 22×35 0.76 | 25.4×30 0.76 | 30×25 0.76 | 35×20 0.70 |
| 150uF | | 22×35 0.82 | 25.4×30 0.83 | | | 22×35 0.83 | 25.4×30 0.83 | 30×25 0.83 | | 22×40 0.82 | 25.4×30 0.80 | 30×25 0.82 | 35×20 0.80 |
| 180uF | | 22×40 0.91 | 25.4×30 0.88 | 30×25 0.85 | | 22×40 0.89 | 25.4×30 0.89 | 30×25 0.91 | | 22×45 0.88 | 25.4×35 0.88 | 30×30 0.89 | 35×25 0.90 |
| 220uF | | 22×45 0.94 | 25.4×35 0.96 | 30×30 1.00 | | 22×45 0.98 | 25.4×35 0.98 | 30×30 0.98 | 35×25 0.96 | 22×50 1.01 | 25.4×40 0.99 | 30×30 0.98 | 35×25 1.02 |
| 270uF | | | 25.4×45 1.13 | 30×35 1.12 | 35×25 1.06 | 22×50 1.12 | 25.4×40 1.10 | 30×30 1.08 | 35×25 1.12 | | 25.4×45 1.12 | 30×35 1.12 | 35×30 1.16 |
| 330uF | | | 25.4×50 1.28 | 30×40 1.28 | 35×30 1.30 | | 25.4×45 1.24 | 30×40 1.24 | 35×30 1.29 | | 25.4×50 1.27 | 30×40 1.28 | 35×35 1.35 |
| 390uF | | | | 30×45 1.44 | 35×35 1.42 | | 25.4×60 1.47 | 30×40 1.40 | 35×35 1.47 | | 25.4×60 1.51 | 30×45 1.49 | 35×35 1.47 |
| 470uF | | | | 30×50 1.63 | 35×40 1.64 | | 25.4×60 1.70 | 30×45 1.67 | 35×35 1.65 | | | 30×50 1.63 | 35×40 1.62 |
| 560uF | | | | | 35×45 1.87 | | | 30×50 1.87 | 35×40 1.86 | | | 30×60 1.88 | 35×50 1.88 |
| 680uF | | | | | 35×50 2.07 | | | 30×60 2.18 | 35×50 2.18 | | | | 35×60 2.19 |
| 820uF | | | | | | | | | 35×60 2.53 | ← Case Size ΦD×L(mm) | | | ← Rated Ripple Current(Arm/105°C,120Hz) |

LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

| μF | V _{DC} ΦD(mm) | 420V.DC | | | | 450V.DC | | | | 500V.DC | | | |
|-------|---------------------------|-----------------|---------------|---------------|----|---------------|-----------------|---------------|---------------|---|-----------------|---------------|---------------|
| | | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 |
| 56uF | | | | | | 22×25 0.40 | | | | 22×23 0.46 | 25.4×30 0.46 | 30×30 0.48 | |
| 68uF | 22×25 0.50 | | | | | 22×30 0.50 | 25.4×25 0.50 | | | 22×40 0.45 | 25.4×35 0.53 | 30×30 0.55 | |
| 82uF | 22×25 0.51 | 25.4×25 0.63 | | | | 22×30 0.55 | 25.4×25 0.54 | | | 22×45 0.56 | 25.4×35 0.58 | 30×35 0.58 | |
| 100uF | 22×30 0.58 | 25.4×30 0.69 | | | | 22×35 0.62 | 25.4×30 0.62 | 30×25 0.64 | | | 25.4×40 0.65 | 30×35 0.66 | |
| 120uF | 22×35 0.72 | 25.4×30 0.73 | 30×25 0.75 | | | 22×40 0.70 | 25.4×35 0.71 | 30×30 0.72 | 35×25 0.73 | | 25.4×45 0.75 | 30×40 0.76 | 35×30 0.78 |
| 150uF | 22×45 0.79 | 25.4×35 0.74 | 30×25 0.75 | 35×25 0.81 | | 22×45 0.77 | 25.4×40 0.75 | 30×30 0.74 | 35×25 0.75 | | | 30×45 0.80 | 30×35 0.81 |
| 180uF | 22×50 0.89 | 25.4×40 0.89 | 30×30 0.88 | 35×25 0.87 | | | 25.4×45 0.84 | 30×35 0.87 | 35×30 0.88 | | | 30×50 0.90 | 35×40 0.93 |
| 220uF | | 1.01 | 30×35 1.00 | 35×30 1.05 | | | 25.4×50 0.98 | 30×40 0.98 | 35×30 1.00 | | | 30×60 1.10 | 35×45 1.11 |
| 270uF | | | 30×45 1.19 | 35×35 1.19 | | | 25.4×60 1.17 | 30×45 1.15 | 35×35 1.17 | | | | 35×50 1.28 |
| 330uF | | | 30×50 1.36 | 35×40 1.39 | | | | 30×50 1.38 | 35×40 1.38 | | | | 35×60 1.50 |
| 390uF | | | | 35×45 1.57 | | | | 30×60 1.60 | 35×45 1.56 | | | | |
| 470uF | | | | 35×50 1.73 | | | | | 35×50 1.72 | | | | |
| 560uF | | | | | | | | | 35×60 1.98 | ← Case Size ΦD×L(mm) | | | |
| | | | | | | | | | | ← Rated Ripple Current(Arm/105°C,120Hz) | | | |