

AC / DC Filter and High Ripple Current Capacitor

C61



Characteristics

- PET tape wrapping, epoxy resin perfusion
- Tin plated copper nut or copper sheet leads
- High-frequency current capacity
- Low ESL, low ESR
- High pulse current , high dV/dt, high stability, self healing

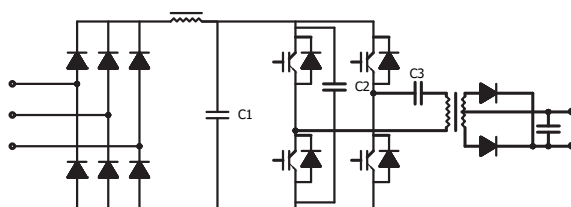
Application

- Widely used in series circuits or parallel resonant circuits of power electronic devices
- Welding power supplies, induction heating equipment in resonance occasions

Technical Data

| | |
|-------------------------------|-----------------------------------|
| • Reference Standard | IEC61071 .GB/T17702 |
| • Operating Temperature Range | -40°C~+70°C(Max. +85°C) Tmax+85°C |
| • Capacitance Range | 5.0µF ~100µF |
| • Rated Voltage | 400VDC~1200VDC |
| • Capacitance Tolerance | ±5%(J); ±10%(K) |
| • Withstand Voltage | 1.5Un DC/10S |
| • Dissipation Factor | tgδ≤0.0010 f=100Hz at 20°C |
| • Insulation Resistance | RsC≥10000S (at 20°C 100VDC 60S) |
| • Flame Retardation | UL94V-0 |
| • Life Expectancy | 100000hrs (Un θhotspot ≤ 55°C) |

Typical Circuit

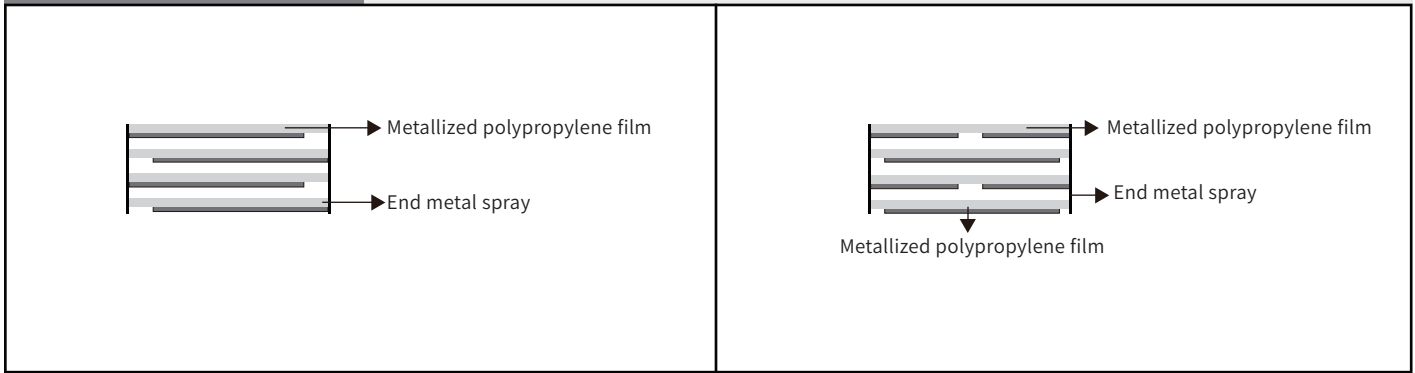


C1, C3: The High Ripple Current Capacitor

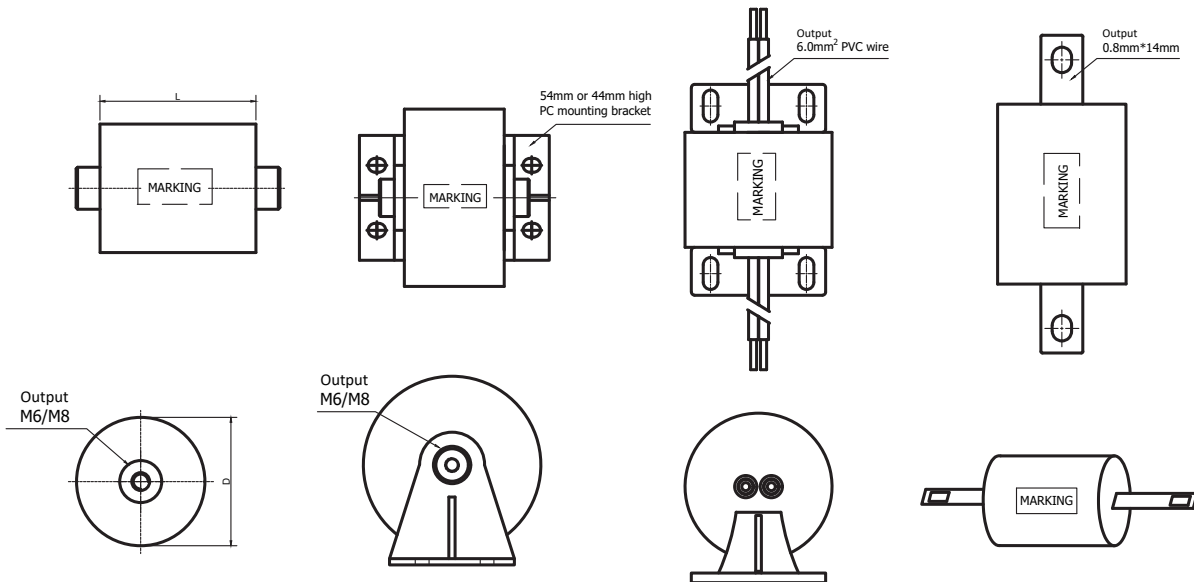
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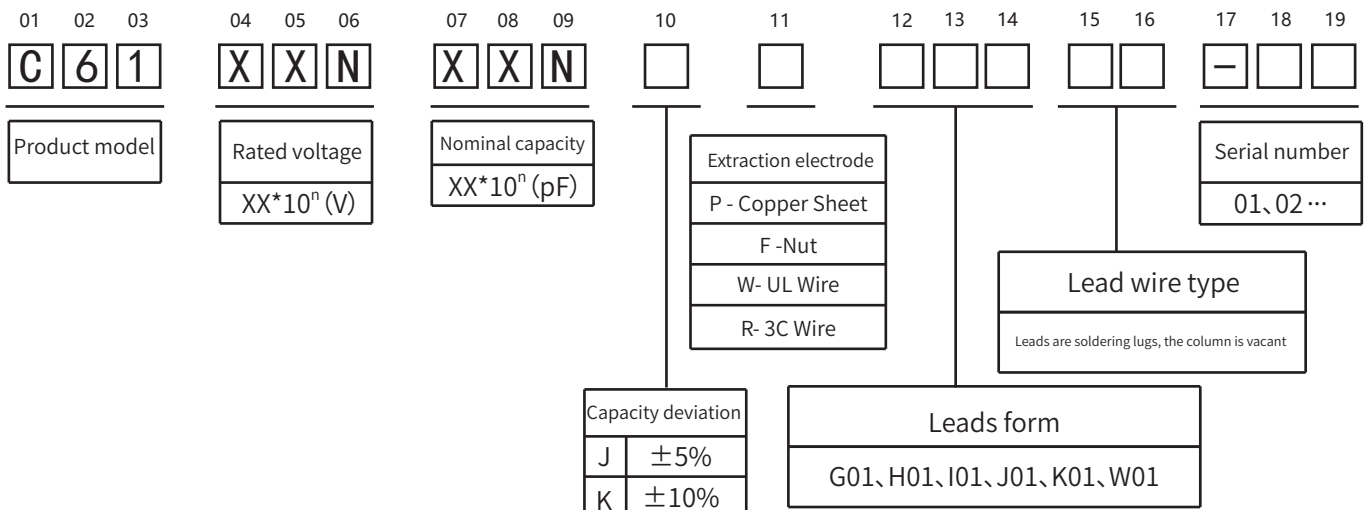
Construction Diagram



Product Shape



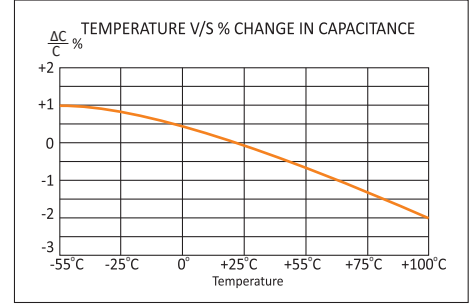
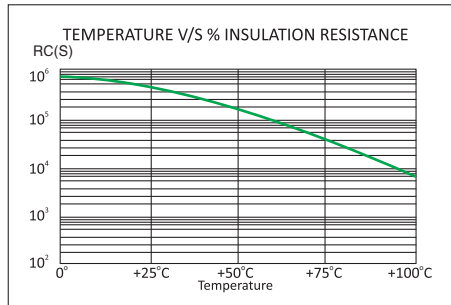
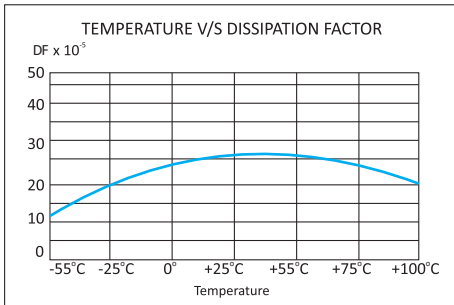
Product Coding



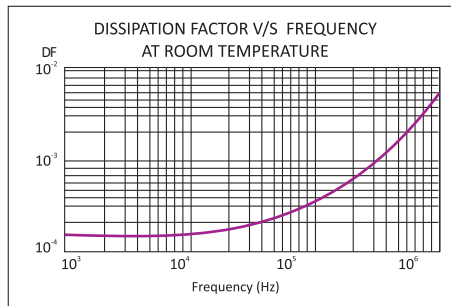
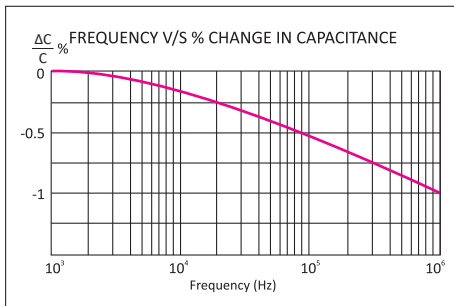
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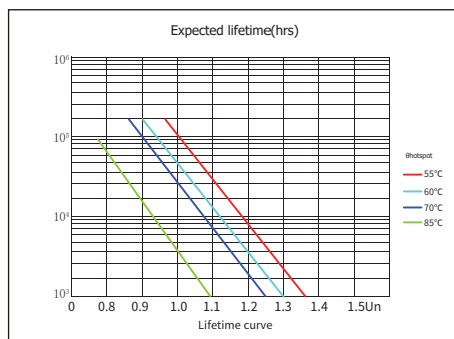
Frequency Characteristics



Temperature Characteristics



Life Expectancy



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Article Table

| Part Number | CAP μF | Dimension (mm) | | dV/dt (V/μs) | I _{peak} (A) | I _{rms} @10KHz40°C (A) | ESL (nH) | ESR @10KHz20°C (mΩ) | Output |
|--------------------------------------|-----------|----------------|-----|-----------------|--------------------------|---------------------------------------|-------------|---------------------------|--------|
| | | L | D | | | | | | |
| U _N 400VDC / Urms 250VAC | | | | | | | | | |
| C61401206J••••• | 20 | 40 | 44 | 80 | 1600 | 45 | 23 | 4.0 | M6 |
| C61401256J••••• | 25 | 50 | 47 | 70 | 1750 | 50 | 31 | 3.3 | M6 |
| C61401306J••••• | 30 | 50 | 50 | 65 | 1950 | 55 | 30 | 2.7 | M6 |
| C61401406J••••• | 40 | 50 | 58 | 60 | 2400 | 60 | 28 | 2.0 | M6 |
| C61401506J••••• | 50 | 50 | 64 | 55 | 2750 | 70 | 27 | 1.6 | M8 |
| C61401606J••••• | 60 | 60 | 57 | 45 | 2700 | 65 | 26 | 1.5 | M6 |
| C61401806J••••• | 80 | 60 | 66 | 40 | 3200 | 75 | 24 | 1.1 | M8 |
| C61401107J••••• | 100 | 60 | 74 | 35 | 3500 | 85 | 23 | 0.9 | M8 |
| U _N 800VDC / Urms 400VAC | | | | | | | | | |
| C61801106J••••• | 10 | 40 | 42 | 100 | 1000 | 40 | 28 | 6.0 | M6 |
| C61801156J••••• | 15 | 50 | 44 | 80 | 1200 | 45 | 35 | 5.0 | M6 |
| C61801206J••••• | 20 | 50 | 52 | 75 | 1500 | 50 | 32 | 4.5 | M6 |
| C61801256J••••• | 25 | 50 | 58 | 75 | 1875 | 55 | 32 | 3.2 | M6 |
| C61801306J••••• | 30 | 50 | 63 | 70 | 2100 | 60 | 30 | 2.7 | M6 |
| C61801406J••••• | 40 | 60 | 63 | 55 | 2200 | 68 | 30 | 2.0 | M8 |
| C61801506J••••• | 50 | 60 | 70 | 50 | 2500 | 75 | 27 | 1.6 | M8 |
| C61801606J••••• | 60 | 60 | 76 | 50 | 3000 | 80 | 25 | 1.2 | M8 |
| C61801806J••••• | 80 | 60 | 88 | 45 | 3600 | 95 | 24 | 1.0 | M8 |
| C61801107J••••• | 100 | 60 | 98 | 40 | 4000 | 110 | 23 | 0.9 | M8 |
| U _N 1200VDC / Urms 500VAC | | | | | | | | | |
| C61122505J••••• | 5 | 40 | 44 | 120 | 600 | 35 | 30 | 8.0 | M6 |
| C61122106J••••• | 10 | 50 | 58 | 100 | 1000 | 45 | 38 | 6.5 | M6 |
| C61122156J••••• | 15 | 50 | 70 | 100 | 1500 | 50 | 35 | 3.8 | M8 |
| C61122206J••••• | 20 | 60 | 66 | 80 | 1600 | 55 | 32 | 3.2 | M8 |
| C61122256J••••• | 25 | 60 | 74 | 80 | 2000 | 65 | 32 | 2.5 | M8 |
| C61122306J••••• | 30 | 60 | 81 | 80 | 2400 | 75 | 30 | 2.1 | M8 |
| C61122406J••••• | 40 | 60 | 93 | 80 | 3200 | 85 | 27 | 1.7 | M8 |
| C61122506J••••• | 50 | 60 | 105 | 80 | 4000 | 100 | 25 | 1.3 | M8 |

The above table / graphics are for reference only, subject to the actual product (unit: mm)

Note: Maximum I_{rms} current at 10kHz, T_{amb}=40°C ΔT≤15°C.