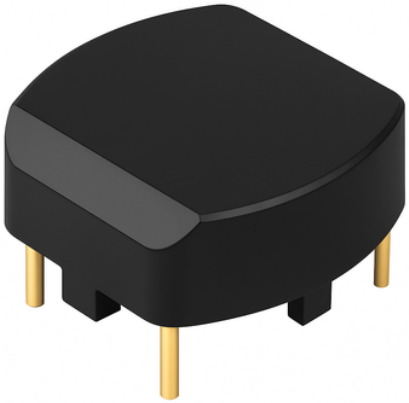
Approvals & Compliances

Features:

- High saturation resistance with excellent thermal stability
- Secure through-hole PCB mounting
- Compact size ideal for space-constrained applications
- Multiple enclosures and custom options available



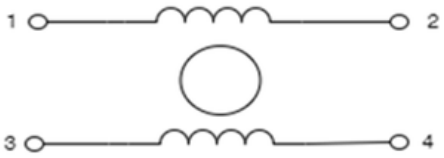
Applications:

- SMPS applications.
- DC/DC converters.
- EMI filters for HVAC ventilation units.
- LED driver circuits.
- In phase-angle control with chokes.
- For consumer, lab, and lighting electronics.
- Handles 10 kHz to 30 MHz signals.

DATASHEET

Common Mode Choke series - CMC74

Type Circuit Diagram:



These chokes are designed to suppress unwanted interference by being installed in series with both phase and neutral lines of AC power systems. They effectively reduce common-mode noise (between line/neutral and ground) and attenuate differential-mode noise via the windings' stray inductance. For enhanced performance, they are typically used in combination with noise suppression capacitors.

Technical Specifications:

Rated Voltage	:250VAC
Rated Current	:0.25A to 0.7A @ 40°C
Rated inductance	:4.7 to 47 mH
Operating frequency	:DC to 400Hz
Surge current 10 msec	:20 x IN @ 25°C
Inductance reduction (DC bias with IN)	:Less than 10% (25°C)
Temperature range(operation and storage)	:-40°C to 125°C (40/125/56) acc. IEC 60068-1
Flammability corresponding to	:UL 94V-0
Design Corresponding to	:UL1283

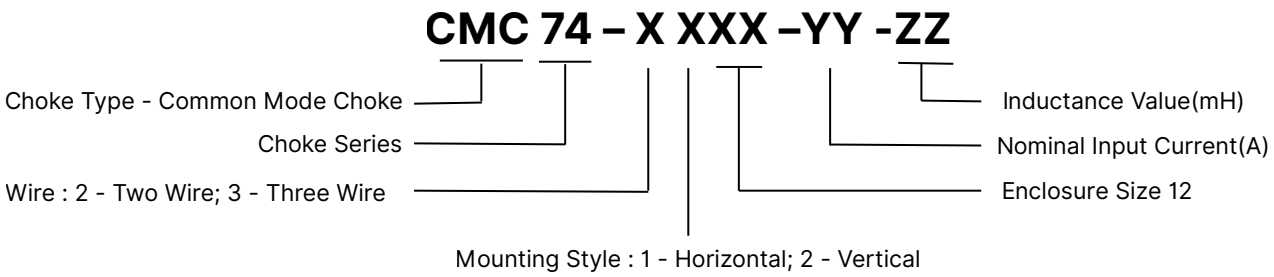
Ordering Information

Model Number	Part Number	Current Ratings (A)	Inductance (mH)	Resistance (R_{DC}) mΩ	Min.Weight (g)
CMC74-2112-0.25-47	E115921-1	0.25	47	2400	4
CMC74-2112-0.3-30	E115922-1	0.3	30	2200	4
CMC74-2112-0.35-22	E115923-1	0.35	22	1900	4
CMC74-2112-0.4-15	E115924-1	0.4	15	1350	4
CMC74-2112-0.5-10	E115925-1	0.5	10	1000	4
CMC74-2112-0.6-6.8	E115926-1	0.6	6.8	650	4
CMC74-2112-0.7-4.7	E115927-1	0.7	4.7	450	4
CMC74-2212-0.25-47	E115928-1	0.25	47	2400	4
CMC74-2212-0.3-30	E115929-1	0.3	30	2200	4
CMC74-2212-0.35-22	E115930-1	0.35	22	1900	4
CMC74-2212-0.4-15	E115931-1	0.4	15	1350	4
CMC74-2212-0.5-10	E115932-1	0.5	10	1000	4
CMC74-2212-0.6-6.8	E115933-1	0.6	6.8	650	4
CMC74-2212-0.7-4.7	E115934-1	0.7	4.7	450	4

Test conditions:

Measured at 10 kHz with 50 mV; inductance tolerance: +50% / -30%; resistance tolerance: ±15% at 25°C; all electrical characteristics specified at 25 ± 2°C

Product Selector



Example:

CMC74-2112-0.25-47 = 2-wire choke Horizontal mounting designed for 0.25 A with an inductance of 47mH

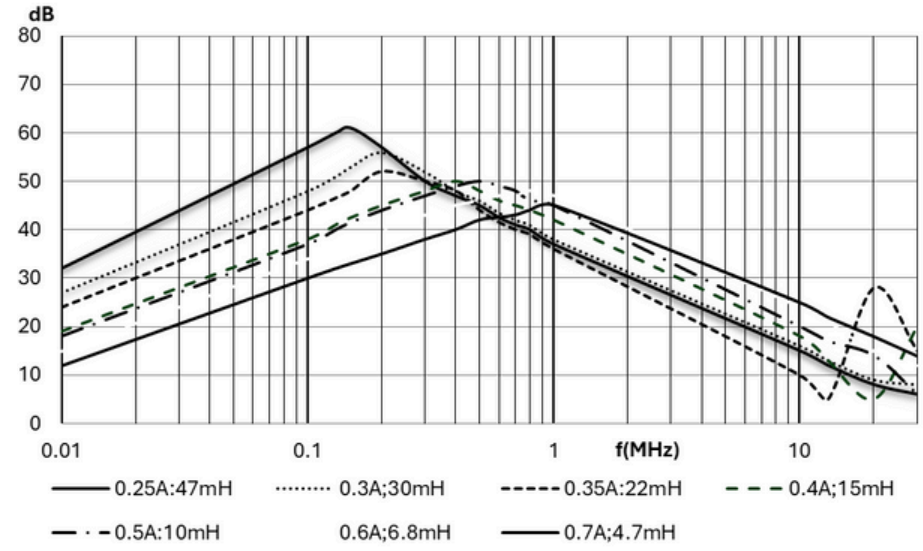
CMC74-2212-0.25-47 = 2-wire Vertical choke mounting designed for 0.25 A with an inductance of 47mH

Insertion Loss :

As Per CISPR 17; C=50Ω/50Ω D=50Ω/50Ω

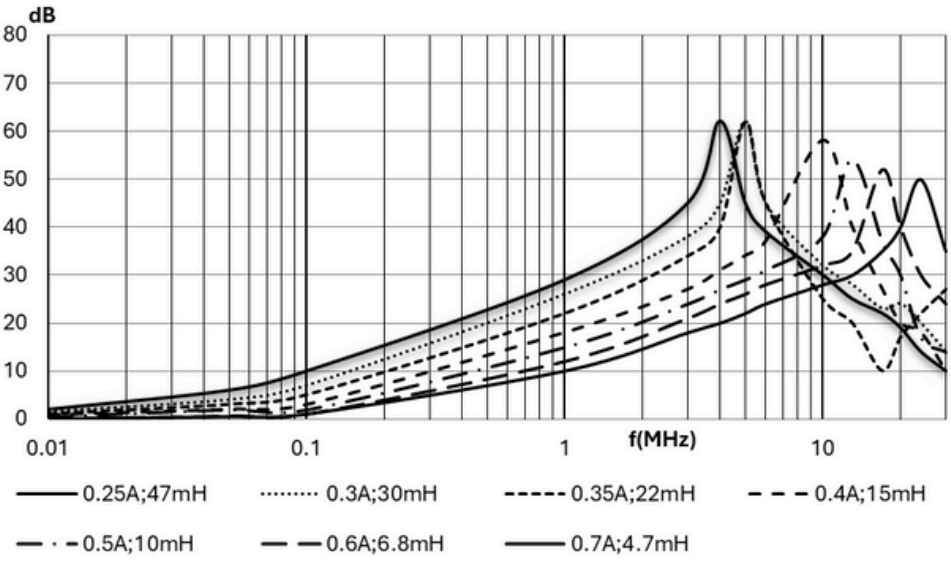
Common Mode

CMC74-2112 and CMC74-2212

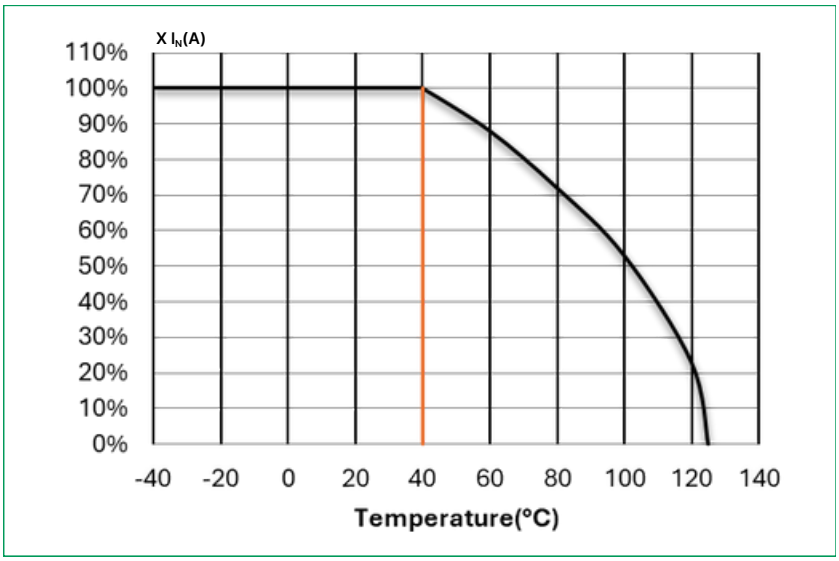


Differential Mode

CMC74-2112 and CMC74-2212



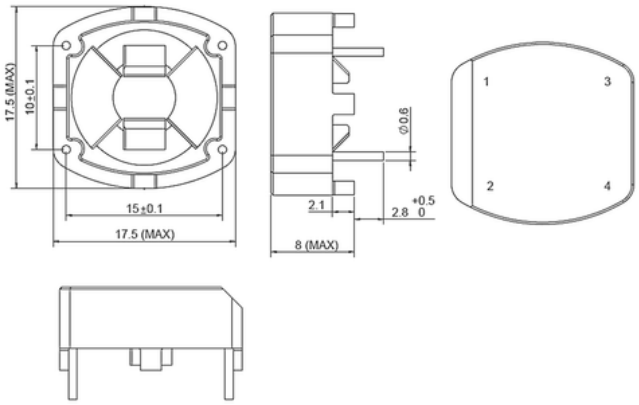
Derating Curve:



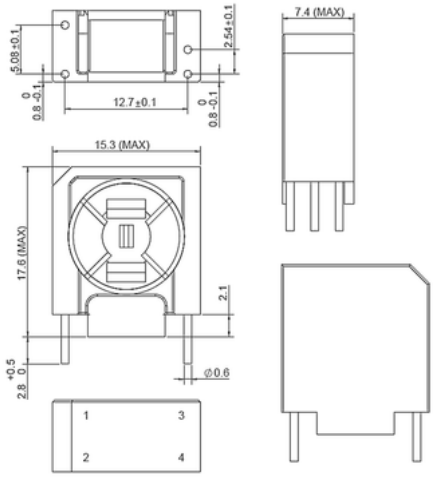
If the ambient temperature exceeds the specified limit, the nominal current needs to be reduced according to the thermal Derating graph shown above.

Mechanical Information

CMC74-2112



CMC74-2212



All Dimension in mm; Tolerance According : ISO 2768-m