

THT Wire Wound Common Mode Choke---CMC Series



Feature

- Broadband filtering due to low capacitance winding technique.
- High suppression of asymmetrical interferences also at low frequency range.
- Very compact design.
- Highest possible rated current by small size.
- Flammability corresponding to UL 94 V-0.
- Certified according to IEC 60938-2.
- Operating temperature range $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (Including self - temperature rise).

Application

- Power electronics.
- Power line input and output filter.
- Filtering of devices without any ground connection.
- Suppression of radio interferences in motors.
- Suppression of common mode noise.

Production identification

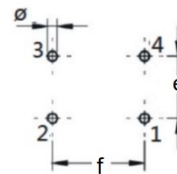
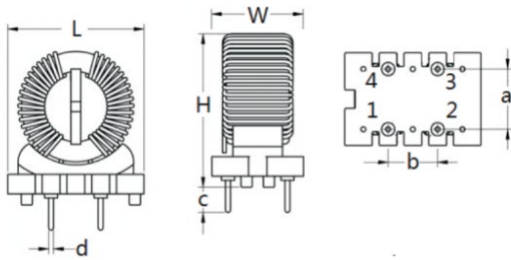
CMC 1678 - 470 N
 ① ② ③ ④

- ① Series name: THT Common Mode Choke
- ② Size: $16 \times 7.8 \times 18\text{mm}$
- ③ Inductance: $47\mu\text{H}$
- ④ Tolerance: $\pm 30\%$

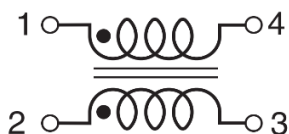
Series Shape and Dimensions (Unit:mm)

Dimensions(mm):

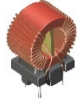
Recommended Layout:



Schematic:



THT Wire Wound Common Mode Choke---CMC Series



Series Shape and Dimensions (Unit:mm)

Series	Mechanical Dimensions(mm)							Land Pattern(mm)		
	L _{Max}	W _{Max}	H _{Max}	a	b	c	d _{Typ}	e	f	Ø
CMC1678	16	7.8	18	4.5±0.5	10±0.5	2.5±0.5	0.7	4.5	10.0	0.9
CMC1915	19	15	22	5.0±0.5	7.7±0.5	3.5±0.5	0.9	5.0	7.7	1.1
CMC2517	25	17	27	10.7±0.5	7.5±0.5	3.0±0.5	0.7	10.7	7.5	0.9
CMC2819	28	19	33	12±0.5	10±0.5	5.0±0.5	1.0	12.0	10.0	1.3
CMC3122	31	22	35	15±0.5	25±0.5	5.0±0.5	1.0	15.0	25.0	1.3
CMC4724	47	24	43	18.5±0.5	10.5±0.5	3.0±0.5	1.5-2.5	18.5	10.5	3.0

CMC1678 Electrical Characteristics

Part Number	L(μH)	I _R (A)	DCR(mΩ)	U _R (Vac)	U _T (Vac)	Core Material	Test Condition
CMC1678-102N	1000	2.0	45	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-402N	4000	1.5	140	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-502N	5000	1.0	220	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-103N	10000	0.7	350	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-203N	20000	0.5	1000	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-393N	39000	0.3	3000	250	1500	Mn-Zn	10KHz/0.25V

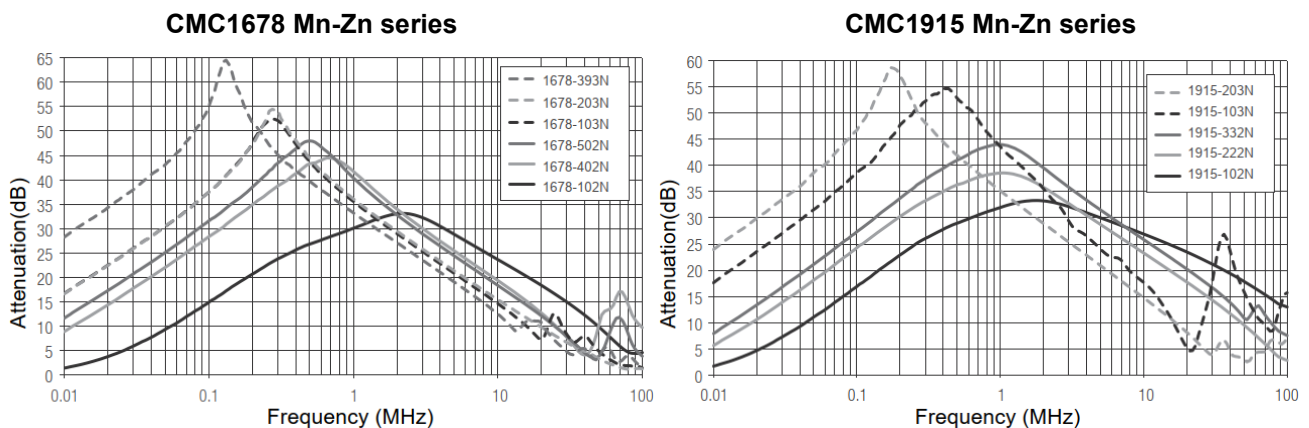
L: Inductance; I_R: Rated Current; U_R: Rated Voltage; U_T: Insulation Test Voltage

CMC1915 Electrical Characteristics

Part Number	L(μH)	I _R (A)	DCR(mΩ)	U _R (Vac)	U _T (Vac)	Core Material	Test Condition
CMC1915-102N	1000	3.0	35	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-222N	2200	2.0	70	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-332N	3300	1.5	120	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-103N	10000	1.0	360	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-203N	20000	0.5	540	250	1500	Mn-Zn	10KHz/0.25V

L: Inductance; I_R: Rated Current; U_R: Rated Voltage; U_T: Insulation Test Voltage

Typical Electrical Graphs



THT Wire Wound Common Mode Choke---CMC Series



CMC2517 Electrical Characteristics

Part Number	L(μ H)	I _R (A)	DCR(m Ω)	U _R (Vac)	U _T (Vac)	Core Material	Test Condition
CMC2517-102N	1000	6.0	13	250	1500	Mn-Zn	10KHz/0.25V
CMC2517-222N	2200	4.0	30	250	1500	Mn-Zn	10KHz/0.25V
CMC2517-332N	3300	2.5	60	250	1500	Mn-Zn	10KHz/0.25V
CMC2517-502N	5000	2.5	95	250	1500	Mn-Zn	10KHz/0.25V
CMC2517-103N	10000	2.0	125	250	1500	Mn-Zn	10KHz/0.25V
CMC2517-203N	20000	1.5	270	250	1500	Mn-Zn	10KHz/0.25V

L: Inductance; I_R: Rated Current; U_R: Rated Voltage; U_T: Insulation Test Voltage

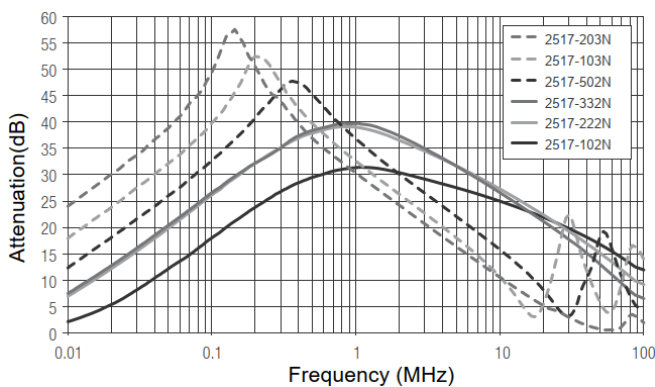
CMC2819 Electrical Characteristics

Part Number	L(μ H)	I _R (A)	DCR(m Ω)	U _R (Vac)	U _T (Vac)	Core Material	Test Condition
CMC2819-102N	1000	10	7	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-222N	2200	6.0	20	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-332N	3300	4.0	35	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-103N	10000	3.0	105	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-203N	20000	2.0	220	250	1500	Mn-Zn	10KHz/0.25V

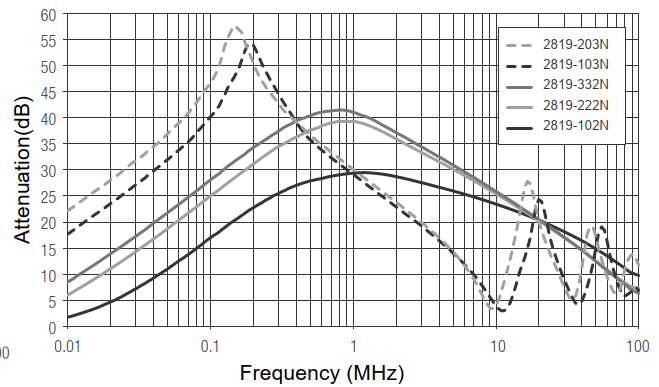
L: Inductance; I_R: Rated Current; U_R: Rated Voltage; U_T: Insulation Test Voltage

Typical Electrical Graphs

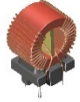
CMC2517 Mn-Zn series



CMC2819 Mn-Zn series



THT Wire Wound Common Mode Choke---CMC Series



CMC3122 Electrical Characteristics

Part Number	L(μ H)	I _R (A)	DCR(m Ω)	U _R (Vac)	U _T (Vac)	Core Material	Test Condition
CMC3122-102N	1000	12	9	250	1500	Mn-Zn	10KHz/0.25V
CMC3122-222N	2200	8.0	14	250	1500	Mn-Zn	10KHz/0.25V
CMC3122-332N	3300	6.0	25	250	1500	Mn-Zn	10KHz/0.25V
CMC3122-502N	5000	6.0	45	250	1500	Mn-Zn	10KHz/0.25V
CMC3122-103N	10000	5.0	55	250	1500	Mn-Zn	10KHz/0.25V
CMC3122-203N	20000	3.0	160	250	1500	Mn-Zn	10KHz/0.25V
CMC3122-333N	33000	3.0	210	250	1500	Mn-Zn	10KHz/0.25V

L: Inductance; I_R: Rated Current; U_R: Rated Voltage; U_T: Insulation Test Voltage

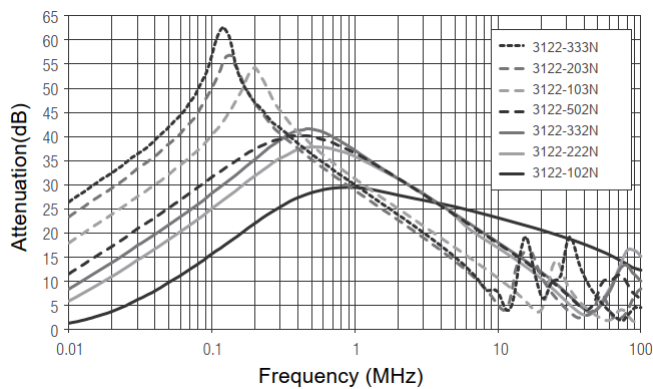
CMC4724 Electrical Characteristics

Part Number	L(μ H)	I _R (A)	DCR(m Ω)	U _R (Vac)	U _T (Vac)	Core Material	Test Condition
CMC4724-501N	500	35	2.3	250	1500	Mn-Zn	10KHz/0.25V
CMC4724-102N	1000	25	4.5	250	1500	Mn-Zn	10KHz/0.25V
CMC4724-132N	1300	20	6.2	250	1500	Mn-Zn	10KHz/0.25V
CMC4724-182N	1800	14	9.5	250	1500	Mn-Zn	10KHz/0.25V

L: Inductance; I_R: Rated Current; U_R: Rated Voltage; U_T: Insulation Test Voltage

Typical Electrical Graphs

CMC3122 Mn-Zn series



CMC4724 Mn-Zn series

