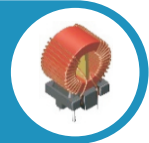




## THT Wire Wound Common Mode Choke - CMC Series



### 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

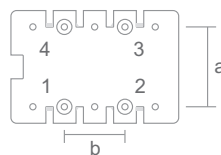
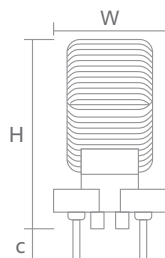
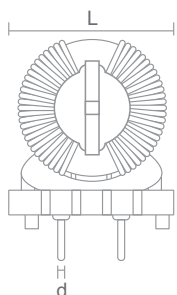
- Power electronics.
- Power line input and output filter.
- Filtering of devices without any ground connection.
- Suppression of radio interferences in motors.
- Suppression of common mode noise.

### Production Identification

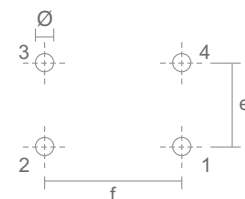
<b>CMC</b> Series name: THT Common Mode Choke	<b>1678</b> Size: 16×7.8×18mm	<b>470</b> Inductance: 47μH	<b>N</b> Tolerance: ±30%
---	-------------------------------------	-----------------------------------	-----------------------------

### Series Shape and Dimensions (Unit:mm)

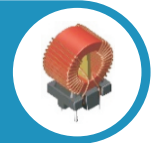
#### Dimensions(mm):



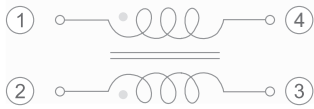
#### Recommended Layout:



# THT Wire Wound Common Mode Choke - CMC Series



**Schematic:**



## Series Shape and Dimensions (Unit:mm)

Series	Mechanical Dimensions(mm)							Land Pattern(mm)		
	L <sub>Max</sub>	W <sub>Max</sub>	H <sub>Max</sub>	a	b	c	d <sub>Typ</sub>	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

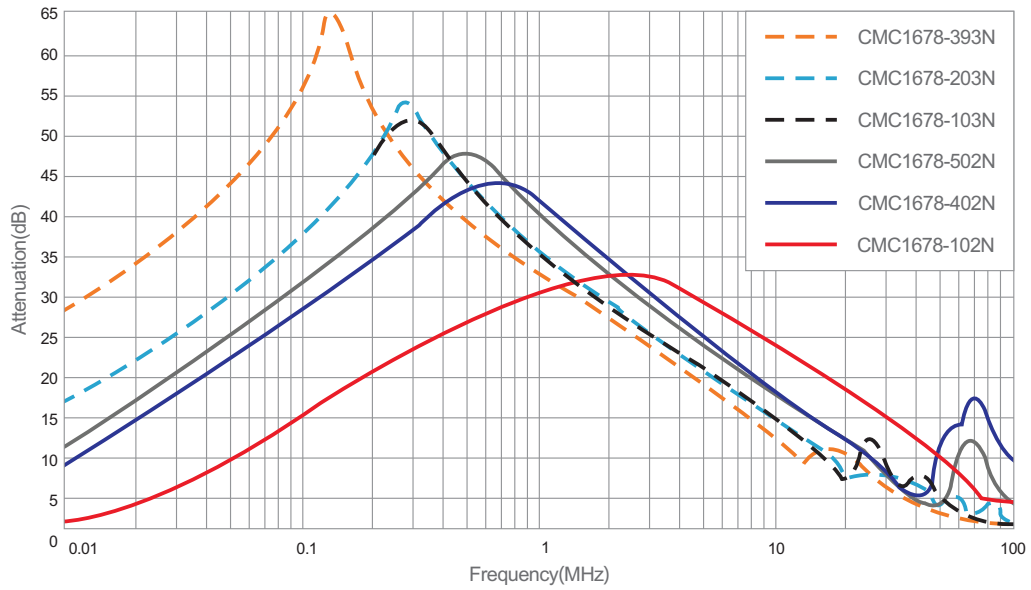
Part Number	L(μH)	IR(A)	DCR(mΩ)	UR(Vac)	UT(Vac)	Core Material	Test Condition
CMC1678-102N	1000	2.0	45	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-402N	4000	1.5	140	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-502N	5000	1.0	220	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-103N	10000	0.7	350	250	1500	Mn-Zn	10KHz/0.25V
CMC1678-203N	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; IR: Rated Current; UR: Rated Voltage; UT: Insulation Test Voltage

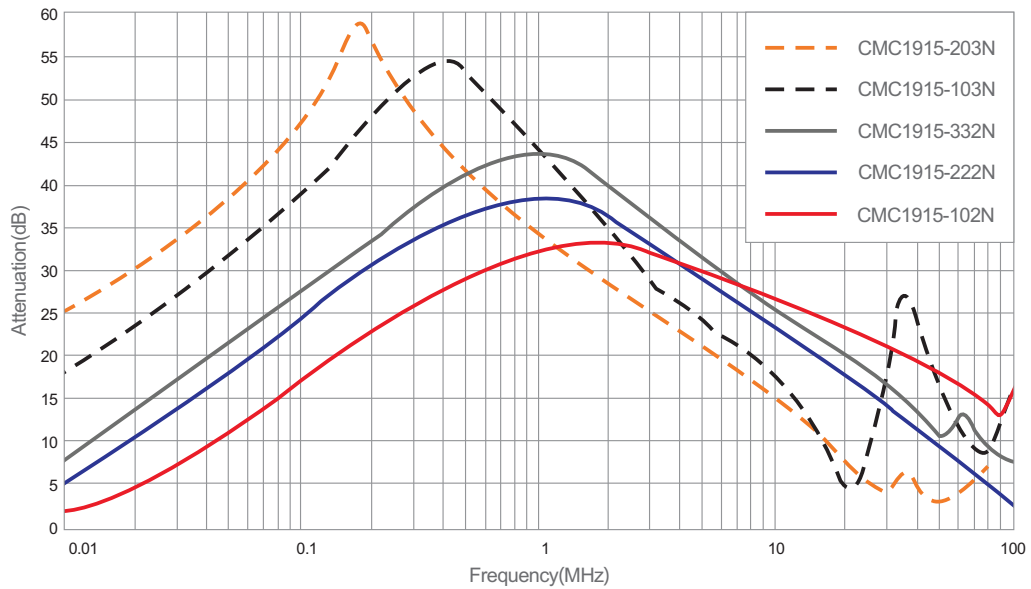


## Typical Electrical Graphs

### CMC1678 Mn-Zn series



### CMC1915 Mn-Zn series



### CMC1915 Electrical Characteristics

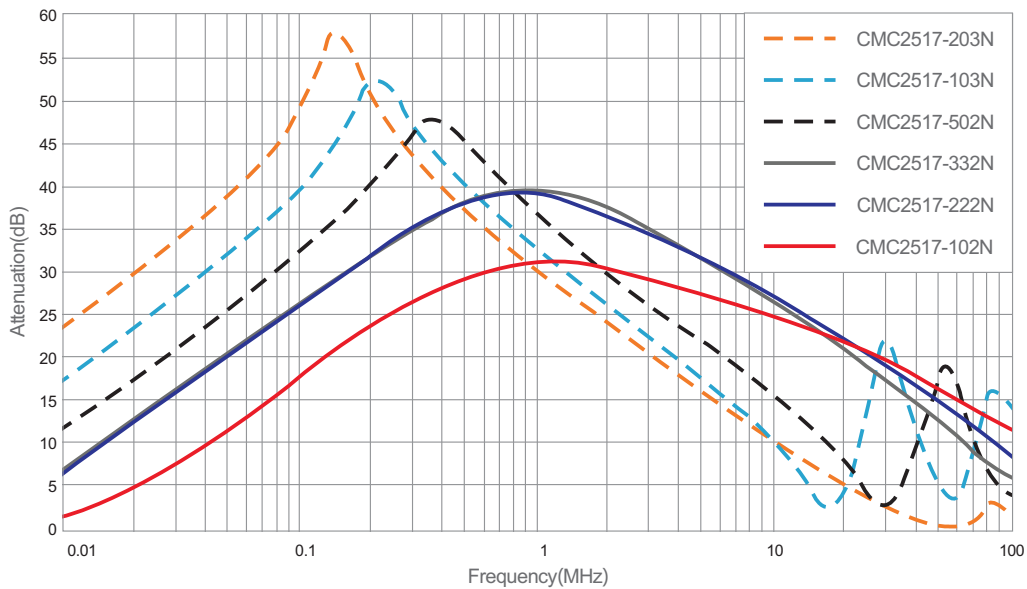
Part Number	L( $\mu$ H)	IR(A)	DCR(m $\Omega$ )	UR(Vac)	UT(Vac)	Core Material	Test Condition
CMC1915-102N	1000	3.0	35	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-222N	2200	2.0	70	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-332N	3300	1.5	120	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-103N	10000	1.0	360	250	1500	Mn-Zn	10KHz/0.25V
CMC1915-203N	20000	0.5	540	250	1500	Mn-Zn	10KHz/0.25V

### CMC2517 Electrical Characteristics

Part Number	L( $\mu$ H)	IR(A)	DCR(m $\Omega$ )	UR(Vac)	UT(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

### Typical Electrical Graphs

CMC2517 Mn-Zn series



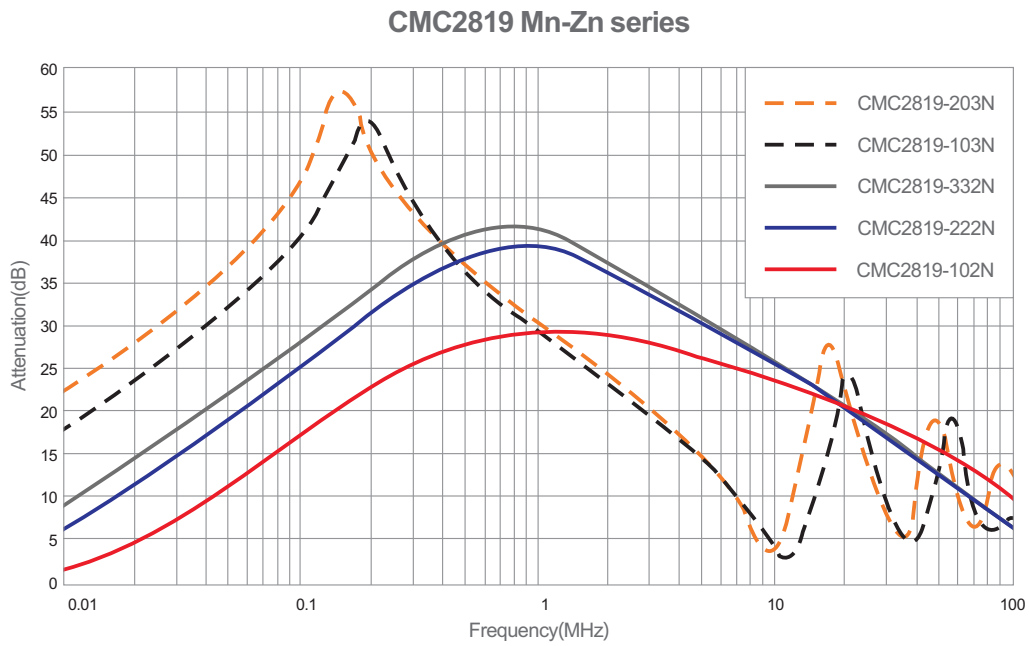


## CMC2819 Electrical Characteristics

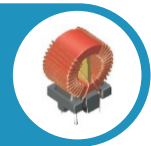
Part Number	L( $\mu$ H)	IR(A)	DCR(m $\Omega$ )	UR(Vac)	UT(Vac)	Core Material	Test Condition
CMC2819-102N	1000	10	7	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-222N	2200	6.0	20	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-332N	3300	4.0	35	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-103N	10000	3.0	105	250	1500	Mn-Zn	10KHz/0.25V
CMC2819-203N	20000	2.0	220	250	1500	Mn-Zn	10KHz/0.25V

• L: Inductance; IR: Rated Current; UR: Rated Voltage; UT: Insulation Test Voltage

## Typical Electrical Graphs



# THT Wire Wound Common Mode Choke - CMC Series



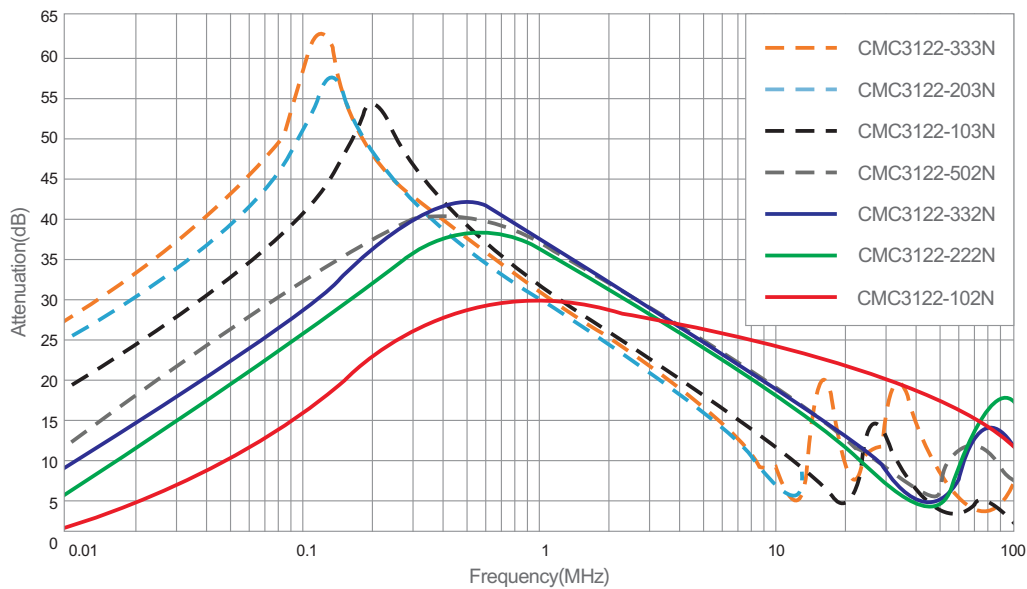
## CMC3122 Electrical Characteristics

Part Number	L( $\mu$ H)	IR(A)	DCR(m $\Omega$ )	UR(Vac)	UT(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; IR: Rated Current; UR: Rated Voltage; UT: Insulation Test Voltage

## Typical Electrical Graphs

CMC3122 Mn-Zn series





## CMC4724 Electrical Characteristics

Part Number	L( $\mu$ H)	IR(A)	DCR(m $\Omega$ )	UR(Vac)	UT(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; IR: Rated Current; UR: Rated Voltage; UT: Insulation Test Voltage

## Typical Electrical Graphs

CMC4724 Mn-Zn series

