

Wire Wound Common Mode Choke-KCMCF Series

Features

- High current capability up to 400 mA, Low profile, only 3.3 mm.
- Flammability corresponding to UL 94 V-0.
- Ferrite toroidal core construction and class H enamelled copper wire.
- Moisture sensitivity Level 1.
- Meet RoHS compliant, Halogen free are available.
- Storage temperature: -40°C--125°C.
- Operating temperature: -40°C--105°C (temperature rise included).



Application

- USB, CAN, FireWire
- Signal, sensor lines and data lines
- Power supply systems
- Suppression of common mode noise

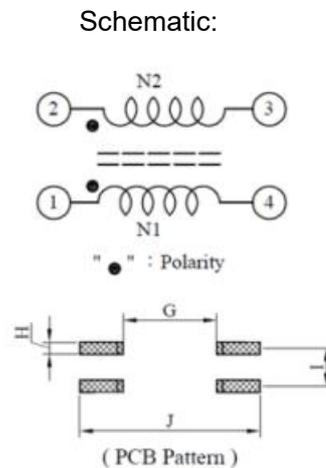
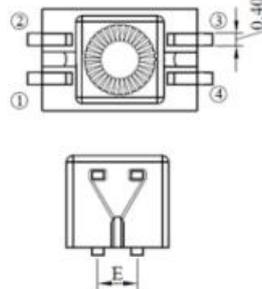
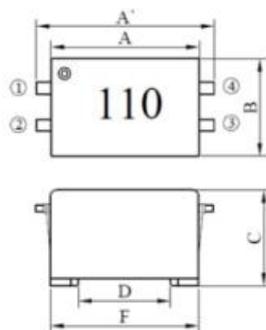
Product Identification

KCMCF 5030 - 110

① ② ③

- ① Series name: Wire Wound Common Mode Choke
- ② Chip Size: 5.0x3.3x3.3mm
- ③ Inductance: 11uH

SHAPE AND DIMENSIONS



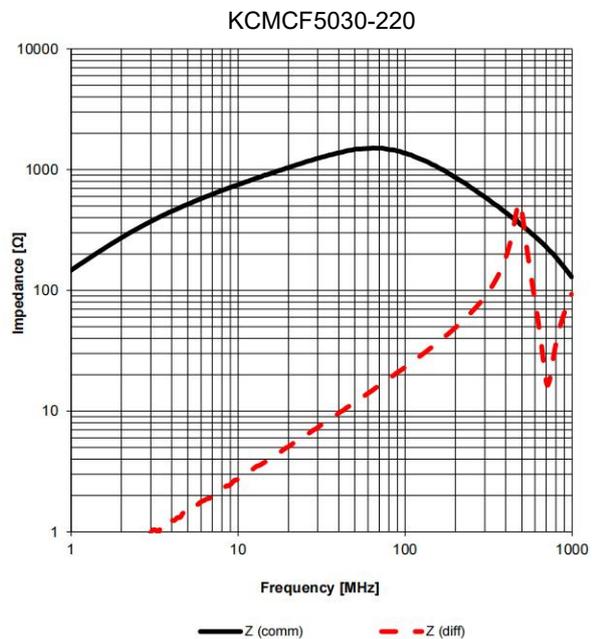
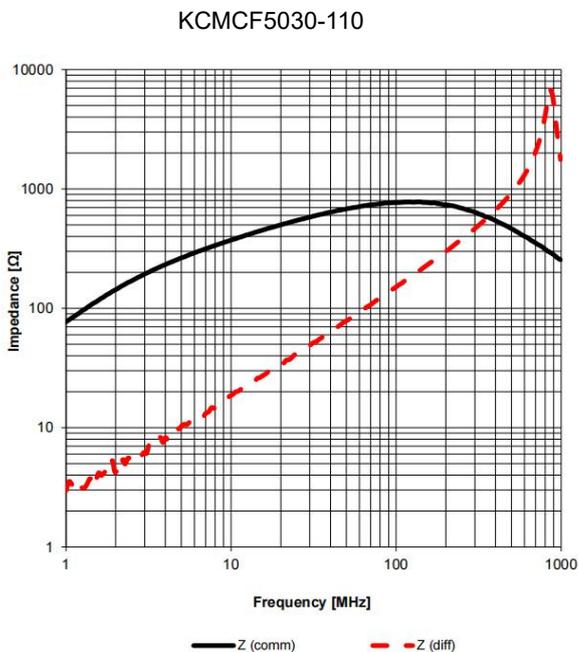
A'(mm)	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)	J(mm)
6.00±0.3	5.00±0.3	3.30±0.3	3.30±0.3	3.10 typ.	1.27 typ.	5.00 typ.	2.70 typ.	0.60 ref.	1.27 ref.	6.40 ref.

SPECIFICATIONS

Part Number	Winding Style	Inductance (μH) +50% /-50%	Impedance		Rated Current [A] Max.	DCR [Ω /line] Max.
			Z _{max} [Ω]	freq.=MHz		
KCMCF5030-110	bifiliar	11	800	100	0.3	0.18
KCMCF5030-220	bifiliar	22	1500	65	0.3	0.23
KCMCF5030-330	bifiliar	33	2000	50	0.3	0.27
KCMCF5030-510	bifiliar	51	2500	25	0.4	0.32
KCMCF5030-101	bifiliar	100	4000	9	0.3	0.58
KCMCF5030-471	bifiliar	470	2200	20	0.4	0.35

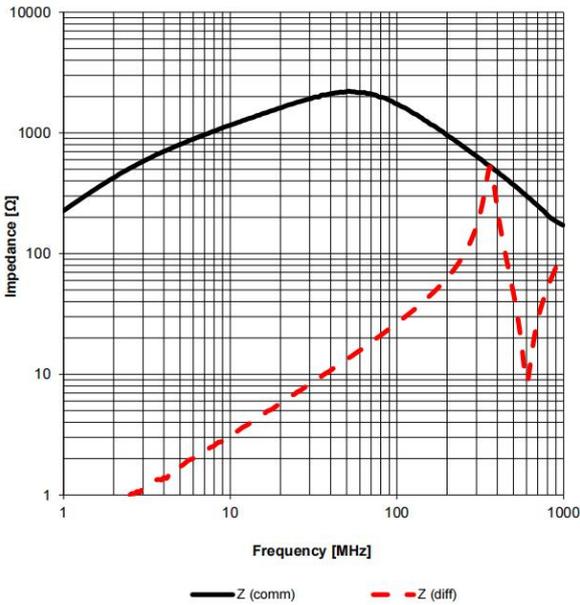
- Inductance measured at: 100kHz, 0.1V
- DC Resistance measured @ 20 °C
- Dielectric strength 250VDC max between line to line
- Insulation resistance $\geq 100\text{M}\Omega$ @500VDC between line to Line
- Rated current: the AC current at which the temperature rise is $\Delta t=40^\circ\text{C}$.($T_a=20^\circ\text{C}$)
- Rated voltage: 60VDC

TYPICAL ELECTRICAL CHARACTERISTICS

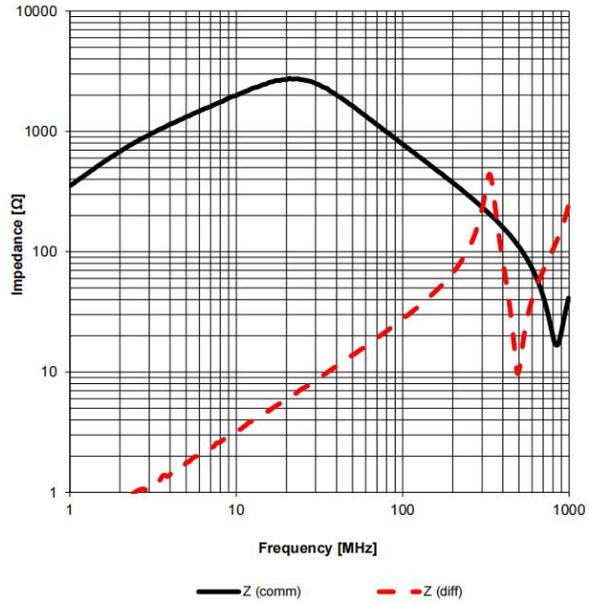


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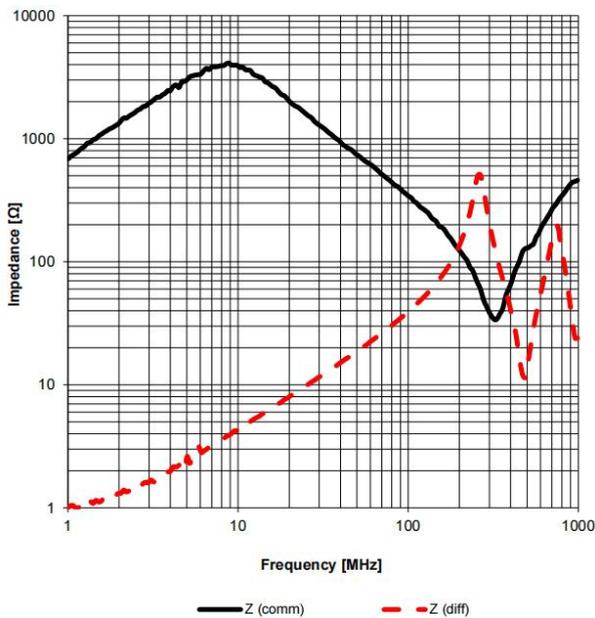
KCMCF5030-330



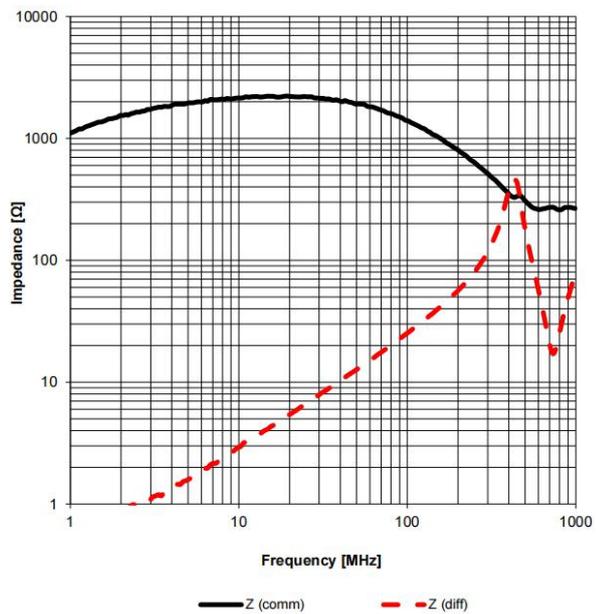
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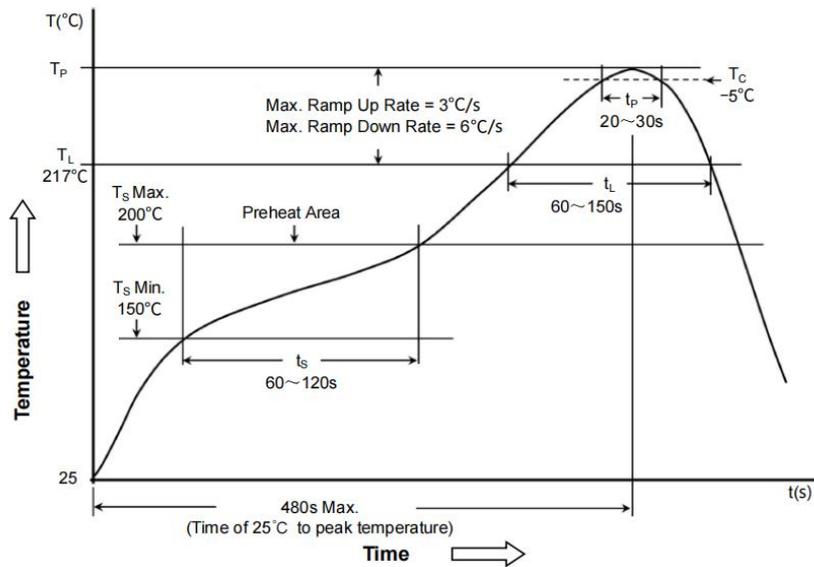
KCMCF5030-101



KCMCF5030-471



SOLDERING SPECIFICATION



	Package Thickness	Package Volume		
		<350 mm ³	350~2000 mm ³	>2000 mm ³
PB-Free Assembly	<1.6mm	260 °C	260 °C	260 °C
	1.6~2.5mm	260 °C	250 °C	245 °C
	≥2.5mm	250 °C	245 °C	245 °C

- Reflow is referred to standard IPC/JEDEC J-STD-020D

NOTICE OF USE

- Product in packing storage condition : temperature 5~40°C , RH<=70%;
- storage of KONEN Electronic products for longer than 12 months is not recommended, Within other effects, the terminals may suffer degradation, resulting in bad solderability. Therefore, all products shall be used within the period of 12 months based on the day of shipment;
- Do not keep products in unsuitable storage conditions, such as areas susceptible to high temperatures, high humidity, dust or corrosion;
- Always handle products with care;
- Don't touch electrodes directly with bare hands as oil secretions may inhibit soldering. Always ensure optimum conditions for soldering;
- When this product will be used on a similar or new project to the original one, sometimes it might be unable to satisfy the specifications due to different condition of usage;
- This inductor itself does not have any protective function in abnormal condition, such as overload, short-circuit, open-circuit conditions, etc. Therefore, it shall be confirmed that there is no risk of smoke, fire, dielectric withstand voltage, insulation resistance, etc., or use in abnormal conditions protective devices or protection circuit in the end product;
- Hi-Pot test with higher voltage than spec value will damage insulating material and shorten its life;
- If using in potting compound, the magnet wire coating might be damaged, please consult with us;
- Refrain from rinsing coils. If necessary, please consult with us.