

Wire Wound Common Mode Choke-KCMCF Series

Features

- Low profile, only 2.5 mm
- High current up to 700 mA
- Ferrite toroidal core construction and class H enamelled copper wire
- Storage temperature: -40°C--125°C
- Operating temperature: -40°C--105°C (temperature rise included)



Application

- Power supply system
- Signal ,sensor and data lines
- Suppression of common mode noise
- Trifilar version for: - Power Over Ethernet (PoE) - Audio frequency (AF)

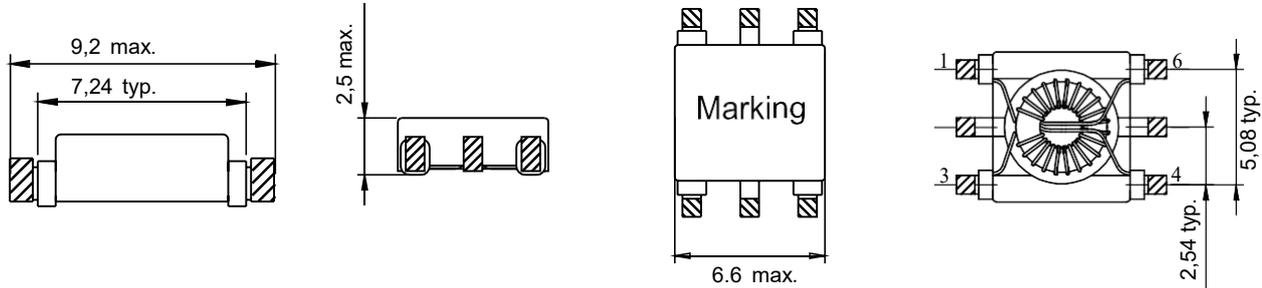
Product Identification

KCMCF 9060 - 200 X

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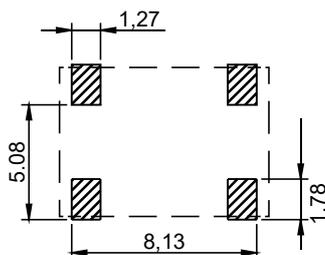
- ① Series name: Wire Wound Common Mode Choke
- ② Chip Size: 9.2x6.6x2.5mm
- ③ Inductance: 20uH
- ④ Tolerance: +50% /-30%

SHAPE AND DIMENSIONS



A(mm)	A'(mm)	B(mm)	B'(mm)	C(mm)	D(mm)
9.20 max.	7.24 typ.	6.60 max.	5.08 typ.	2.50 max.	2.54 typ.

Recommended Land Pattern: [mm]



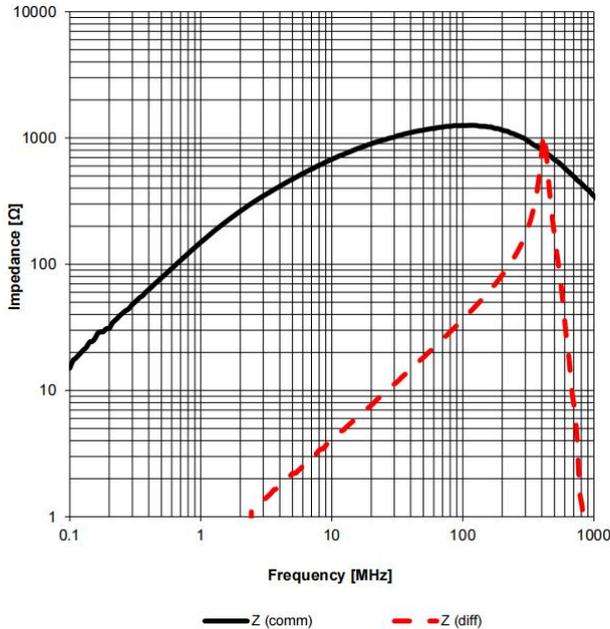
SPECIFICATIONS

Part Number	Winding Style	Inductance (μH) +50% /-30%	Impedance		Rated Current [A] Max.	DCR [Ω /line] Max.
			Z_{max} [K Ω]	freq.=MHz		
KCMCF9060-200T	tifilar	20	1.25	100	0.5	0.16
KCMCF9060-220	bifilar	22	1.6	100	0.7	0.14
KCMCF9060-510	bifilar	51	3.3	45	0.5	0.25
KCMCF9060-101	bifilar	100	5.0	20	0.5	0.28
KCMCF9060-101T	tifilar	100	5.0	20	0.5	0.45

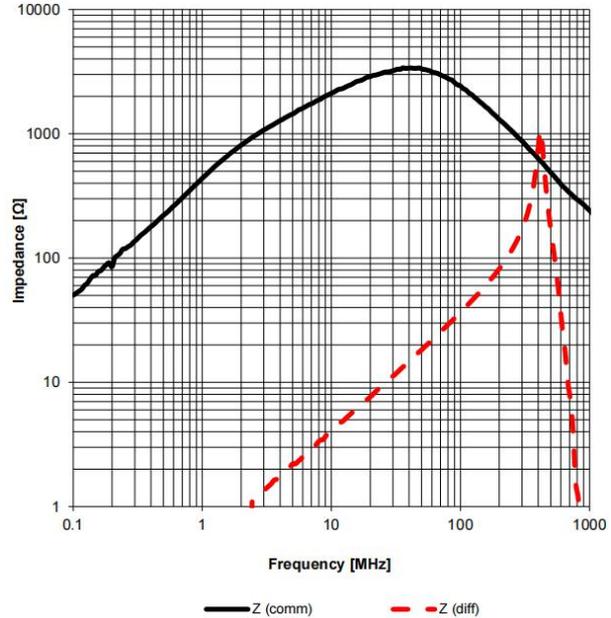
- Inductance measured at: 100kHz, 0.1V
- DC Resistance measured @ 20 °C
- Dielectric strength 500VDC max between line to line
- Insulation resistance $\geq 100\text{M}\Omega$ @500VDC between line to Line
- Rated current: the AC current at which the temperature rise is $\Delta t=45^\circ\text{C}$.($T_a=20^\circ\text{C}$)
- Rated voltage: 80VDC

TYPICAL ELECTRICAL CHARACTERISTICS

KCMCF9060-200T

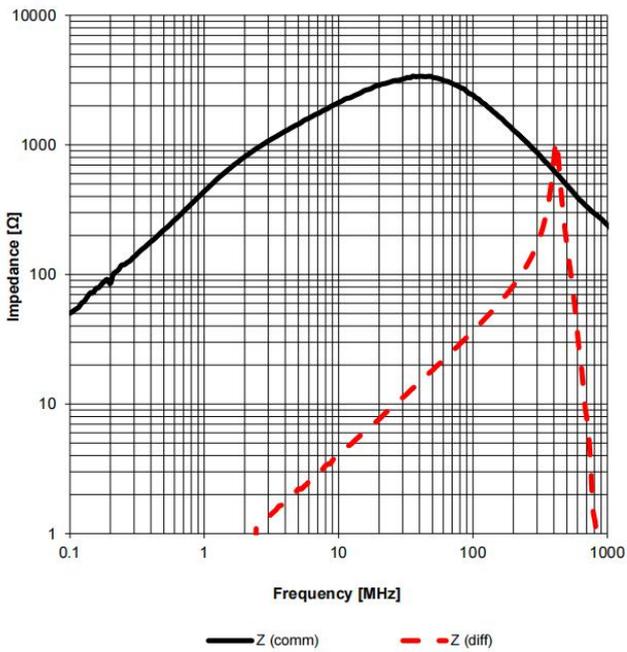


KCMCF9060-220

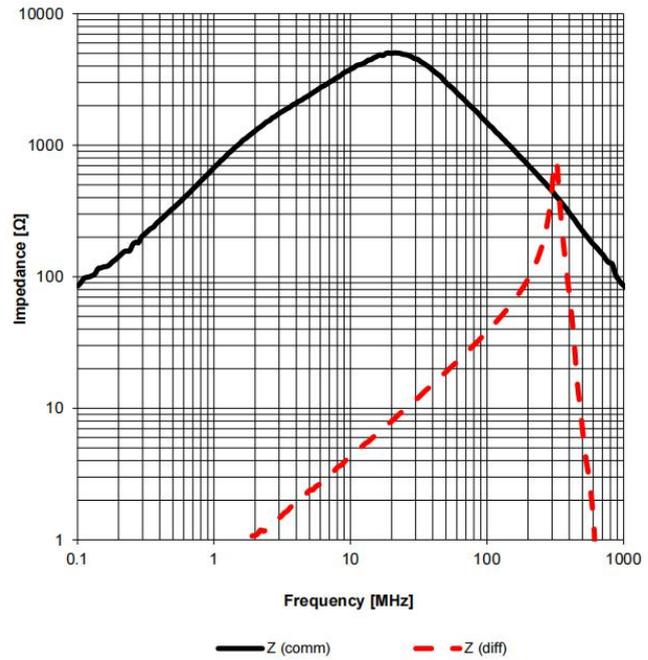


TYPICAL ELECTRICAL CHARACTERISTICS

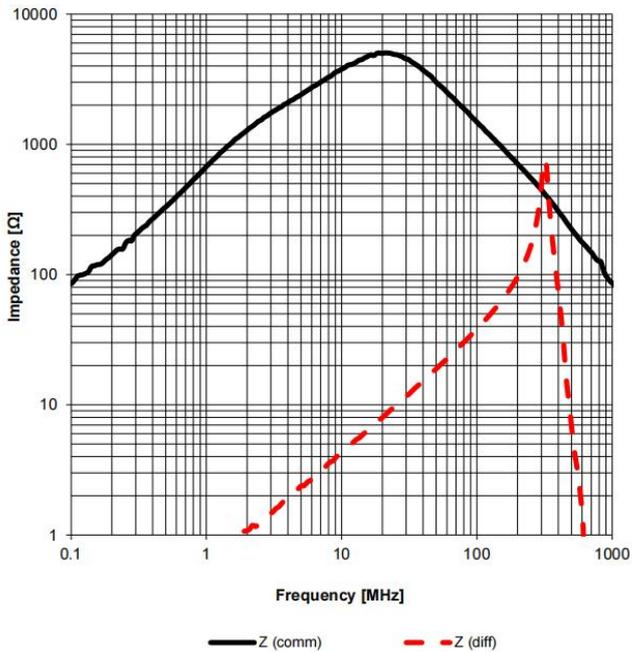
KCMCF9060-510



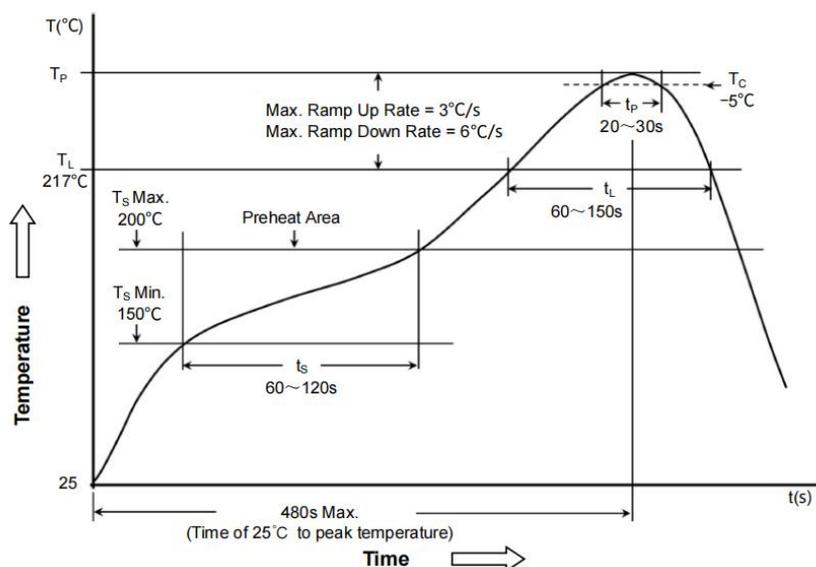
KCMCF9060-101



KCMCF9060-101T



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.