Wire Wound Common Mode THT Choke-KCMBF Series

Features

- Very high permeability nanocrystalline core material
- Improved isolation through plastic case and winding spacer
- High and stable inductance values up to 150 ℃
- Highest possible reated current by small size.
- Frequency range: 1KHz-300MHz
- RoHS, REACH compliant

Application

- Power electronics
- Power line in and output filter
- Radio interference suppression in motors
- Suppression for common mode noise

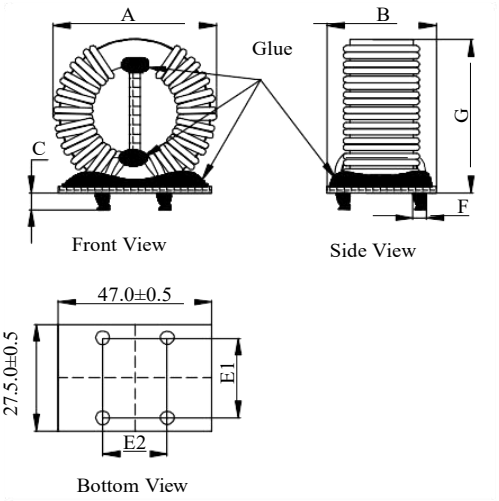
Product Identification

KCMBF 4547 - 105 N

① ② ③ ④

① Series name: Wire Wound Common Mode Line SMD Filter
② Chip Size: 45x47x28mm
③ Inductance: 1500uH
④ Tolerance: -30%~+50%

SHAPE AND DIMENSIONS



Amm Max	Bmm Max	Cmm ±0.5	E1mm ±0.5	E2mm ±0.5	Fmm Ref	Gmm ±0.5
45.00	28.00	5.00	21.00	10.00	1.5.00	47.00

SPECIFICATIONS

Technical specifications :

Rated voltage	250 VAC max @ 50 Hz
Dielectric withstanding voltage	1500 VAC, 2 sec., Between lines
Temperature rise	55℃ Max. with rated current
Operating temperature	- 40℃ to + 125℃, including Temp. rise
Storage conditions	< 40℃; < 75% RH
Flammability corresponding to	UL 94V-0
Moisture sensitivity level (MSL)	1

SPECIFICATIONS

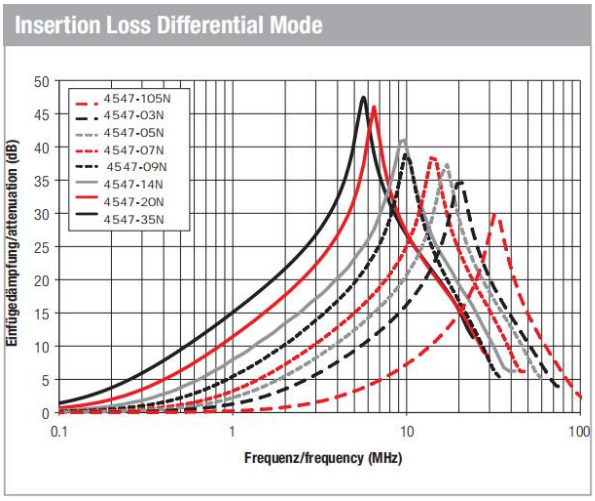
Standard Specification:

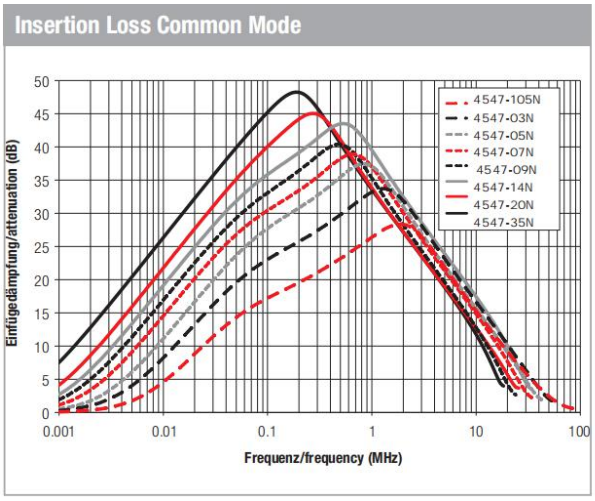
Part Number	Inductance ①		DCR ② [mOhms / Line] Maximum	Rated current ③ [A] Maximum	Isolation [Vrms]
	mH	Tolerance			
KCMBF4547-105N	1.5	+50% / -30%	2.5	38	1500
KCMBF4547-03N	3	+50% / -30%	4.8	26	1500
KCMBF4547-05N	5	+50% / -30%	6.7	21	1500
KCMBF4547-07N	7	+50% / -30%	9.8	15	1500
KCMBF4547-09N	9	+50% / -30%	16.2	13	1500
KCMBF4547-14N	14	+50% / -30%	28.3	8	1500
KCMBF4547-20N	20	+50% / -30%	47	6	1500
KCMBF4547-35N	35	+50% / -30%	93	5	1500

- Inductance shown for each winding, measured at: 10kHz, 0.1Vrms,0Adc, on an Agilent/HP4284A LCR meter or equivalent.
- DC Resistance is for each winding.
- Rated current that causes a 55℃ temperature rise from 25℃ ambient. This information is for reference only, the actual temperature rise depends on the condition of your circuit and the heat dissipation conditions.
- All of electrical specifications measured at 25℃.
- Standard packing : Blister tray in cardboard box, 105pcs / Carton

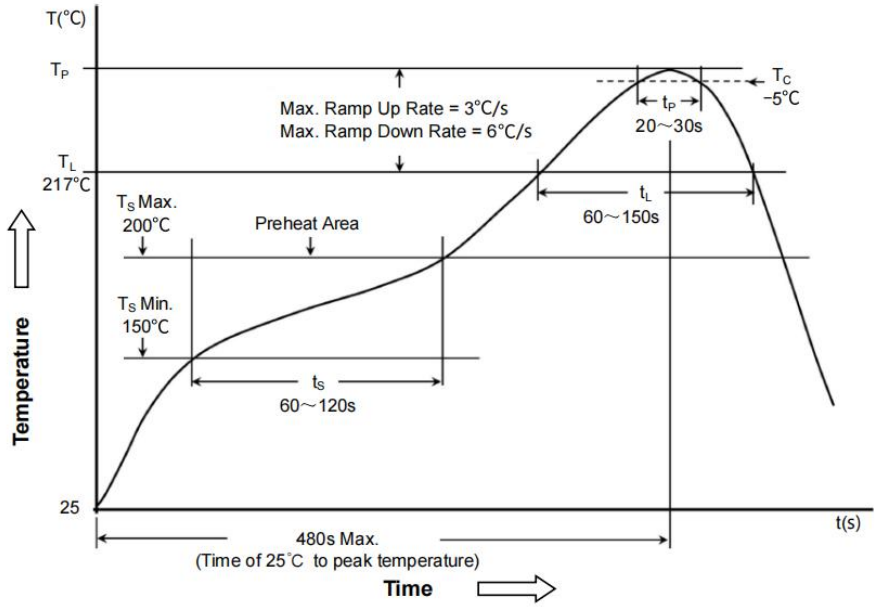
TYPICAL ELECTRICAL CHARACTERISTICS

KCMBF4547 Series





SOLDERING SPECIFICATION



	Package Thickness	Package Volume		
		<350 mm³	350~2000 mm³	>2000 mm³
PB-Free Assembly	<1.6mm	260 ℃	260 ℃	260 ℃
	1.6~2.5mm	260 ℃	250 ℃	245 ℃
	≥2.5mm	250 ℃	245 ℃	245 ℃

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

NOTICE OF USE

- Product in packing storage condition : temperature 5~40℃, 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 devicesor 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.