

FINEMET® Low Core Loss Cut Cores F3CC Series and Non Cut Core FT-3TL for Medium Frequency Transformer

Contributing to lower loss, smaller size, and lighter weight



Outline

- FINEMET® F3CC and FT-3TL both have high magnetic flux density $B_s=1.23$ T and low core loss.
- Enables smaller, lighter, and more efficient high-frequency transformers.

Features

Characteristic comparison with conventional material Mn-Zn ferrite Si-Fe

Materials	B_s (T)	P_{cm} (W/kg)	λ_s (ppm)	T_c (deg C)
FINEMET®F3CC	1.23	0.4	~0	570
FINEMET®FT-3TL	1.23	0.1	~0	570
Mn-Zn Ferrite	0.53	2.0	-0.6	230
3% Si-Fe	1.90	25	8	750

P_{cm} 10kHz0.1T 嬰

Applications

- High Frequency Isolation Transformers for Fast Chargers
- High Frequency Isolation Transformers for Alternative Energy Power Conditioners
- Auxiliary Power Transformer for Rolling Stock.

FINEMET® 20kHz 100kVA MFT example



Comparison of core loss frequencies of various cores

