

# Large size Ferrite Cores for “WPT”

\*WPT = Wireless Power Transfer

## Material name : DTT-P95

Has excellent performance over a wide temperature range and is used for large capacity types.

The use of wireless power transfer(WPT) is expanding from small capacity such as electric toothbrushes to automatic guided vehicle (AGV) and electric vehicle (EV) as new technology (electromagnetic resonance method) is put into practical use. A ferrite core, which is a soft magnetic material, is essential for this technology. Recently, along with the increase in capacity, there is a demand for large ferrite cores as well as materials with low loss and high magnetic flux density in a wide temperature range.

The **DTT-P95** material provided by the DTT Ferrite Group achieves low loss and high magnetic flux density in a wide temperature range to meet market demands.

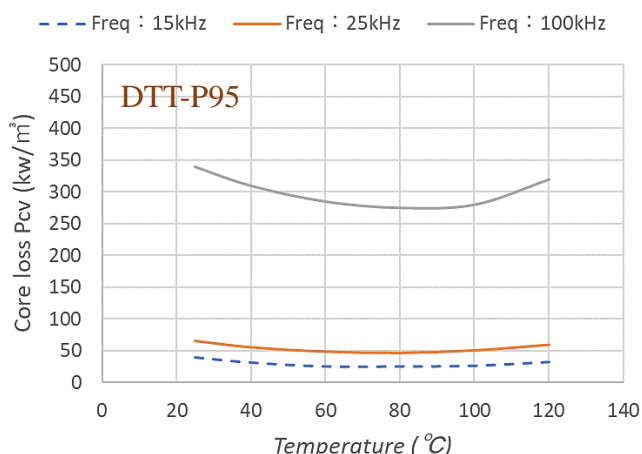


Figure-1 Pcv vs Temperature  
Bm:200(mT) at Sine wave data.

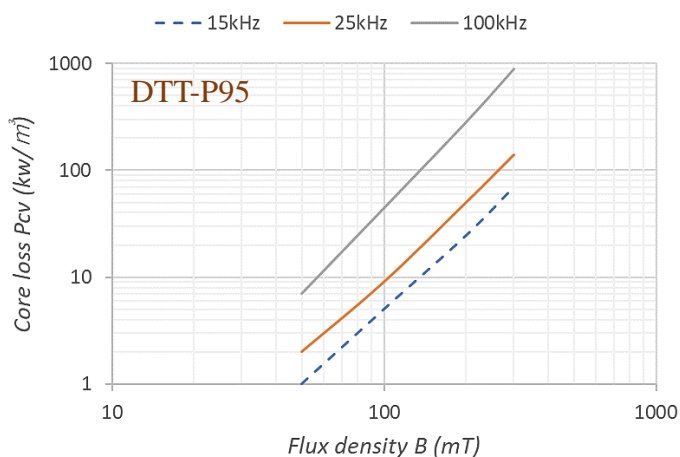


Figure-2 Pcv vs Flux density  
Temp:100(°C) at Sine wave data.

### ● Key points for high efficiency

1. High efficiency (reduction of heat generation, improvement of overall efficiency)
2. High functionality (high power, long distance, large area, thin type)
3. Safety (noise countermeasures, metal detection)

The key to improving the efficiency of outdoor WPT is the reduction of high-frequency loss in a wide temperature range.

### ● Features of DTT-P95 material

**DTT-P95** Mn-Zn Soft Ferrite Material feature **low core loss at a wide temperature range**. This Soft Ferrite Material provide 3300μ' initial permeability at +25°C and 530mT (+25°C) or 410mT (+100°C) saturation magnetic flux density at 1194A/m.



● Main application

- ◆ Automotive Wireless Power Transfer(EV)
- ◆ Industrial Wireless Power Transfer (AGV)

● Features of Ferrite cores

- ◆ Supports various capacities by adjusting the thickness of the ferrite core
- ◆ Operating frequency up to 1MHz
- ◆ The operating temperature environment is possible from -40°C to 120°C.
- ◆ Various custom shapes are available.

\*Maximum dimensions are 450mm x 100mm x 20mm

● Main size

Part Number	A(mm)	B(mm)	C(mm)	SHAPES
F95/95	95.0	95.0	5.0~20.0	
F101/75	101.0	75.0	5.0~20.0	
F152.4/101.6	152.4	101.6	5.0~20.0	
F238/80	238.0	80.0	5.0~20.0	

● Contact us

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