



Ferrite plates play a vital role in improving the efficiency of wireless power transfer (WPT) systems. Their high relative permeability allows them to concentrate and channel electromagnetic fields more effectively compared to air. In a WPT system, a ferrite plate acts like a guide for the electromagnetic field generated by the transmitter coil. It focuses this field towards the receiver coil, maximizing directed energy transfer. By reflecting the electromagnetic field within a defined path, ferrite plates minimize leakage flux. This leakage represents wasted energy radiating outwards and not contributing to power transfer. Minimizing leakage not only improves overall system efficiency but also reduces electromagnetic interference (EMI). Ferrite plates offer a significant advantage in WPT systems by channeling electromagnetic flux, improving efficiency, and reducing power loss. Their properties allow for tailoring WPT systems to specific applications.

Other materials available

Available to customize into any shape

KEY BENEFITS

- Increased Charging Efficiency
- Compatibility with High Power WPT Systems
- Improved System Design
- Reduced Power Loss
- Low Loss Medium for Flux

APPLICATIONS

- Industrial Automation
- Smartphone and Consumer Electronics Charging
- Automotive Wireless Charging
- Medical Devices
- Integrated Wireless Charging

PART NUMBER	LENGTH (mm)	WIDTH (mm)	PLATE THICKNESS	WT. (g)	RECOMMENDED SYSTEM POWER (VA) @ 85 KHZ
3595000501	100 +/- 2.5	100 +/- 2.5	3 +/- 0.25	143	1400
3595000511	100 +/- 2.5	100 +/- 2.5	4 +/- 0.25	191	4800
3595004801	100 +/- 2.5	100 +/- 2.5	5 +/- 0.25	238	8800
3595000521	100 +/- 2.5	100 +/- 2.5	8 +/- 0.25	381	19000
3595000531	150 +/- 4.0	100 +/- 2.5	3 +/- 0.25	215	1400
3595000541	150 +/- 4.0	100 +/- 2.5	4 +/- 0.25	286	4800
3595004901	150 +/- 4.0	100 +/- 2.5	5 +/- 0.25	358	8800
3595000551	150 +/- 4.0	100 +/- 2.5	8 +/- 0.25	572	19000

System power is estimated based on limiting core loss at 85kHz to 300mW/cc via flux density

FIELD SHAPING WITH PLATE EXAMPLE

