



6I MATERIAL™

WIRELESS CHARGING FERRITE PLATES

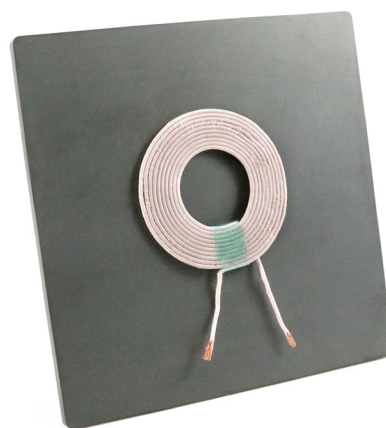
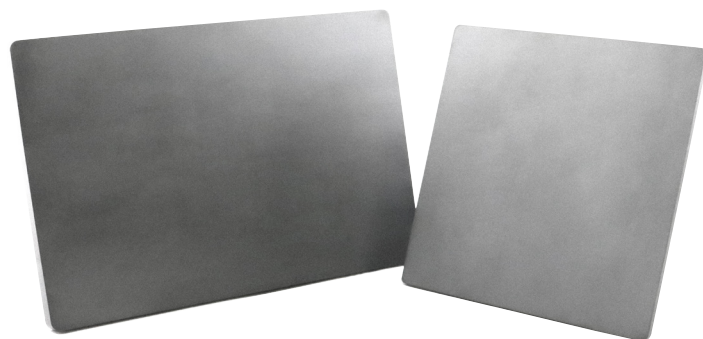
Ferrite plates play a vital role in improving the efficiency of wireless power transfer (WPT) systems. Their high relative permeability allows them to concentrate and channel electromagnetic fields more effectively compared to air. In a WPT system, a ferrite plate acts like a guide for the electromagnetic 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.

Applications

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

Key Benefits

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



Winding shown for demonstrative purposes only.

PART NUMBER	LENGTH (mm)	WIDTH (mm)	PLATE THICKNESS	WT. (g)	RECOMMENDED SYSTEM POWER (VA) @ 6.78 MHz
3561000501	104.5 +/- 2.5	104.5 +/- 2.5	3 +/- 0.25	143	1500
3561000511	104.5 +/- 2.5	104.5 +/- 2.5	4 +/- 0.25	191	2100
3561004801	104.5 +/- 2.5	104.5 +/- 2.5	5 +/- 0.25	238	2800
3561000521	104.5 +/- 2.5	104.5 +/- 2.5	8 +/- 0.25	381	5300
3561000531	157 +/- 4.0	104.5 +/- 2.5	3 +/- 0.25	215	1500
3561000541	157 +/- 4.0	104.5 +/- 2.5	4 +/- 0.25	286	2100
3561004901	157 +/- 4.0	104.5 +/- 2.5	5 +/- 0.25	358	2800
3561000551	157 +/- 4.0	104.5 +/- 2.5	8 +/- 0.25	572	5300

VA recommendations are based limiting flux density to prevent core heating above 10°C.

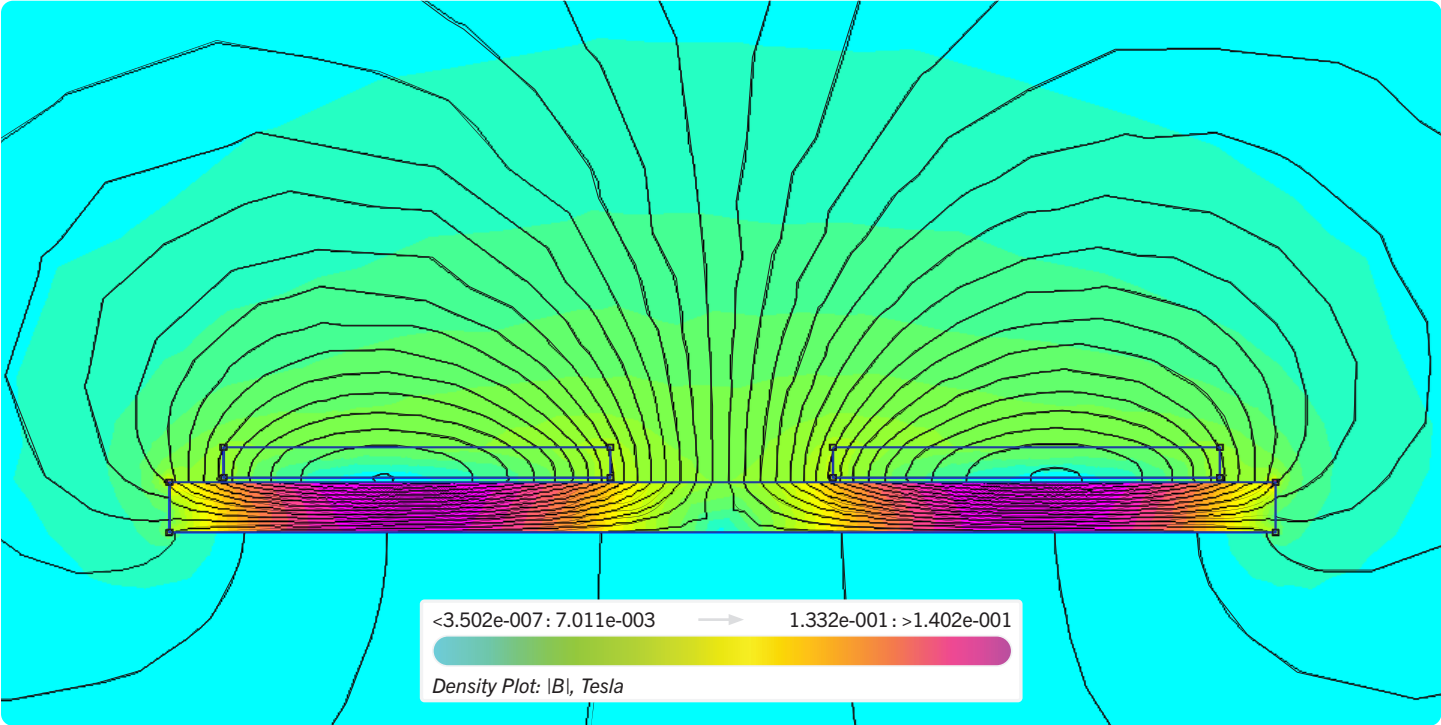
Other materials available

Available to customize into any shape

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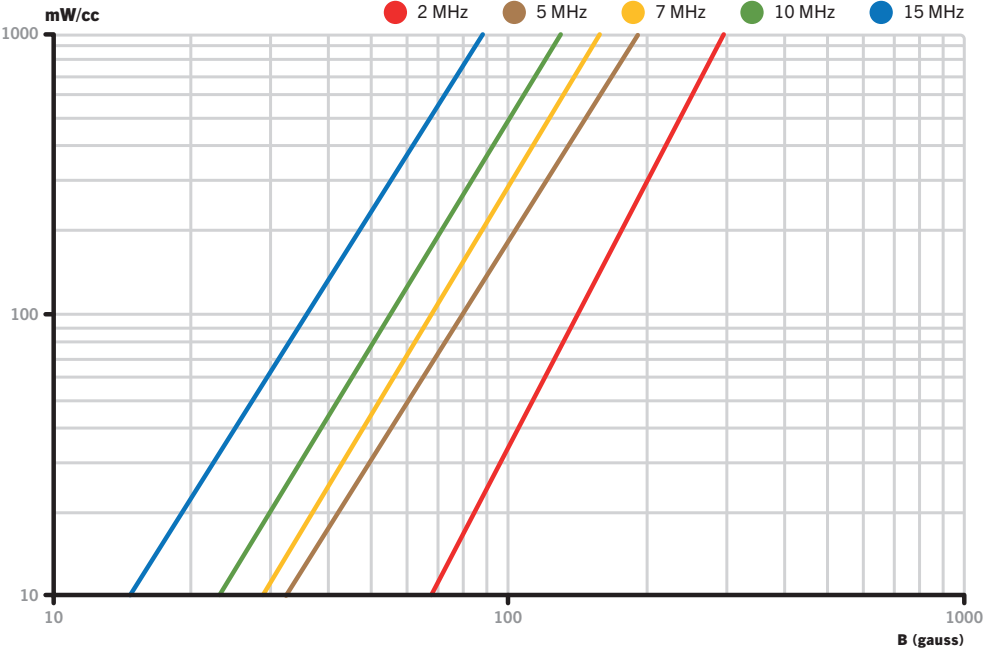
61 MATERIAL WIRELESS CHARGING FERRITE PLATES

FIELD SHAPING WITH PLATE EXAMPLE



POWER LOSS VS FLUX DENSITY AT 25°C

Fair-Rite 61 Material Ferrite Plates



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(888) 324.7748 / (845) 895.2055
(888) FERRITE / (845) 895.2629
Ferrites@fair-rite.com

P.O. Box 288, One Commercial Row, Wallkill, NY 12589-0288
FAIR-RITE.COM