



PRODUCT DATASHEET

Amorphous E-Core (JHAE series)

1K101 iron-based amorphous ribbon, bobbin E with a cut gap

DG Focus Technology Co., Ltd. · Source page: [product-amorphous-e-core.html](https://www.magcomponent.com/product-amorphous-e-core.html) · Compiled 25 September 2026. Values are copied from that page.

Custom sizes and windings available — request a quote at www.magcomponent.com/contact.html

The JHAE amorphous E-core is cut from 1K101 iron-based amorphous ribbon so a bobbin can be wound and an air gap can be cut. Saturation flux density is 1.56 T. The loss figure published for this shape is 20–50 W/kg at 20 kHz and 0.2 T.

Electromagnetic characteristics

Parameter	Published value
Material grade	1K101 iron-based amorphous alloy
Product series	JHAE
Saturation flux density (Bs)	1.56 T at $H = 800$ A/m
Curie temperature (Tc)	410°C
Resistivity (ρ)	130 $\mu\Omega\cdot\text{cm}$ at room temperature
Core loss (Pcv)	20–50 W/kg at 20 kHz, 0.2 T
Loss vs silicon steel	1/5 to 1/10 at the same frequency
Operating temperature	–40°C to +155°C
Lead time	2–4 weeks for standard products, as stated on the page

How this page distinguishes related cores

Sibling columns repeat values already published on those MagComponent pages.

Point	E-core (this page)	Planar core	Nanocrystalline C-core
Shape	E, bobbin winding, cut air gap	Flat window, SCBH15/19	Rectangular cut C
Published loss	20–50 W/kg at 20 kHz, 0.2 T	< 0.15 W/kg at 50 Hz, 1.35 T	High-frequency; ribbon < 26 μm
Saturation / Curie	1.56 T, 410°C	1.56 T, 415°C on that page	1.2 T, 570°C
Operating temperature	–40°C to +155°C	130°C long-term on that page	Below 155°C on that page

Applications

As published on the product page:

- Solar inverter reactors and transformers at the 20 kHz loss point
- EV onboard-charger PFC inductors and DC/DC transformers in a bobbin E
- UPS high-frequency inductors and transformers
- Variable-frequency drive filter reactors
- Switch-mode transformers and energy-storage inductors
- Wind-converter inductors and transformers

Published notes

- Customization published on the page: custom air-gap cutting, stack thickness, window size, overall dimensions, and coating or casing.
- Those geometry options do not change the published 1.56 T, 410°C, or 20–50 W/kg figures.
- The page says the 50 Hz planar loss and the 415°C Curie temperature belong to the planar core, not to this E-core.



Not published on this product page. These items are omitted rather than estimated:

- Initial permeability (μ_i) and saturation magnetostriction (λ_s) are not published on this page.
- A kVA distribution table is not published. The page says this series is for converters and inductors, not a distribution-transformer window.

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