



Ferrites and accessories

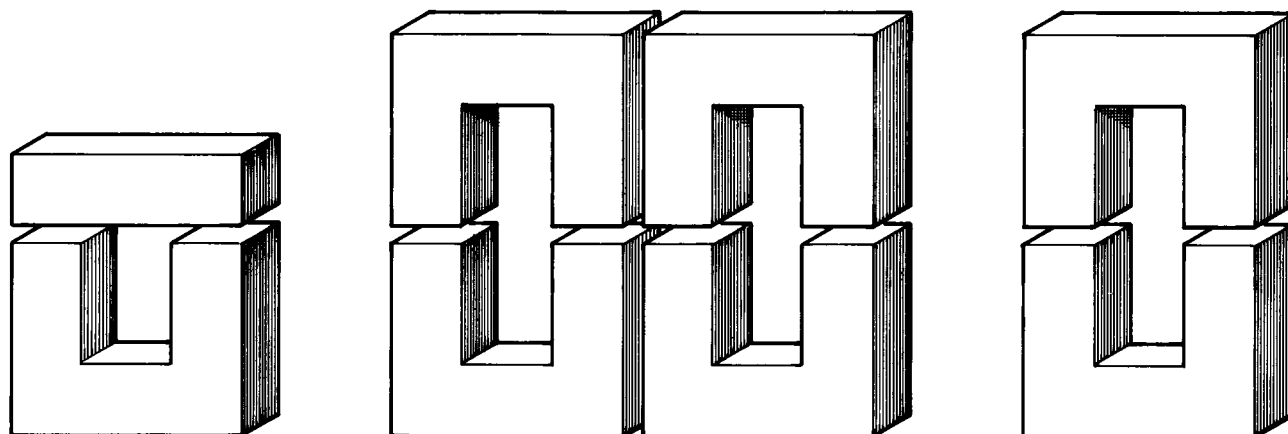
U and UI cores

General information

Date: September 2006

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FUS0001-3

3 Core shapes and materials

U cores of rectangular cross section and I cores are made of SIFERRIT materials N27 and N87. Owing to their high saturation flux density, high Curie temperature and low dissipation losses, they are suitable for power, pulse and high-voltage transformers. UU and UI cores are preferred for power ratings, since they can be combined in various ways (see illustration above) to produce transformers in the kilowatt range.

4 Ordering, marking and delivery

U and I cores are supplied as single units, not as sets.

U cores with one shortened leg ($\hat{=}$ air gap) are available on request.

U and I cores are not marked.

5 A_L and core loss specification

The corresponding test results are tabulated separately for each core shape.

a) A_L value (see also “General – Definitions”, page 7)

The A_L value is measured with a fully wound 100-turn coil at a flux density of $\hat{B} = 0.25$ mT and a frequency of $f = 10$ kHz. The temperature of the core is equal to room temperature.

b) Power loss P_V

The dissipation loss is specified in W/set. The data are maximum values under the specified measuring conditions. The flux density has been calculated on the basis of a sinusoidal voltage and is referred to the minimum cross-sectional area A_{\min} of the core.