

DATA SHEET

3B1 Material specification

Supersedes data of February 2002

2004 Sep 01

Material specification

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3B1 SPECIFICATIONS

Medium permeability MnZn ferrite for use in wideband EMI-suppression (10 - 100 MHz) as well as RF tuning, wideband and balun transformers.

| SYMBOL | CONDITIONS | VALUE | UNIT |
|--------------------|----------------------------------|--------------------------|------------------|
| μ_i | 25 °C; ≤ 10 kHz; 0.25 mT | 900 $\pm 20\%$ | |
| B | 25 °C; 10 kHz; 1200 A/m | ≈ 380 | mT |
| | 100 °C; 10 kHz; 1200 A/m | ≈ 230 | |
| $\tan\delta/\mu_i$ | 25 °C; 450 kHz; 0.25 mT | $\leq 50 \times 10^{-6}$ | |
| ρ | DC; 25 °C | ≈ 0.2 | Ωm |
| T_C | | ≥ 150 | °C |
| density | | ≈ 4800 | kg/m^3 |

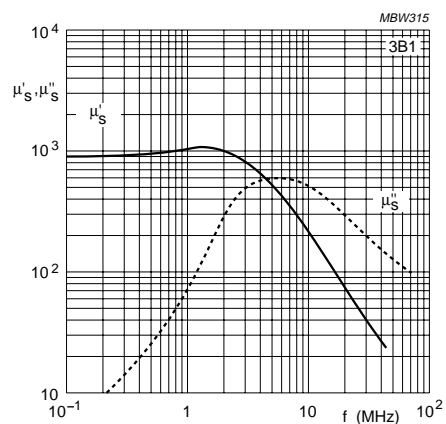


Fig.1 Complex permeability as a function of frequency.

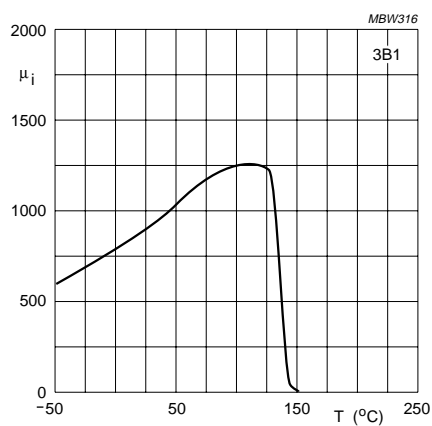


Fig.2 Initial permeability as a function of temperature.

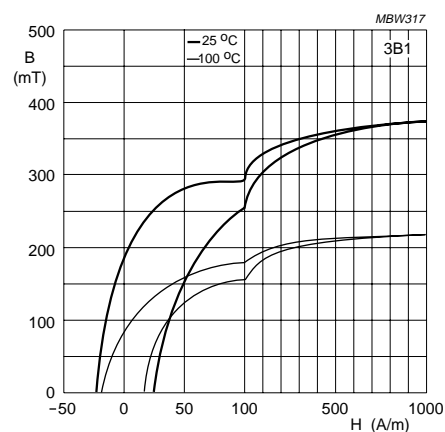


Fig.3 Typical B-H loops.

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DATA SHEET STATUS DEFINITIONS

| DATA SHEET STATUS | PRODUCT STATUS | DEFINITIONS |
|---------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preliminary specification | Development | This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product. |
| Product specification | Production | This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product. |

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PRODUCT STATUS DEFINITIONS

| STATUS | INDICATION | DEFINITION |
|------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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