

DATA SHEET

3C11 Material specification

Supersedes data of September 2004

2008 Sep 01

Material specification

3C11

3C11 SPECIFICATIONS

A medium permeability material mainly for use in current compensated chokes in EMI-suppression filters.

| SYMBOL | CONDITIONS | VALUE | UNIT |
|--------------------|---|---|-------------------|
| μ_i | 25 °C; ≤ 10 kHz; 0.25 mT | $4300 \pm 20\%$ | |
| B | 25 °C; 10 kHz; 1200 A/m 100 °C; 10 kHz; 1200 A/m | ≈ 390 ≈ 230 | mT |
| $\tan\delta/\mu_i$ | 25 °C; 100 kHz; 0.25 mT 25 °C; 300 kHz; 0.25 mT | $\leq 20 \times 10^{-6}$ $\leq 200 \times 10^{-6}$ | |
| ρ | DC; 25 °C | ≈ 1 | Ωm |
| T_C | | ≥ 125 | °C |
| density | | ≈ 4900 | kg/m ³ |

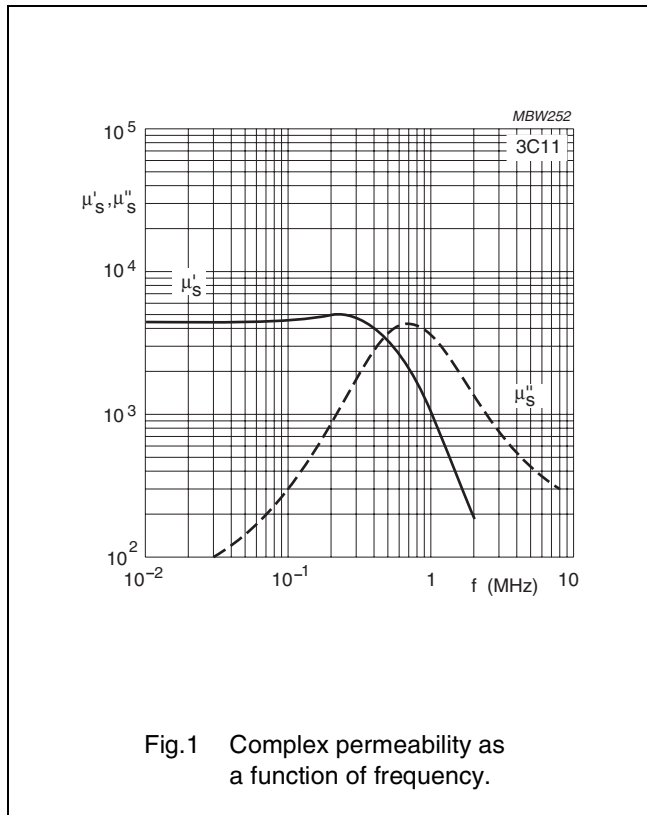


Fig.1 Complex permeability as a function of frequency.

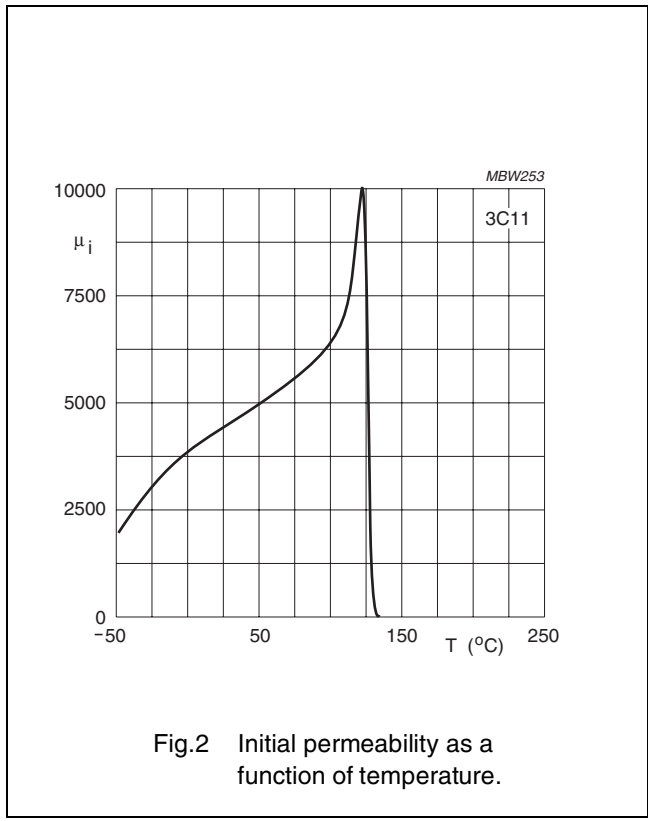


Fig.2 Initial permeability as a function of temperature.

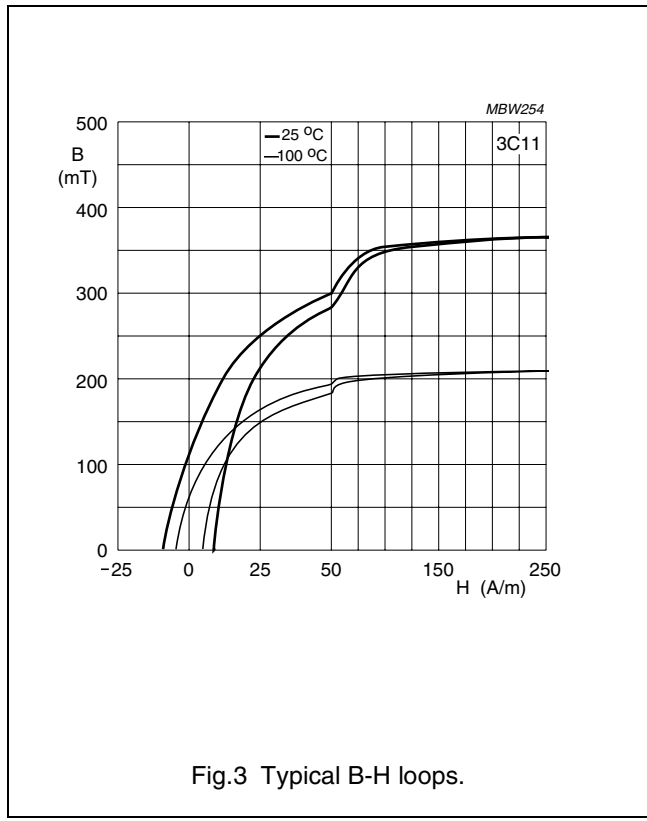
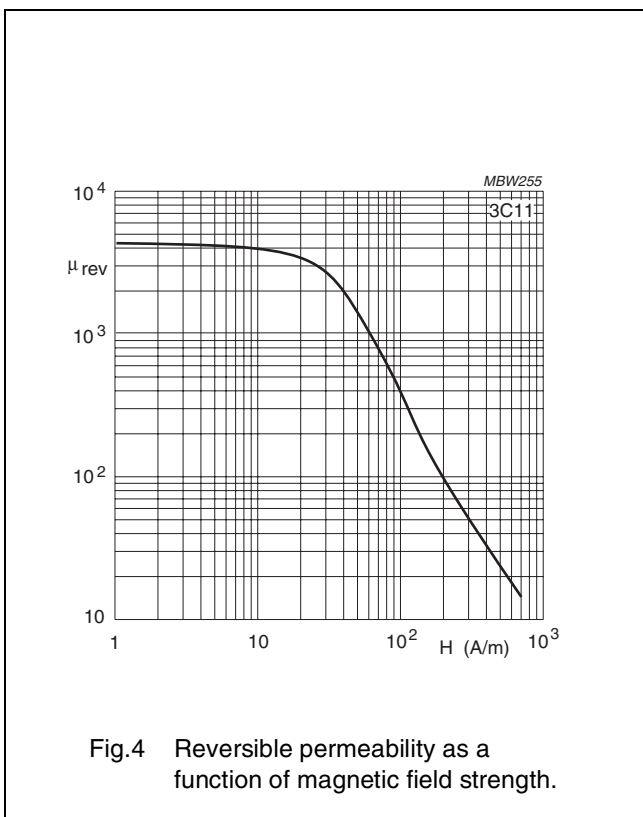


Fig.3 Typical B-H loops.






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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| STATUS | INDICATION | DEFINITION |
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