



# MATERIAL DATA SHEET



## Material Specification : CF297

Date: 14-JUNE-2017

\*Material data specified here have been derived from measurement on toroid core T2512



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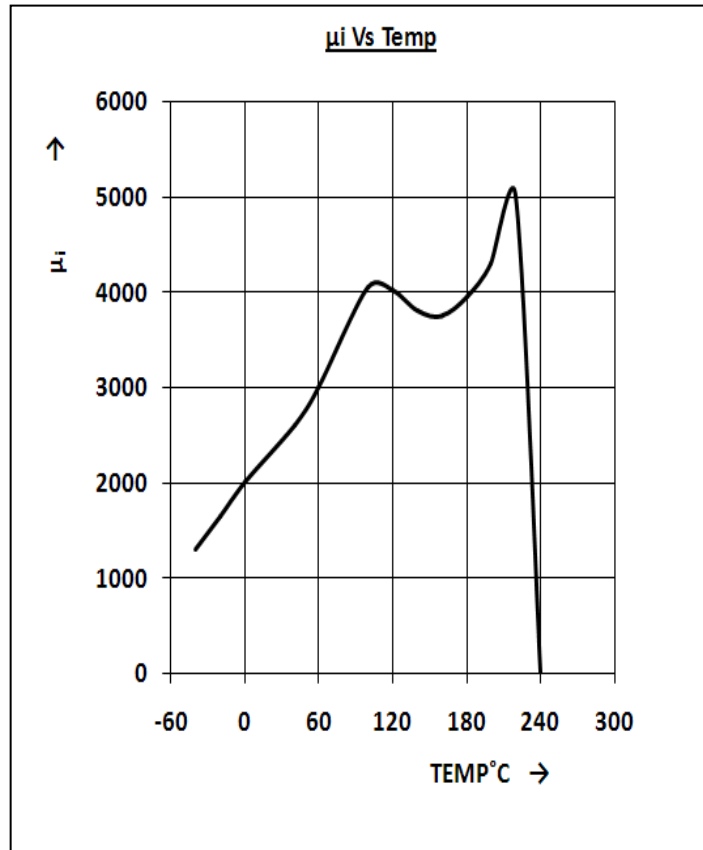
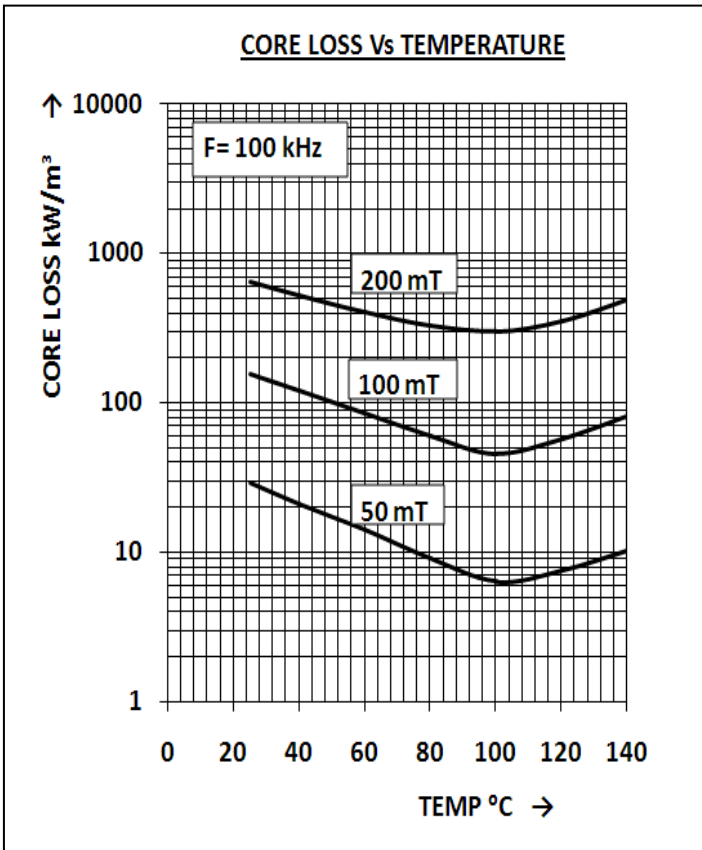
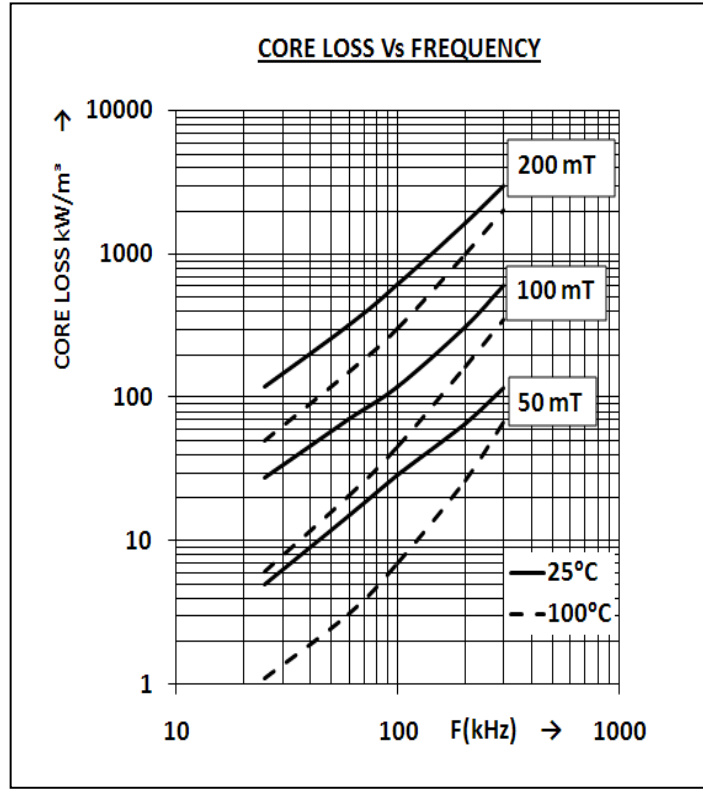
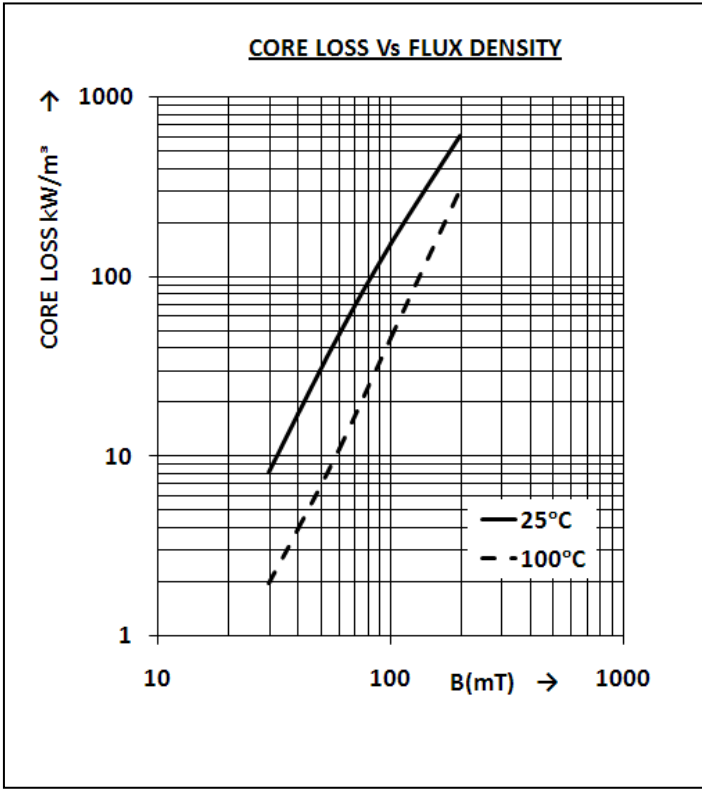
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|--------------------|--------------------|
| <b>Application</b> | Power transformers |
| <b>Material</b>    | Mn-Zn              |

| Material Properties                 | Conditions            | Symbol      | Value               | Unit                |
|-------------------------------------|-----------------------|-------------|---------------------|---------------------|
| <b>Initial Permeability</b>         | 25°C, 10kHz, ≤ 0.25mT | $\mu_i$     | 2300 ±20%           |                     |
| <b>Flux Density</b>                 | 25°C; 1000A/m         | $B_s$       | 518                 | mT                  |
|                                     | 100°C; 1000A/m        | $B_s$       | 410                 | mT                  |
| <b>Coercive Field Strength</b>      | 25°C; 10kHz           | $H_c$       | 21                  | A/m                 |
|                                     | 100°C; 10kHz          | $H_c$       | 12                  | A/m                 |
| <b>Hysteresis Material Constant</b> | 25°C;                 | $\eta_B$    | <1.0                | 10 <sup>-6</sup> mT |
| <b>Curie Temperature</b>            | 10kHz; ≤0.25mT        | $T_c$       | >210                | °C                  |
| <b>Density</b>                      | 25°C                  | $\rho$      | 4.8×10 <sup>3</sup> | kg/m <sup>3</sup>   |
| <b>Resistivity</b>                  | 25°C                  | $\rho_{DC}$ | 8                   | Ωm                  |
| <b>Relative Core Losses</b>         | 100°C; 100kHz; 100mT  |             | ≤ 45                | kW/m <sup>3</sup>   |
|                                     | 100°C; 100kHz; 200mT  |             | ≤ 300               | kW/m <sup>3</sup>   |

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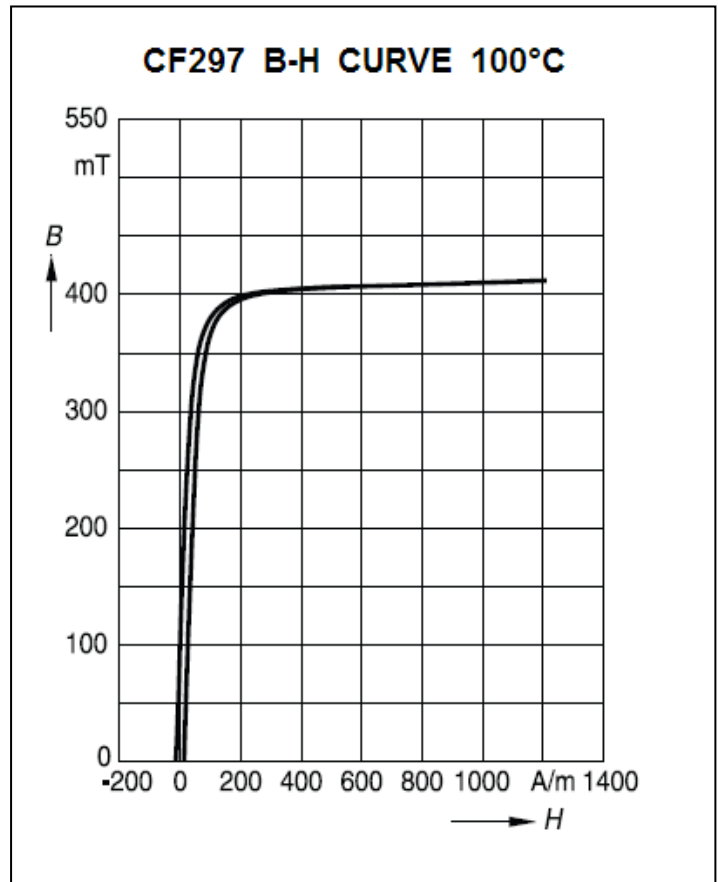
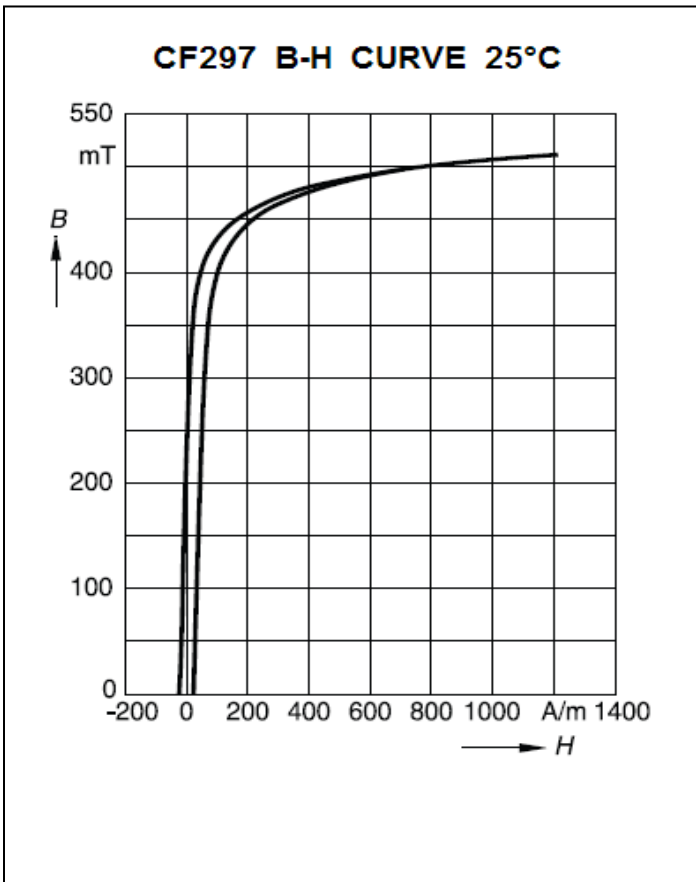
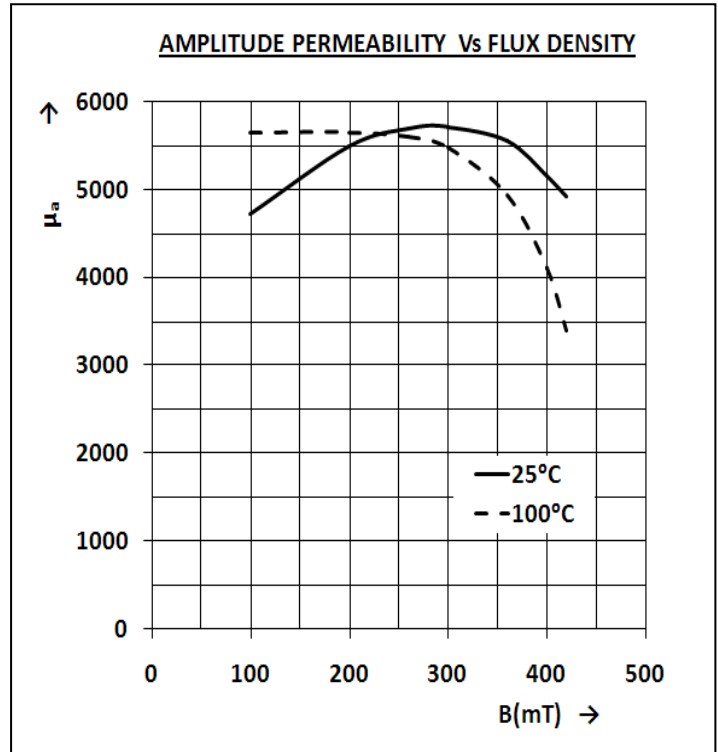
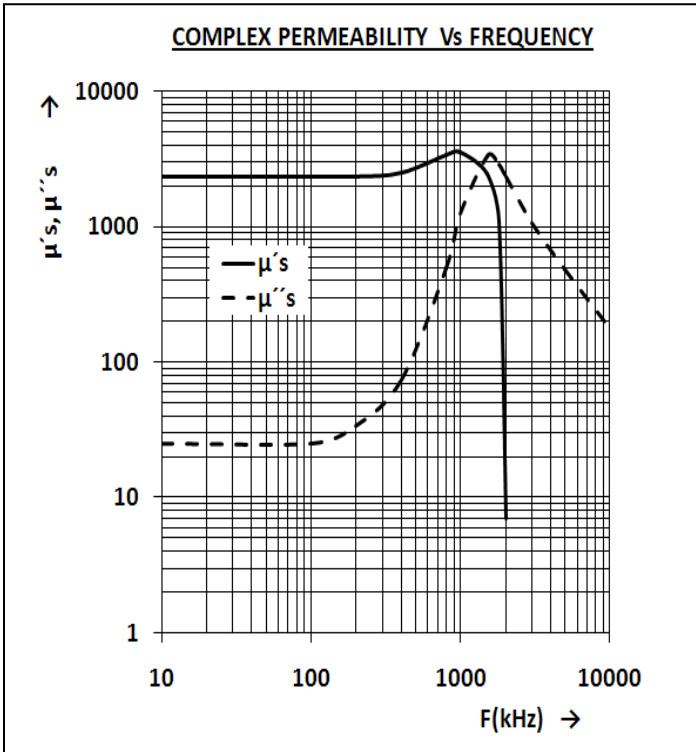
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