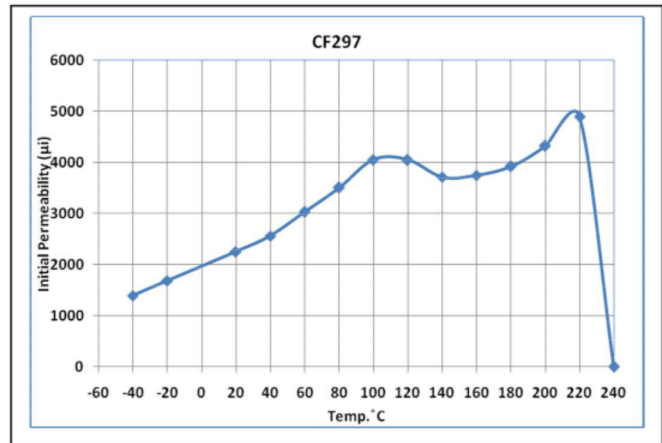
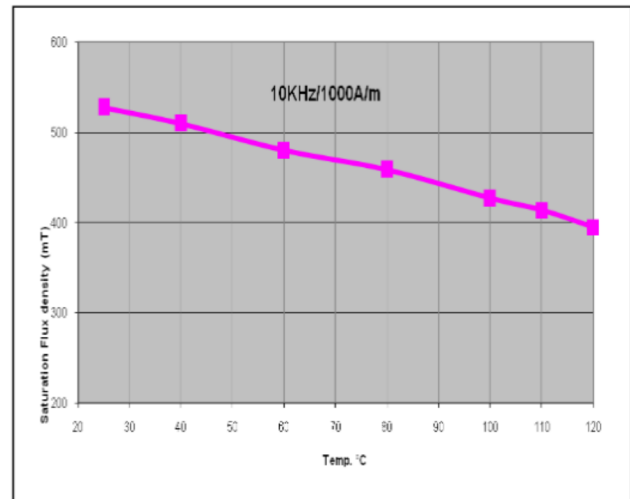
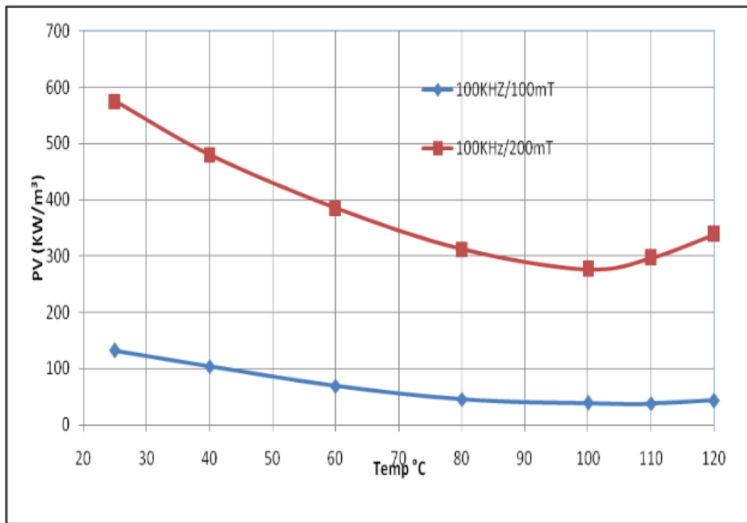


## CF297 - Material Characteristics

| Property                                                                                   | Symbol         | Unit              | CF297                |
|--------------------------------------------------------------------------------------------|----------------|-------------------|----------------------|
| Initial Permeability (T = 25 °C)                                                           | $\mu_i$        |                   | 2300±20%             |
| Flux density<br>(H = 1000 A/m, f = 10 kHz)                                                 | $B_i$ (25 °C)  | mT                | 510                  |
|                                                                                            | $B_i$ (100 °C) | mT                | 410                  |
| Coercive field strength<br>(f=10kHz)                                                       | $H_c$ (25 °C)  | A/m               | 21                   |
| Power loss density<br>100 KHz, 100 mT, 25 °C<br>100 °C<br>100 KHz, 200 mT, 25 °C<br>100 °C | $P_v$          | kW/m <sup>3</sup> | ----                 |
|                                                                                            |                |                   | ≤50<br>≤600<br>≤350  |
| Curie Temperature                                                                          | $T_c$          | °C                | >220 °C              |
| Resistivity                                                                                | $\rho$         | Ωm                |                      |
| Density                                                                                    | d              | Kg/m <sup>3</sup> | 4800                 |
| Core Shapes                                                                                |                |                   | Toroids,ETD<br>E,EP, |



(Material Data specified here have been derived from measurements on Toroidal Cores T2512)



### Characteristics:

- This power material is characterized by a flat power density Vs. Temperature curve between 80 °C and 120 °C .
- Improved power efficiency over a wide temperature range.

### Applications:

- Power material with Low losses at Higher temperatures for Automotive applications
- This material applicable where large variation in operating temperature occurs.
- Power charging systems for electric vehicles.
- DC-DC converters for electric and hybrid cars.
- Solar inverters.



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