CF297 - Material Characteristics

Property	Symbol	Unit	CF297
Initial Permeability ($T = 25$ ⁰ C)	μ		2300±20%
Flux density (H = 1000 A/m, f = 10 kHz)	$ B_{s} (25 \ {}^{0}C) B_{s} (100 \ {}^{0}C) $	mT mT	510 410
Coercive field strength (f=10kHz)	Hc (25 ⁰ C)	A/m	21
Power loss density 100 KHz, 100 mT, 25 °C 100 °C 100 KHz, 200 mT, 25 °C 100 °C 100 °C	Pv	kW/m ³	≤50 ≤600 ≤350
Curie Temperature	T _c	⁰ C	>220 °C
Resistivity	ρ	Ωm	
Density	d	Kg/m ³	4800
Core Shapes			Toroids,ETD E,EP,



80

90

100

110 120

(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 $^{\circ}$ C and 120 $^{\circ}$ 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.

