# DATA SHEET

# TX140/106/25
Ferrite toroids

Supersedes data of September 2004 2008 Sep 01

FERROXCUBE
A YAGEO COMPANY

# Ferrite toroids TX140/106/25

## RING CORES (TOROIDS)

### Effective core parameters

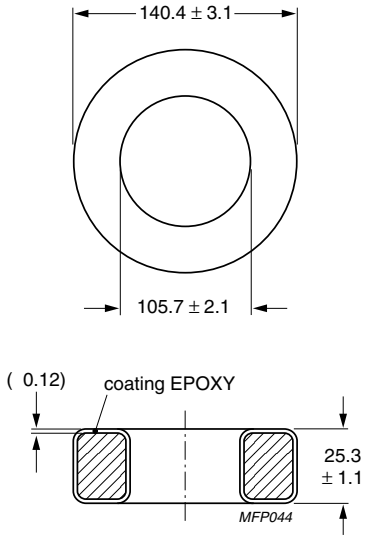
| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $\Sigma(l/A)$ | core factor (C1) | 0.903 | $mm^{-1}$ |
| $V_e$ | effective volume | 161 100 | $mm^3$ |
| $l_e$ | effective length | 382 | mm |
| $A_e$ | effective area | 422 | $mm^2$ |
| m | mass of core | ≈ 800 | g |

### Coating

The cores are coated with epoxy, flame retardant in accordance with *"UL 94V-0"*; UL file number E 235873.
The colour is white.
Maximum operating temperature is 200 °C.

### Isolation voltage

DC isolation voltage: 2000 V.
Contacts are applied on the edge of the ring core, which is also the critical point for the winding operation.




Dimensions in mm.

Fig.1 TX140/106/25 ring core.

### Ring core data

| GRADE | $A_L$ (nH) | $\mu_i$ | TYPE NUMBER |
|---|---|---|---|
| 3C90 | 3200 ± 20% | ≈ 2300 | TX140/106/25-3C90 |
| 3E25 | 7700 ± 30% | ≈ 5500 | TX140/106/25-3E25 |

### Properties of cores under power conditions

| GRADE | B (mT) at | CORE LOSS (W) at | |
|---|---|---|---|
| | **H = 250 A/m; f = 25 kHz; T = 100 °C** | **$\hat{B}$ = 200 mT; f = 25 kHz; T = 100 °C** | **$\hat{B}$ = 100 mT; f = 100 kHz; T = 100 °C** |
| 3C90 | ≥320 | ≤ 22.7 | ≤ 22.7 |

**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. |
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**PRODUCT STATUS DEFINITIONS**

| STATUS | INDICATION | DEFINITION |
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