

DATA SHEET

TX140/106/25
Ferrite toroids

Supersedes data of February 2002

2004 Sep 01

Ferrite toroids

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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 |

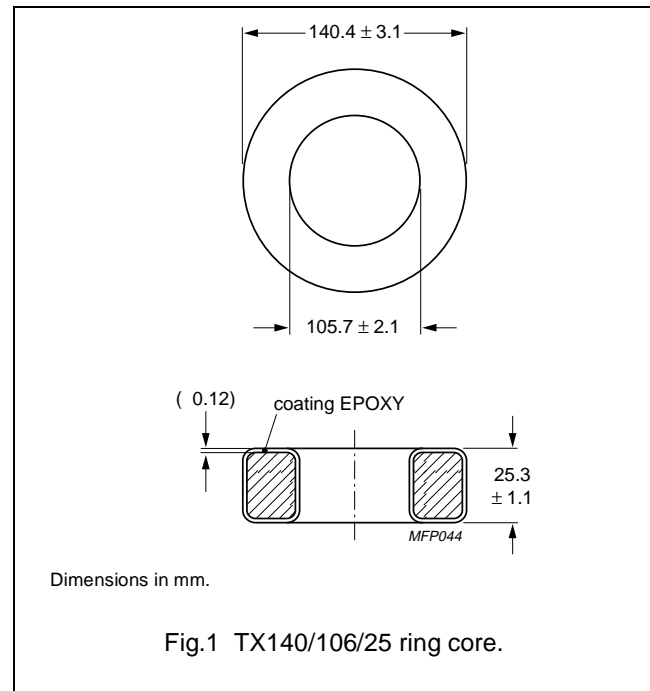
Coating

The cores are coated with epoxy, flame retardant in accordance with "UL 94V-0"; UL file number E 228348. The colour is white.

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.



Ring core data

| GRADE | A_L (nH) | μ_i | TYPE NUMBER |
|-------|-----------------|----------------|-------------------|
| 3C90 | $3200 \pm 20\%$ | ≈ 2300 | TX140/106/25-3C90 |
| 3E25 | $7700 \pm 30\%$ | ≈ 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 | f = 25 kHz; $\hat{B} = 200 \text{ mT}$; T = 100 °C | f = 100 kHz; $\hat{B} = 100 \text{ mT}$; T = 100 °C |
| 3C90 | ≥ 320 | ≤ 22.7 | ≤ 22.7 |

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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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PRODUCT STATUS DEFINITIONS

| STATUS | INDICATION | DEFINITION |
|-----------|---|--|
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| Preferred | | These products are recommended for use in current designs and are available via our sales channels. |
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