

# DATA SHEET

**TX22/14/13**  
Ferrite toroids

Supersedes data of November 2000

2002 Feb 01

**RING CORES (TOROIDS)**

**Effective core parameters**

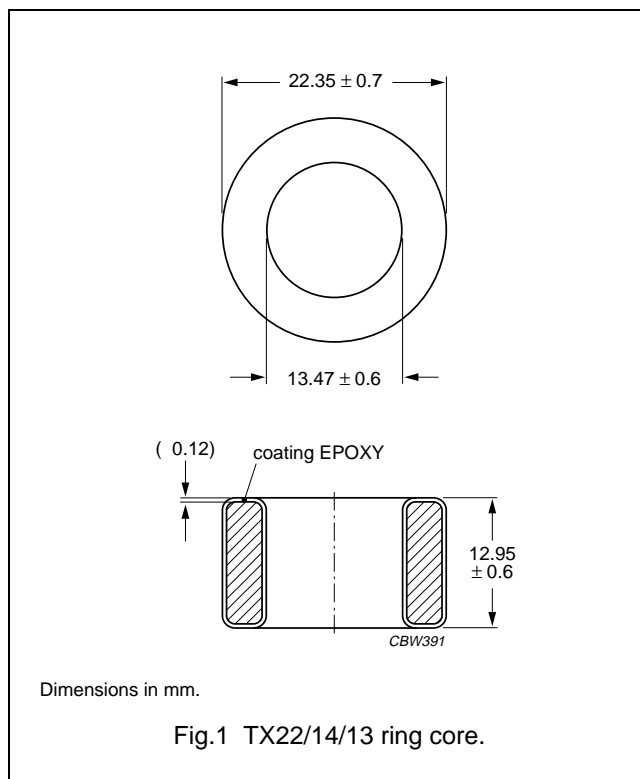
SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.07	mm <sup>-1</sup>
$V_e$	effective volume	2750	mm <sup>3</sup>
$l_e$	effective length	54.2	mm
$A_e$	effective area	50.9	mm <sup>2</sup>
m	mass of core	≈ 14	g

**Coating**

The cores are coated with epoxy, flame retardant in accordance with "UL 94V-0"; UL file number E 214934.

**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)	$\mu_i$	COLOUR CODE	TYPE NUMBER
3F3	2 200 ± 20%	≈ 1 800	blue/white	TX22/14/13-3F3
3C90	2795 ± 20%	≈ 2300	ultramarine/white	TX22/14/13-3C90
3E27 <small>des</small>	6 110 ± 20%	≈ 5 000	green/white	TX22/14/13-3E27
3E6	12080 ± 30%	≈ 10300	purple/white	TX22/14/13-3E6

**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 = 100 kHz; $\hat{B}$ = 100 mT; T = 100 °C	f = 400 kHz; $\hat{B}$ = 50 mT; T = 100 °C
3F3	≥320	≤ 0.30	≤ 0.52




**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
<b>Prototype</b>		These are products that have been made as development samples for the purposes of technical evaluation only. The data for these types is provisional and is subject to change.
<b>Design-in</b>		These products are recommended for new designs.
<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
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