DATA SHEET

TX22/14/13
Ferrite toroids

Supersedes data of September 2004 2008 Sep 01

FERROXCUBE
A YAGEO COMPANY

Ferrite toroids TX22/14/13

RING CORES (TOROIDS)

Effective core parameters

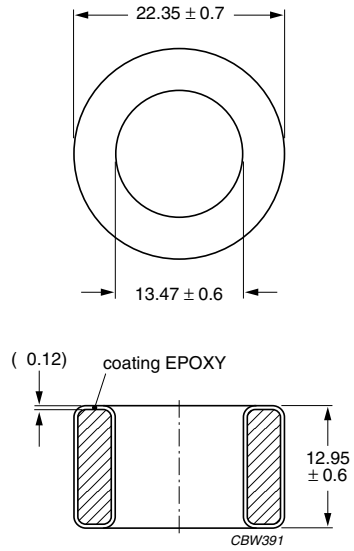
SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.07	mm^{-1}
V_e	effective volume	2750	mm^3
l_e	effective length	54.2	mm
A_e	effective area	50.9	mm^2
m	mass of core	≈ 14	g

Coating

The cores are coated with epoxy, flame retardant in accordance with *"UL 94V-0"*; UL file number E 228348.
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 TX22/14/13 ring core.

Ring core data

GRADE	A_L (nH)	μ_i	TYPE NUMBER
3F3	2200 ± 20%	≈ 1800	TX22/14/13-3F3
3C90	2795 ± 20%	≈ 2300	TX22/14/13-3C90
3E27 des	6110 ± 20%	≈ 5000	TX22/14/13-3E27
3E6	12080 ± 30%	≈ 10300	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	**$\hat{f}$ = 100 kHz; $\hat{B}$ = 100 mT; T = 100 °C**	**$\hat{f}$ = 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
Prototype	prot	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.
Design-in	des	These products are recommended for new designs.
Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support	sup	These products are **not** recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.