# **FERROXCUBE**

# DATA SHEET

# TX23/14/7.6 Alloy powder toroids

New data 2008 Sep 01



## Alloy powder toroids

TX23/14/7.6

#### **RING CORES (TOROIDS)**

#### **Effective core parameters**

SYMBOL	PARAME	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	1.71	mm <sup>-1</sup>	
V <sub>e</sub>	effective volume	1880	mm <sup>3</sup>	
l <sub>e</sub>	effective length	56.7	mm	
A <sub>e</sub>	effective area	33.1	mm <sup>2</sup>	
m	mass of core	MPP	15.9	g
	(for μ <sub>i</sub> 125)	Sendust	11.5	g
		High-Flux	15.0	g

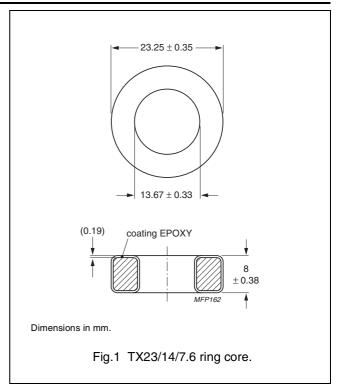
#### Coating

The cores are coated with epoxy. The colour is black (Sendust), grey (MPP) or khaki (High-Flux). Maximum operating temperature is 200 °C.

#### Isolation voltage

AC isolation voltage: 1000 V.

Contacts are applied on the edge of the ring core, which is also the critical point for the winding operation.



**Ring core data - Note** 1. Mechanical dimensions : OD  $\leq$  23.62, ID  $\geq$  13.39, H  $\leq$  8.38

	<u> </u>		B (mT) at	CORE LOSS (W) at		
GRADE	A <sub>L</sub> (nH)	$\mu_{\mathbf{i}}$	H = 100 kA/m; f = 100 kHz; f = 10 kHz; T = 25 °C		TYPE NUMBER	
MPP	9.9 ± 8 %	14	≥ 640	2.82	TX23/7.6-M2-A9.9	
	19 ± 8 %	26	≥ 700	2.26	TX23/7.6-M2-A19	
	43 ± 8 %	60	≥ 760	1.41	TX23/7.6-M2-A43	
	90 ± 8 %	125	≥ 800	1.41	TX23/7.6-M2-A90	
	106 ± 8 %	147	≥ 800	1.50	TX23/7.6-M2-A106	
	115 ± 8 %	160	≥ 800	1.50	TX23/7.6-M2-A115	
	124 ± 8 %	173	≥ 800	1.50	TX23/7.6-M2-A124	
	144 ± 8 %	200	≥ 800	2.82	TX23/7.6-M2-A144	
	$216\pm8~\%$	300	≥ 800	2.82	TX23/7.6-M2-A216	
Sendust (1)	19 ± 8 %	26	≥ 1000	3.01	TX23/7.6-S7-A19-MC	
	$43\pm8$ %	60	≥ 1030	1.61	TX23/7.6-S7-A43-MC	
	54 ± 8 %	75	≥ 1040	1.61	TX23/7.6-S7-A54-MC	
	65 ± 8 %	90	≥ 1050	1.61	TX23/7.6-S7-A65-MC	
	90 ± 8 %	125	≥ 1060	1.61	TX23/7.6-S7-A90-MC	
High-Flux	9.9 ± 8 %	14	≥ 890	4.70	TX23/7.6-H2-A9.9	
	19 ± 8 %	26	≥ 980	3.76	TX23/7.6-H2-A19	
	43 ± 8 %	60	≥ 1280	3.38	TX23/7.6-H2-A43	
	90 ± 8 %	125	≥ 1370	3.76	TX23/7.6-H2-A90	
	106 ± 8 %	147	≥ 1385	4.14	TX23/7.6-H2-A106	
	115 ± 8 %	160	≥ 1400	6.58	TX23/7.6-H2-A115	

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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	
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 <b>not</b> recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.	

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