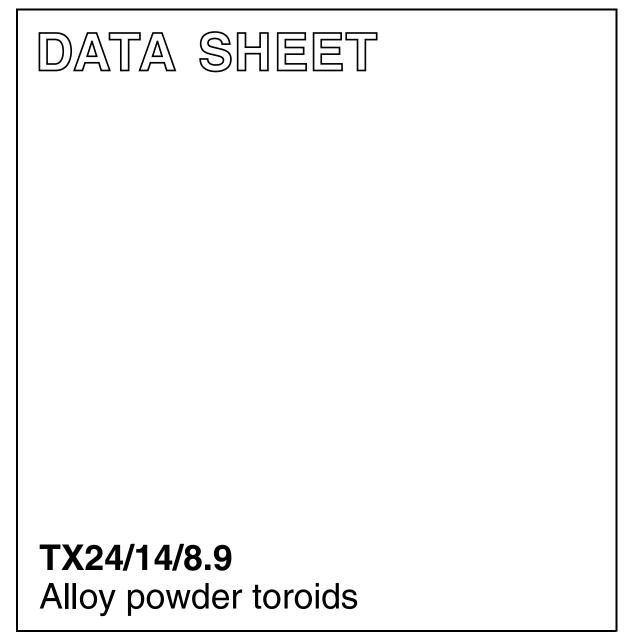
# FERROXCUBE



New data

2008 Sep 01



## Alloy powder toroids

### TX24/14/8.9

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

#### Effective core parameters

SYMBOL	PARAME	VALUE	UNIT	
Σ(I/A)	core factor (C1)	1.52	mm <sup>-1</sup>	
Ve	effective volume	2280	mm <sup>3</sup>	
l <sub>e</sub>	effective length	58.8	mm	
A <sub>e</sub>	effective area		38.8	mm <sup>2</sup>
m	mass of core	MPP	19.9	g
	(for µ <sub>i</sub> 125)	Sendust	14.0	g
		High-Flux	18.8	g

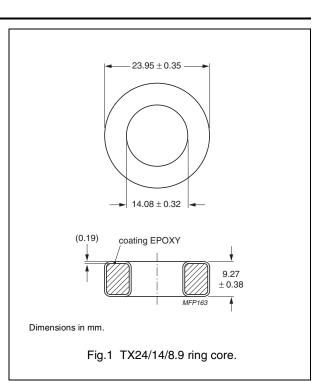
#### Coating

The cores are coated with epoxy. The colour is cream (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



			B (mT) at	CORE LOSS (W) at	
GRADE	A <sub>L</sub> (nH)	μ <sub>i</sub>	H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; B = 100 mT; T = 25 °C	TYPE NUMBER
MPP	12±8 %	14	≥ 640	3.42	TX24/8.9-M2-A12
	22±8%	26	≥ 700	2.74	TX24/8.9-M2-A22
	51 ± 8 %	60	≥ 760	1.71	TX24/8.9-M2-A51
	105±8 %	125	≥ 800	1.71	TX24/8.9-M2-A105
	$124\pm8$ %	147	≥ 800	1.82	TX24/8.9-M2-A124
	135±8 %	160	≥ 800	1.82	TX24/8.9-M2-A135
	146 ± 8 %	173	≥ 800	1.82	TX24/8.9-M2-A146
	169 ± 8 %	200	≥ 800	3.42	TX24/8.9-M2-A169
	253±8 %	300	≥ 800	3.42	TX24/8.9-M2-A253
Sendust	22 ± 8 %	26	≥ 1000	3.65	TX24/8.9-S7-A22
	51 ± 8 %	60	≥ 1030	1.95	TX24/8.9-S7-A51
	105±8 %	125	≥ 1060	1.95	TX24/8.9-S7-A105
High-Flux	12±8 %	14	≥ 890	5.70	TX24/8.9-H2-A12
	$22\pm8$ %	26	≥ 980	4.56	TX24/8.9-H2-A22
	51±8%	60	≥ 1280	4.10	TX24/8.9-H2-A51
	$105\pm8$ %	125	≥ 1370	4.56	TX24/8.9-H2-A105
	124±8 %	147	≥ 1385	5.02	TX24/8.9-H2-A124
	135±8 %	160	≥ 1400	7.98	TX24/8.9-H2-A135

2008 Sep 01

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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.