

# DATA SHEET

**TX24/14/8.9**  
Alloy powder toroids

New data

2008 Sep 01

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## RING CORES (TOROIDS)

### Effective core parameters

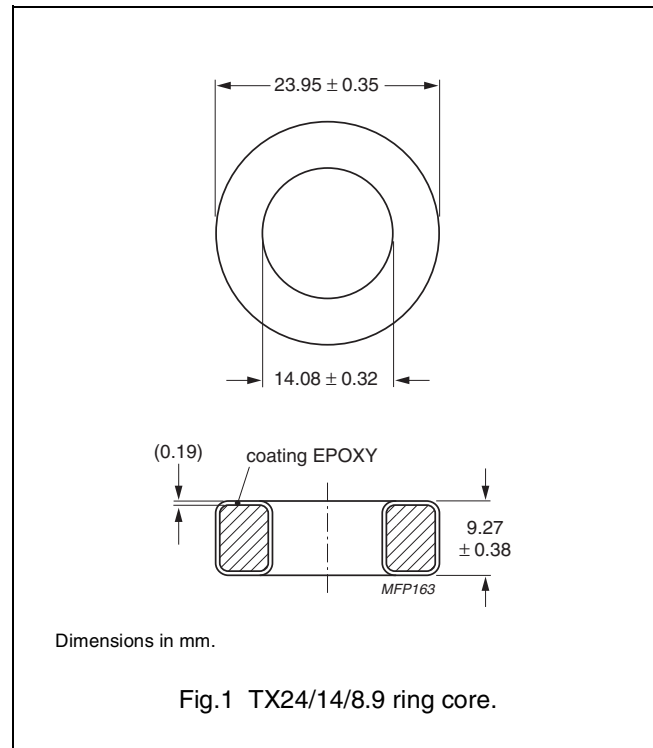
SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	1.52	mm <sup>-1</sup>	
$V_e$	effective volume	2280	mm <sup>3</sup>	
$l_e$	effective length	58.8	mm	
$A_e$	effective area	38.8	mm <sup>2</sup>	
m	mass of core (for $\mu_i$ 125)	MPP	19.9	g
		Sendust	14.0	g
		High-Flux	18.8	g

### 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

GRADE	$A_L$ (nH)	$\mu_i$	B (mT) at	CORE LOSS (W) at	TYPE NUMBER
			H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; $\hat{B}$ = 100 mT; T = 25 °C	
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 ± 8 %	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
Sendust	253 ± 8 %	300	≥ 800	3.42	TX24/8.9-M2-A253
	22 ± 8 %	26	≥ 1000	3.65	TX24/8.9-S7-A22
	51 ± 8 %	60	≥ 1030	1.95	TX24/8.9-S7-A51
High-Flux	105 ± 8 %	125	≥ 1060	1.95	TX24/8.9-S7-A105
	12 ± 8 %	14	≥ 890	5.70	TX24/8.9-H2-A12
	22 ± 8 %	26	≥ 980	4.56	TX24/8.9-H2-A22
	51 ± 8 %	60	≥ 1280	4.10	TX24/8.9-H2-A51
	105 ± 8 %	125	≥ 1370	4.56	TX24/8.9-H2-A105
High-Flux	124 ± 8 %	147	≥ 1385	5.02	TX24/8.9-H2-A124
	135 ± 8 %	160	≥ 1400	7.98	TX24/8.9-H2-A135

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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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<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.
<b>Support</b>		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.