# **FERROXCUBE**

# DATA SHEET

# TX57/36/14 Alloy powder toroids

New data 2008 Sep 01



## Alloy powder toroids

TX57/36/14

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

#### **Effective core parameters**

SYMBOL	PARAME	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	0.990	mm <sup>-1</sup>	
Ve	effective volume	20650	mm <sup>3</sup>	
l <sub>e</sub>	effective length	143	mm	
A <sub>e</sub>	effective area	144	mm <sup>2</sup>	
m	mass of core	MPP	175	g
(for μ <sub>i</sub> 12	(for μ <sub>i</sub> 125)	Sendust	127	g
		High-Flux	165	g

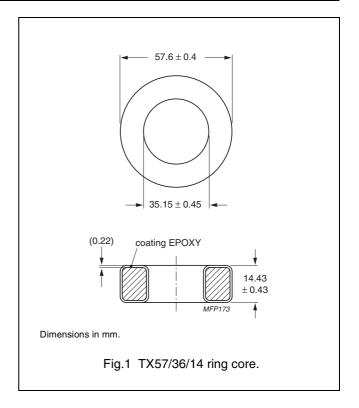
#### Coating

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  $\leq$  58, ID  $\geq$  34.7, H  $\leq$  14.86

			B (mT) at	CORE LOSS (W) at		
GRADE	A <sub>L</sub> (nH)	μί	H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; B = 100 mT; T = 25 °C	TYPE NUMBER	
MPP	18 ± 8 %	14	≥ 640	31.0	TX57/14-M2-A18	
_	33 ± 8 %	26	≥ 700	24.8	TX57/14-M2-A33	
	75 ± 8 %	60	≥ 760	15.5	TX57/14-M2-A75	
	156 ± 8 %	125	≥ 800	15.5	TX57/14-M2-A156	
	185 ± 8 %	147	≥ 800	16.5	TX57/14-M2-A185	
	200 ± 8 %	160	≥ 800	16.5	TX57/14-M2-A200	
	218 ± 8 %	173	≥ 800	16.5	TX57/14-M2-A218	
	250 ± 8 %	200	≥ 800	31.0	TX57/14-M2-A250	
	374 ± 8 %	300	≥ 800	31.0	TX57/14-M2-A374	
Sendust (1)	33 ± 8 %	26	≥ 1000	33.0	TX57/14-S7-A33-MC	
	75 ± 8 %	60	≥ 1030	17.7	TX57/14-S7-A75-MC	
	94 ± 8 %	75	≥ 1040	17.7	TX57/14-S7-A94-MC	
	112 ± 8 %	90	≥ 1050	17.7	TX57/14-S7-A112-MC	
	156 ± 8 %	125	≥ 1060	17.7	TX57/14-S7-A156-MC	
High-Flux	18 ± 8 %	14	≥ 890	51.6	TX57/14-H2-A18	
	33 ± 8 %	26	≥ 980	41.3	TX57/14-H2-A33	
	75 ± 8 %	60	≥ 1280	37.2	TX57/14-H2-A75	
	156 ± 8 %	125	≥ 1370	41.3	TX57/14-H2-A156	

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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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