FERROXCUBE

DATA SHEET

TX51/32/14 Alloy powder toroids

New data 2008 Sep 01



Alloy powder toroids

TX51/32/14

RING CORES (TOROIDS)

Effective core parameters

SYMBOL	PARAME	VALUE	UNIT	
Σ(I/A)	core factor (C1)		1.02	mm ⁻¹
V _e	effective volume		15900	mm ³
l _e	effective length		127	mm
A _e	effective area		125	mm ²
m	mass of core	MPP	141	g
(for μ _i 125)	(for μ _i 125)	Sendust	98.1	g
		High-Flux	133	g

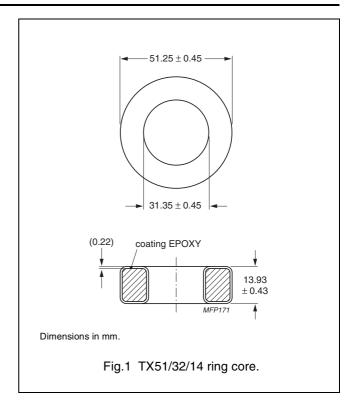
Coating

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 51.69, ID \geq 30.94, H \leq 14.35

			B (mT) at	CORE LOSS (W) at		
GRADE	A _L (nH)	μί	H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; B = 100 mT; T = 25 °C	TYPE NUMBER	
MPP	17 ± 8 %	14	≥ 640	23.9	TX51/14-M2-A17	
	32 ± 8 %	26	≥ 700	19.1	TX51/14-M2-A32	
	73 ± 8 %	60	≥ 760	11.9	TX51/14-M2-A73	
	152 ± 8 %	125	≥ 800	11.9	TX51/14-M2-A152	
	179 ± 8 %	147	≥ 800	12.7	TX51/14-M2-A179	
	195 ± 8 %	160	≥ 800	12.7	TX51/14-M2-A195	
	210 ± 8 %	173	≥ 800	12.7	TX51/14-M2-A210	
	243 ± 8 %	200	≥ 800	23.9	TX51/14-M2-A243	
	365 ± 8 %	300	≥ 800	23.9	TX51/14-M2-A365	
Sendust (1)	32 ± 8 %	26	≥ 1000	25.5	TX51/14-S7-A32-MC	
	73 ± 8 %	60	≥ 1030	13.6	TX51/14-S7-A73-MC	
	91 ± 8 %	75	≥ 1040	13.6	TX51/14-S7-A91-MC	
	109 ± 8 %	90	≥ 1050	13.6	TX51/14-S7-A103-MC	
	152 ± 8 %	125	≥ 1060	13.6	TX51/14-S7-A152-MC	
High-Flux	17 ± 8 %	14	≥ 890	39.8	TX51/14-H2-A17	
	32 ± 8 %	26	≥ 980	31.9	TX51/14-H2-A32	
	73 ± 8 %	60	≥ 1280	28.7	TX51/14-H2-A73	
	152 ± 8 %	125	≥ 1370	31.9	TX51/14-H2-A152	

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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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Life support applications — These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.

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.	

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