

DATA SHEET

TX51/32/14
Alloy powder toroids

New data

2008 Sep 01

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TX51/32/14

RING CORES (TOROIDS)

Effective core parameters

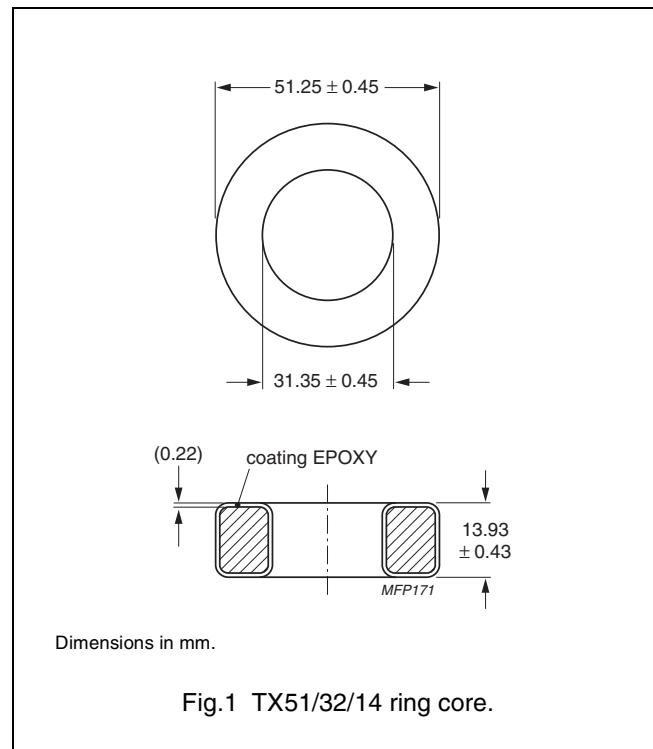
SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	1.02	mm ⁻¹	
V_e	effective volume	15900	mm ³	
l_e	effective length	127	mm	
A_e	effective area	125	mm ²	
m	mass of core (for μ_i 125)	MPP	141	g
		Sendust	98.1	g
		High-Flux	133	g

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 ≤ 51.69, ID ≥ 30.94, H ≤ 14.35

GRADE	A_L (nH)	μ_i	B (mT) at	CORE LOSS (W) at	TYPE NUMBER
			H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; B = 100 mT; T = 25 °C	
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
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




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		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.
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Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support		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.