FERROXCUBE

DATA SHEET

TX40/24/15 Alloy powder toroids

New data 2008 Sep 01



Alloy powder toroids

TX40/24/15

RING CORES (TOROIDS)

Effective core parameters

SYMBOL	PARAME	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	0.920	mm ⁻¹	
Ve	effective volume		10500	mm ³
l _e	effective length	98.4	mm	
A _e	effective area	107	mm ²	
m	mass of core	MPP	91.7	g
	(for μ _i 125)	Sendust	64.9	g
		High-Flux	86.5	g

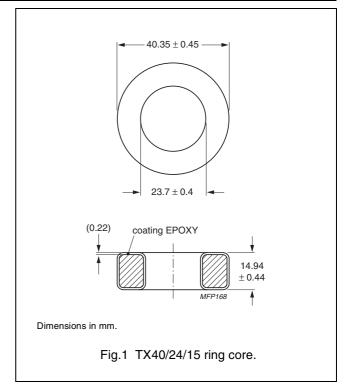
Coating

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 40.72, ID \geq 23.3, H \leq 15.37

GRADE	A _L (nH)	μ_i	B (mT) at	CORE LOSS (W) at	
			H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; B = 100 mT; T = 25 °C	TYPE NUMBER
MPP	19 ± 8 %	14	≥ 640	15.8	TX40/15-M2-A19
	35 ± 8 %	26	≥ 700	12.6	TX40/15-M2-A35
	81 ± 8 %	60	≥ 760	7.87	TX40/15-M2-A81
	168 ± 8 %	125	≥ 800	7.87	TX40/15-M2-A168
	198 ± 8 %	147	≥ 800	8.40	TX40/15-M2-A198
	215 ± 8 %	160	≥ 800	8.40	TX40/15-M2-A215
	233 ± 8 %	173	≥ 800	8.40	TX40/15-M2-A233
	269 ± 8 %	200	≥ 800	15.8	TX40/15-M2-A269
	403 ± 8 %	300	≥ 800	15.8	TX40/15-M2-A403
Sendust (1)	35 ± 8 %	26	≥ 1000	16.8	TX40/15-S7-A35-MC
	81 ± 8 %	60	≥ 1030	8.98	TX40/15-S7-A81-MC
	101 ± 8 %	75	≥ 1040	8.98	TX40/15-S7-A101-MC
	121 ± 8 %	90	≥ 1050	8.98	TX40/15-S7-A121-MC
	168 ± 8 %	125	≥ 1060	8.98	TX40/15-S7-A168-MC
High-Flux	19 ± 8 %	14	≥ 890	26.3	TX40/15-H2-A19
	35 ± 8 %	26	≥ 980	21.0	TX40/15-H2-A35
-	81 ± 8 %	60	≥ 1280	18.9	TX40/15-H2-A81
	168 ± 8 %	125	≥ 1370	21.0	TX40/15-H2-A168
	198 ± 8 %	147	≥ 1385	23.1	TX40/15-H2-A198
	215 ± 8 %	160	≥ 1400	36.8	TX40/15-H2-A215

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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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