

DATA SHEET

TX47/24/18
Alloy powder toroids

New data

2008 Sep 01

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RING CORES (TOROIDS)

Effective core parameters

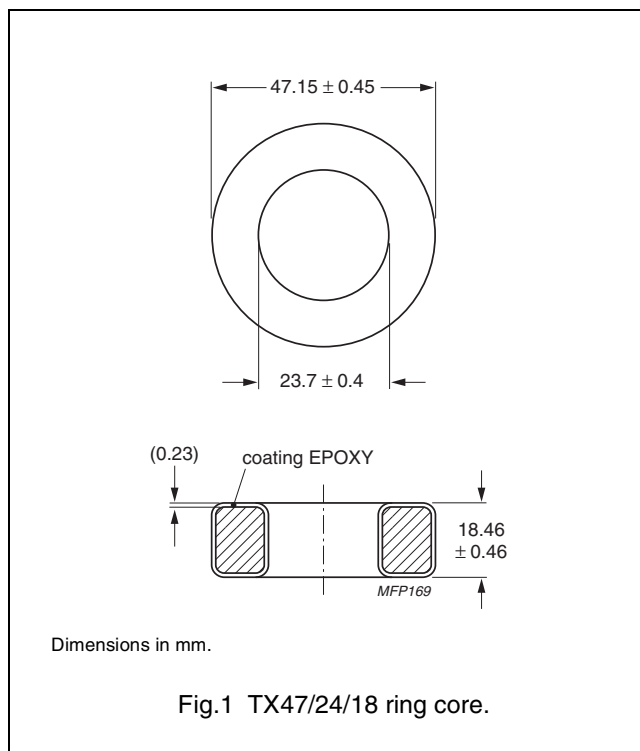
SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	0.540	mm ⁻¹	
V_e	effective volume	21300	mm ³	
l_e	effective length	107	mm	
A_e	effective area	199	mm ²	
m	mass of core (for μ_i 125)	MPP	181	g
		Sendust	131	g
		High-Flux	171	g

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 ≤ 47.63, ID ≥ 23.32, H ≤ 18.92

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	32 ± 8 %	14	≥ 640	32.0	TX47/18-M2-A32
	59 ± 8 %	26	≥ 700	25.6	TX47/18-M2-A59
	135 ± 8 %	60	≥ 760	16.0	TX47/18-M2-A135
	281 ± 8 %	125	≥ 800	16.0	TX47/18-M2-A281
	330 ± 8 %	147	≥ 800	17.0	TX47/18-M2-A330
	360 ± 8 %	160	≥ 800	17.0	TX47/18-M2-A360
	390 ± 8 %	173	≥ 800	17.0	TX47/18-M2-A390
	450 ± 8 %	200	≥ 800	32.0	TX47/18-M2-A450
	674 ± 8 %	300	≥ 800	32.0	TX47/18-M2-A674
Sendust (1)	59 ± 8 %	26	≥ 1000	34.1	TX47/18-S7-A59-MC
	135 ± 8 %	60	≥ 1030	18.2	TX47/18-S7-A135-MC
	169 ± 8 %	75	≥ 1040	18.2	TX47/18-S7-A169-MC
	202 ± 8 %	90	≥ 1050	18.2	TX47/18-S7-A202-MC
	281 ± 8 %	125	≥ 1060	18.2	TX47/18-S7-A281-MC
High-Flux	32 ± 8 %	14	≥ 890	53.3	TX47/18-H2-A32
	59 ± 8 %	26	≥ 980	42.6	TX47/18-H2-A59
	135 ± 8 %	60	≥ 1280	38.3	TX47/18-H2-A135
	281 ± 8 %	125	≥ 1370	42.6	TX47/18-H2-A281

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.