

DATA SHEET

TX47/28/15
Alloy powder toroids

New data

2008 Sep 01

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RING CORES (TOROIDS)

Effective core parameters

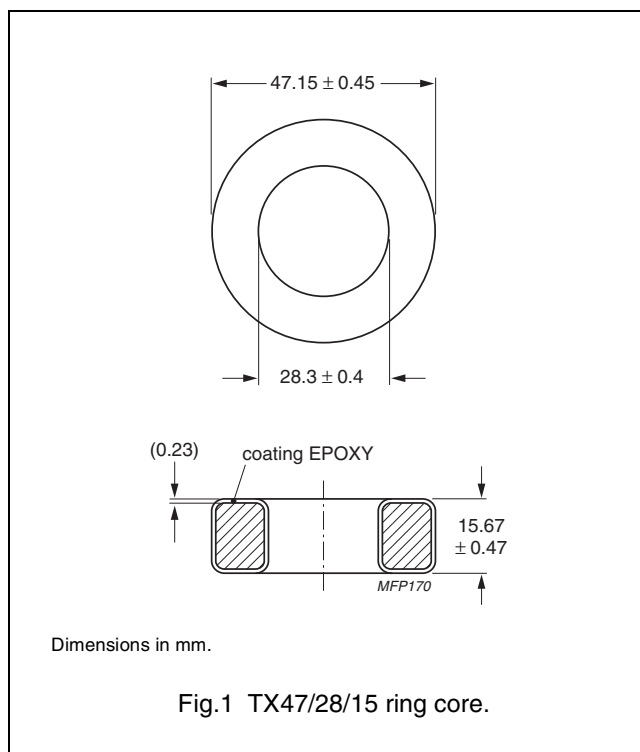
SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(l/A)$	core factor (C1)	0.868	mm ⁻¹	
V_e	effective volume	15600	mm ³	
l_e	effective length	116	mm	
A_e	effective area	134	mm ²	
m	mass of core (for μ_i 125)	MPP	130	g
		Sendust	95.8	g
		High-Flux	123	g

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 ≥ 27.89, H ≤ 16.13

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	20 ± 8 %	14	≥ 640	23.4	TX47/15-M2-A20
	37 ± 8 %	26	≥ 700	18.7	TX47/15-M2-A37
	86 ± 8 %	60	≥ 760	11.7	TX47/15-M2-A86
	178 ± 8 %	125	≥ 800	11.7	TX47/15-M2-A178
	210 ± 8 %	147	≥ 800	12.5	TX47/15-M2-A210
	228 ± 8 %	160	≥ 800	12.5	TX47/15-M2-A228
	246 ± 8 %	173	≥ 800	12.5	TX47/15-M2-A248
	285 ± 8 %	200	≥ 800	23.4	TX47/15-M2-A285
Sendust ⁽¹⁾	427 ± 8 %	300	≥ 800	23.4	TX47/15-M2-A427
	37 ± 8 %	26	≥ 1000	24.9	TX47/15-S7-A37-MC
	86 ± 8 %	60	≥ 1030	13.3	TX47/15-S7-A86-MC
	107 ± 8 %	75	≥ 1040	13.3	TX47/15-S7-A107-MC
	128 ± 8 %	90	≥ 1050	13.3	TX47/15-S7-A128-MC
High-Flux	178 ± 8 %	125	≥ 1060	13.3	TX47/15-S7-A178-MC
	20 ± 8 %	14	≥ 890	39.0	TX47/15-H2-A20
	37 ± 8 %	26	≥ 980	31.2	TX47/15-H2-A37
	86 ± 8 %	60	≥ 1280	28.0	TX47/15-H2-A86
	178 ± 8 %	125	≥ 1370	31.2	TX47/15-H2-A178




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.