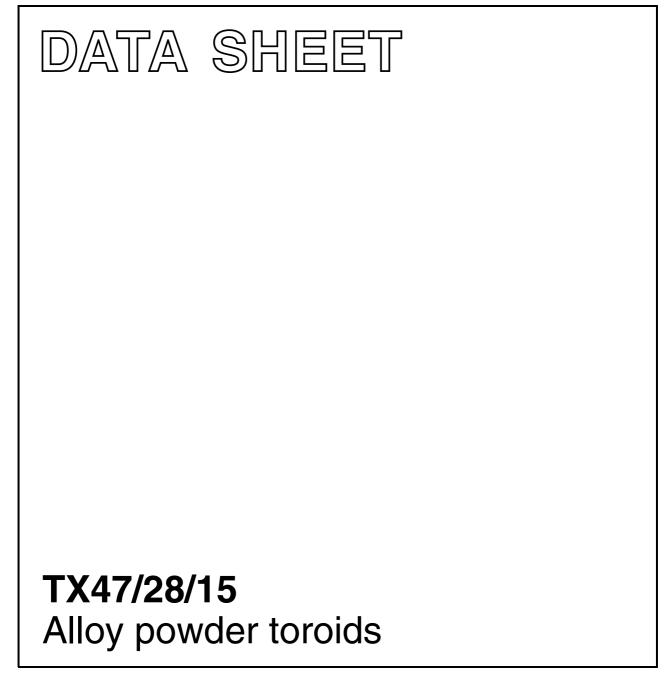
FERROXCUBE



New data

2008 Sep 01



Alloy powder toroids

TX47/28/15

RING CORES (TOROIDS)

Effective core parameters

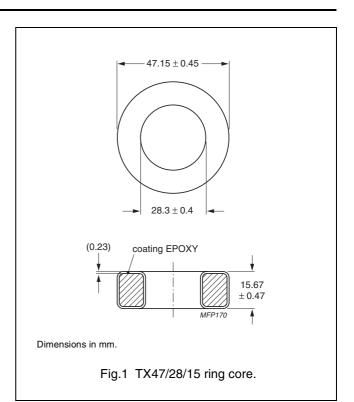
SYMBOL	PARAME	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	0.868	mm ⁻¹	
Ve	effective volume	15600	mm ³	
l _e	effective length	116	mm	
A _e	effective area	134	mm ²	
m	mass of core	MPP	130	g
	(for μ _i 125)	Sendust	95.8	g
		High-Flux	123	g

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 \leq 47.63, ID \geq 27.89, H \leq 16.13

GRADE	A _L (nH)	μ	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 ℃	
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
	$178\pm8~\%$	125	≥ 800	11.7	TX47/15-M2-A178
	210 ± 8 %	147	≥ 800	12.5	TX47/15-M2-A210
	$228 \pm 8~\%$	160	≥ 800	12.5	TX47/15-M2-A228
	$246\pm8~\%$	173	≥ 800	12.5	TX47/15-M2-A248
	$285\pm8~\%$	200	≥ 800	23.4	TX47/15-M2-A285
	427 ± 8 %	300	≥ 800	23.4	TX47/15-M2-A427
Sendust (1)	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
	178±8 %	125	≥ 1060	13.3	TX47/15-S7-A178-MC
High-Flux	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

Alloy powder toroids

DATA SHEET STATUS DEFINITIONS

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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.

DISCLAIMER

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.