

# DATA SHEET

**TX36/22/11**  
Alloy powder toroids

New data

2008 Sep 01

## Alloy powder toroids

TX36/22/11

## RING CORES (TOROIDS)

## Effective core parameters

SYMBOL	PARAMETER		VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)		1.32	mm <sup>-1</sup>
V <sub>e</sub>	effective volume		6090	mm <sup>3</sup>
l <sub>e</sub>	effective length		89.8	mm
A <sub>e</sub>	effective area		67.8	mm <sup>2</sup>
m	mass of core (for $\mu_i$ 125)	MPP	51.8	g
		Sendust	37.4	g
		High-Flux	48.9	g

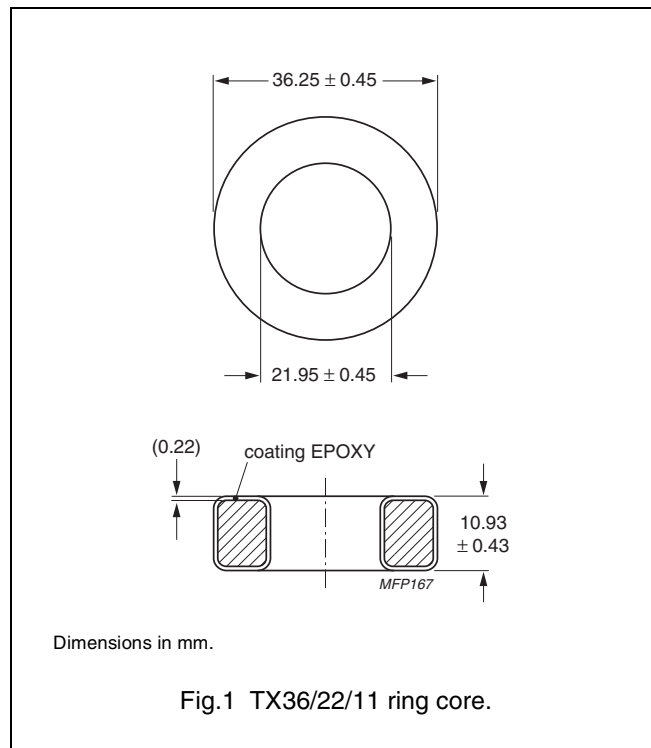
## Coating

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 ≤ 36.63, ID ≥ 21.54, H ≤ 11.28

GRADE	$A_L$ (nH)	$\mu_i$	B (mT) at	CORE LOSS (W) at	TYPE NUMBER
			H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; $\hat{B} = 100$ mT; T = 25 °C	
MPP	13 ± 8 %	14	≥ 640	9.13	TX36/11-M2-A13
	24 ± 8 %	26	≥ 700	7.31	TX36/11-M2-A24
	56 ± 8 %	60	≥ 760	4.57	TX36/11-M2-A56
	117 ± 8 %	125	≥ 800	4.57	TX36/11-M2-A117
	138 ± 8 %	147	≥ 800	4.87	TX36/11-M2-A138
	150 ± 8 %	160	≥ 800	4.87	TX36/11-M2-A150
	162 ± 8 %	173	≥ 800	4.87	TX36/11-M2-A162
	187 ± 8 %	200	≥ 800	9.13	TX36/11-M2-A187
	281 ± 8 %	300	≥ 800	9.13	TX36/11-M2-A281
Sendust <sup>(1)</sup>	24 ± 8 %	26	≥ 1000	9.74	TX36/11-S7-A24-MC
	56 ± 8 %	60	≥ 1030	5.21	TX36/11-S7-A56-MC
	70 ± 8 %	75	≥ 1040	5.21	TX36/11-S7-A70-MC
	84 ± 8 %	90	≥ 1050	5.21	TX36/11-S7-A84-MC
	117 ± 8 %	125	≥ 1060	5.21	TX36/11-S7-A117-MC
High-Flux	13 ± 8 %	14	≥ 890	15.2	TX36/11-H2-A13
	24 ± 8 %	26	≥ 980	12.2	TX36/11-H2-A24
	56 ± 8 %	60	≥ 1280	11.0	TX36/11-H2-A56
	117 ± 8 %	125	≥ 1370	12.2	TX36/11-H2-A117
	138 ± 8 %	147	≥ 1385	13.4	TX36/11-H2-A138
	150 ± 8 %	160	≥ 1400	21.3	TX36/11-H2-A150

## Alloy powder toroids

TX36/22/11




## 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.

## 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		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		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		These products are <b>not</b> recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.