

# DATA SHEET

**TX3.9/2.2/2.5**  
Alloy powder toroids

New data

2008 Sep 01

**RING CORES (TOROIDS)**

**Effective core parameters**

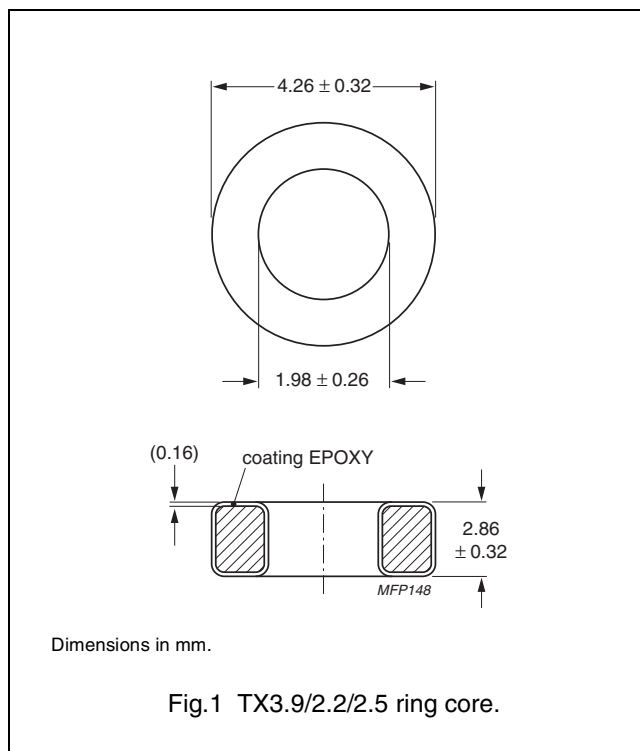
SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(l/A)$	core factor (C1)	4.46	mm <sup>-1</sup>	
$V_e$	effective volume	19.9	mm <sup>3</sup>	
$l_e$	effective length	9.42	mm	
$A_e$	effective area	2.11	mm <sup>2</sup>	
m	mass of core (for $\mu_i$ 125)	MPP	0.17	g
		Sendust	0.12	g

**Coating**

The cores are coated with epoxy. The colour is cream (Sendust), grey (MPP) or khaki (High-Flux). Maximum operating temperature is 200 °C. Parylene coating is also available (transparent, maximum operating temperature 130 °C).

**Isolation voltage**

AC isolation voltage : 1000 V (Parylene : 750 V). Contacts are applied on the edge of the ring core, which is also the critical point for the winding operation.



**Ring core data**

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; B = 100 mT; T = 25 °C	
MPP	35 ± 8 %	125	≥ 800	0.015	TX3.9/2.5-M2-A35
	41 ± 8 %	147	≥ 800	0.016	TX3.9/2.5-M2-A41
	45 ± 8 %	160	≥ 800	0.016	TX3.9/2.5-M2-A45
	48 ± 8 %	173	≥ 800	0.016	TX3.9/2.5-M2-A48
	56 ± 8 %	200	≥ 800	0.030	TX3.9/2.5-M2-A56
	84 ± 8 %	300	≥ 800	0.030	TX3.9/2.5-M2-A84
Sendust	17 ± 15 %	60	≥ 1030	0.017	TX3.9/2.5-S7-A17
	21 ± 15 %	75	≥ 1040	0.017	TX3.9/2.5-S7-A21
	25 ± 15 %	90	≥ 1050	0.017	TX3.9/2.5-S7-A25
	35 ± 15 %	125	≥ 1060	0.017	TX3.9/2.5-S7-A35

**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
<b>Prototype</b>		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.
<b>Design-in</b>		These products are recommended for new designs.
<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
<b>Support</b>		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.