

DATA SHEET

TX13/7.6/4.8
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)	2.74	mm ⁻¹
V_e	effective volume	356	mm ³
l_e	effective length	31.2	mm
A_e	effective area	11.4	mm ²
m	mass of core (for μ_i 125)	MPP	3.07 g
		Sendust	2.20 g
		High-Flux	2.90 g

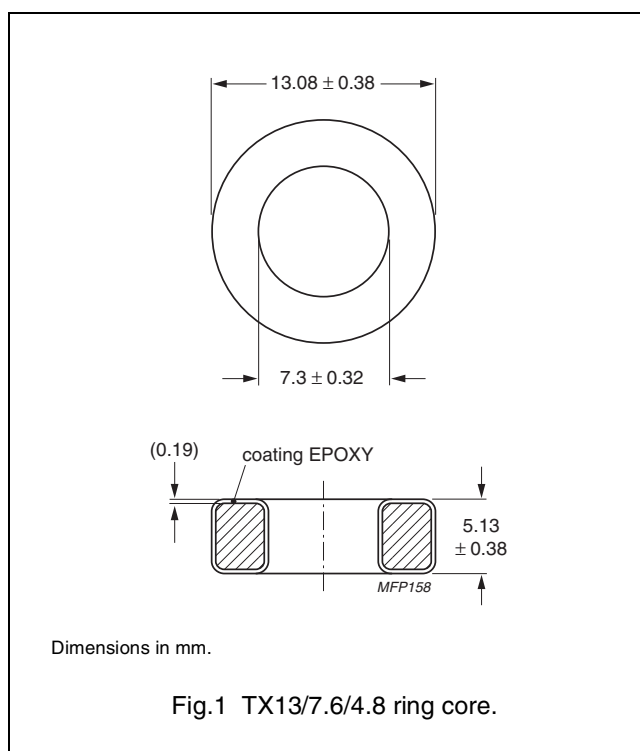
Coating

The cores are coated with epoxy. The colour is black (Sendust), grey (MPP) or khaki (High-Flux). Maximum operating temperature is 200 °C. 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 - Note 1. Mechanical dimensions : OD ≤ 13.46, ID ≥ 6.99, H ≤ 5.51



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	6.4 ± 8 %	14	≥ 640	0.534	TX13/4.8-M2-A6.4
	12 ± 8 %	26	≥ 700	0.427	TX13/4.8-M2-A12
	27 ± 8 %	60	≥ 760	0.267	TX13/4.8-M2-A27
	56 ± 8 %	125	≥ 800	0.267	TX13/4.8-M2-A56
	67 ± 8 %	147	≥ 800	0.285	TX13/4.8-M2-A67
	72 ± 8 %	160	≥ 800	0.285	TX13/4.8-M2-A72
	79 ± 8 %	173	≥ 800	0.285	TX13/4.8-M2-A79
	90 ± 8 %	200	≥ 800	0.534	TX13/4.8-M2-A90
Sendust ⁽¹⁾	134 ± 8 %	300	≥ 800	0.534	TX13/4.8-M2-A134
	27 ± 8 %	60	≥ 1030	0.304	TX13/4.8-S7-A27-MC
	34 ± 8 %	75	≥ 1040	0.304	TX13/4.8-S7-A34-MC
	40 ± 8 %	90	≥ 1050	0.304	TX13/4.8-S7-A40-MC
High-Flux	56 ± 8 %	125	≥ 1060	0.304	TX13/4.8-S7-A56-MC
	6.4 ± 8 %	14	≥ 890	0.890	TX13/4.8-H2-A6.4
	12 ± 8 %	26	≥ 980	0.712	TX13/4.8-H2-A12
	27 ± 8 %	60	≥ 1280	0.641	TX13/4.8-H2-A27
	56 ± 8 %	125	≥ 1370	0.712	TX13/4.8-H2-A56
	67 ± 8 %	147	≥ 1385	0.783	TX13/4.8-H2-A67
	72 ± 8 %	160	≥ 1400	1.25	TX13/4.8-H2-A72




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
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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.