

# DATA SHEET

**TX6.4/2.8/2.8**  
Alloy powder toroids

New data

2008 Sep 01

# Alloy powder toroids

TX6.4/2.8/2.8

## RING CORES (TOROIDS)

### Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	2.90	mm <sup>-1</sup>
$V_e$	effective volume	64.0	mm <sup>3</sup>
$l_e$	effective length	13.6	mm
$A_e$	effective area	4.70	mm <sup>2</sup>
m	mass of core (for $\mu_i$ 125)	MPP	0.59 g
		Sendust	0.39 g
		High-Flux	0.55 g

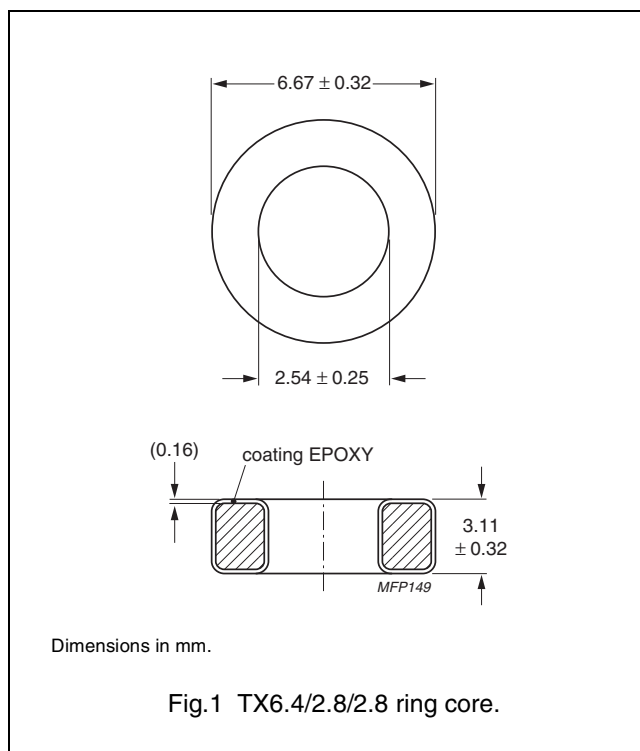
### Coating

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 ≤ 33.83, ID ≥ 19.3, H ≤ 11.61



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	6 ± 8 %	14	≥ 640	0.096	TX6.4/2.8-M2-A6
	10 ± 8 %	26	≥ 700	0.077	TX6.4/2.8-M2-A10
	24 ± 8 %	60	≥ 760	0.048	TX6.4/2.8-M2-A24
	50 ± 8 %	125	≥ 800	0.048	TX6.4/2.8-M2-A50
	59 ± 8 %	147	≥ 800	0.051	TX6.4/2.8-M2-A59
	64 ± 8 %	160	≥ 800	0.051	TX6.4/2.8-M2-A64
	69 ± 8 %	173	≥ 800	0.051	TX6.4/2.8-M2-A69
	80 ± 8 %	200	≥ 800	0.096	TX6.4/2.8-M2-A80
Sendust <sup>(1)</sup>	120 ± 8 %	300	≥ 800	0.096	TX6.4/2.8-M2-A120
	24 ± 12 %	60	≥ 1030	0.055	TX6.4/2.8-S7-A24-MC
	30 ± 12 %	75	≥ 1040	0.055	TX6.4/2.8-S7-A30-MC
	36 ± 12 %	90	≥ 1050	0.055	TX6.4/2.8-S7-A36-MC
High-Flux	50 ± 12 %	125	≥ 1060	0.055	TX6.4/2.8-S7-A50-MC
	6 ± 8 %	14	≥ 890	0.160	TX6.4/2.8-H2-A6
	10 ± 8 %	26	≥ 980	0.128	TX6.4/2.8-H2-A10
	24 ± 8 %	60	≥ 1280	0.115	TX6.4/2.8-H2-A24
	50 ± 8 %	125	≥ 1370	0.128	TX6.4/2.8-H2-A50
	59 ± 8 %	147	≥ 1385	0.141	TX6.4/2.8-H2-A59
	64 ± 8 %	160	≥ 1400	0.224	TX6.4/2.8-H2-A64




**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.
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**PRODUCT STATUS DEFINITIONS**

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