

# DATA SHEET

**TX20/13/6.4**  
Alloy powder toroids

New data

2008 Sep 01

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## RING CORES (TOROIDS)

### Effective core parameters

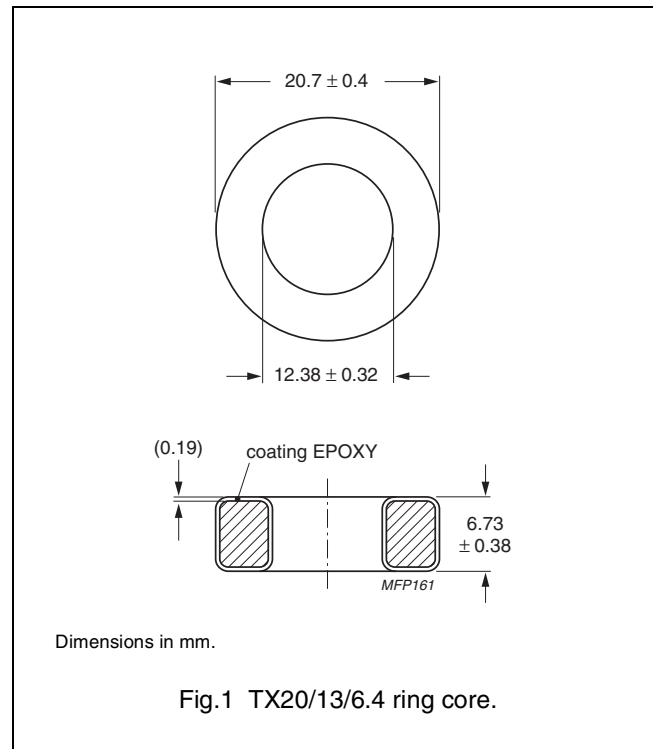
SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	2.25	mm <sup>-1</sup>	
$V_e$	effective volume	1150	mm <sup>3</sup>	
$l_e$	effective length	50.9	mm	
$A_e$	effective area	22.6	mm <sup>2</sup>	
m	mass of core (for $\mu_i$ 125)	MPP	9.40	g
		Sendust	7.10	g
		High-Flux	8.90	g

### Coating

The cores are coated with epoxy. The colour is black (Sendust), grey (MPP) or khaki (High-Flux). Maximum operating temperature is 200 °C.

### 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 ≤ 21.1, ID ≥ 12.07, H ≤ 7.11

GRADE	A <sub>L</sub> (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; B̂ = 100 mT; T = 25 °C	
MPP	7.8 ± 8 %	14	≥ 640	1.73	TX20/6.4-M2-A7.8
	14 ± 8 %	26	≥ 700	1.38	TX20/6.4-M2-A14
	32 ± 8 %	60	≥ 760	0.863	TX20/6.4-M2-A32
	68 ± 8 %	125	≥ 800	0.863	TX20/6.4-M2-A68
	81 ± 8 %	147	≥ 800	0.920	TX20/6.4-M2-A81
	87 ± 8 %	160	≥ 800	0.920	TX20/6.4-M2-A87
	109 ± 8 %	200	≥ 800	1.73	TX20/6.4-M2-A109
Sendust <sup>(1)</sup>	163 ± 8 %	300	≥ 800	1.73	TX20/6.4-M2-A163
	32 ± 8 %	60	≥ 1030	0.983	TX20/6.4-S7-A32-MC
	41 ± 8 %	75	≥ 1040	0.983	TX20/6.4-S7-A41-MC
	49 ± 8 %	90	≥ 1050	0.983	TX20/6.4-S7-A49-MC
High-Flux	68 ± 8 %	125	≥ 1060	0.983	TX20/6.4-S7-A68-MC
	7.8 ± 8 %	14	≥ 890	2.88	TX20/6.4-H2-A7.8
	14 ± 8 %	26	≥ 980	2.30	TX20/6.4-H2-A14
	32 ± 8 %	60	≥ 1280	2.07	TX20/6.4-H2-A32
	68 ± 8 %	125	≥ 1370	2.30	TX20/6.4-H2-A68
	81 ± 8 %	147	≥ 1385	2.53	TX20/6.4-H2-A81
	87 ± 8 %	160	≥ 1400	4.03	TX20/6.4-H2-A87

**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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