

DATA SHEET

TX17/9.7/6.4
Powder material toroids

New data

2007 Jan 01

RING CORES (TOROIDS)

Effective core parameters

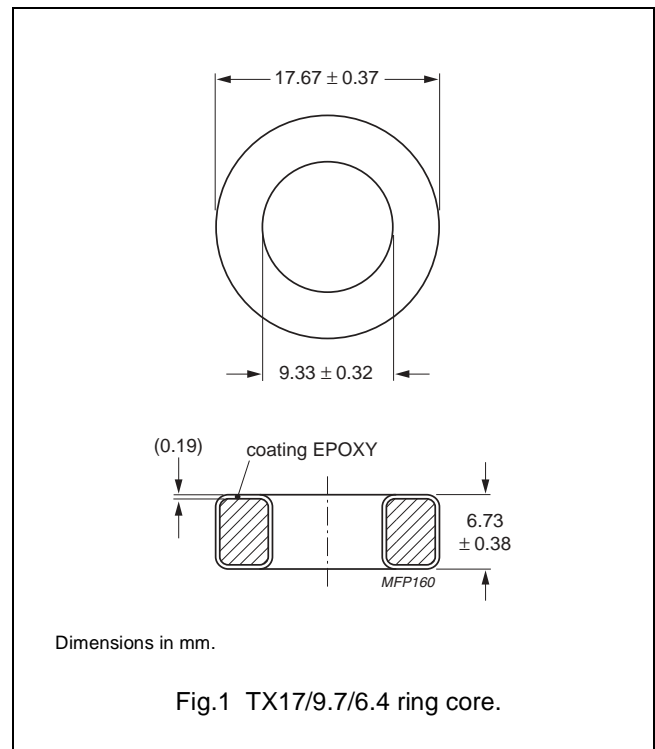
SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.78	mm ⁻¹
V_e	effective volume	960	mm ³
l_e	effective length	41.4	mm
A_e	effective area	23.2	mm ²
m	mass of core (for μ_i 125)	MPP	8.16 g
		Sendust	5.90 g
		High-Flux	7.70 g

Coating

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

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

GRADE	A_L (nH)	μ_i	TYPE NUMBER
MPP	10 ± 8 %	14	TX17/6.4-M2-A10
	19 ± 8 %	26	TX17/6.4-M2-A19
	43 ± 8 %	60	TX17/6.4-M2-A43
	89 ± 8 %	125	TX17/6.4-M2-A89
	105 ± 8 %	147	TX17/6.4-M2-A105
	114 ± 8 %	160	TX17/6.4-M2-A114
	123 ± 8 %	173	TX17/6.4-M2-A123
	142 ± 8 %	200	TX17/6.4-M2-A142
Sendust	214 ± 8 %	300	TX17/6.4-M2-A214
	43 ± 8 %	60	TX17/6.4-S7-A43
	53 ± 8 %	75	TX17/6.4-S7-A53
	64 ± 8 %	90	TX17/6.4-S7-A64
	89 ± 8 %	125	TX17/6.4-S7-A89

Powder material toroids

TX17/9.7/6.4

GRADE	A_L (nH)	μ_i	TYPE NUMBER
High-Flux	$10 \pm 8 \%$	14	TX17/6.4-H2-A10
	$19 \pm 8 \%$	26	TX17/6.4-H2-A19
	$43 \pm 8 \%$	60	TX17/6.4-H2-A43
	$89 \pm 8 \%$	125	TX17/6.4-H2-A89
	$105 \pm 8 \%$	147	TX17/6.4-H2-A105
	$114 \pm 8 \%$	160	TX17/6.4-H2-A114

Properties of cores under power conditions

GRADE	μ_i	B (mT) at	CORE LOSS (W) at
		H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; $\hat{B} = 100$ mT; T = 25 °C
MPP	14	≥ 640	1.44
	26	≥ 700	1.15
	60	≥ 760	0.720
	125	≥ 800	0.720
	147	≥ 800	0.768
	160	≥ 800	0.768
	173	≥ 800	0.768
	200	≥ 800	1.44
	300	≥ 800	1.44
Sendust	60	≥ 1030	0.821
	75	≥ 1040	0.821
	90	≥ 1050	0.821
	125	≥ 1060	0.821
High-Flux	14	≥ 890	2.40
	26	≥ 980	1.92
	60	≥ 1280	1.73
	125	≥ 1370	1.92
	147	≥ 1385	2.11
	160	≥ 1400	3.36

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
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.
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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.