

DATA SHEET

TX6.6/2.7/4.8
Powder material toroids

New data

2007 Jan 01

RING CORES (TOROIDS)

Effective core parameters

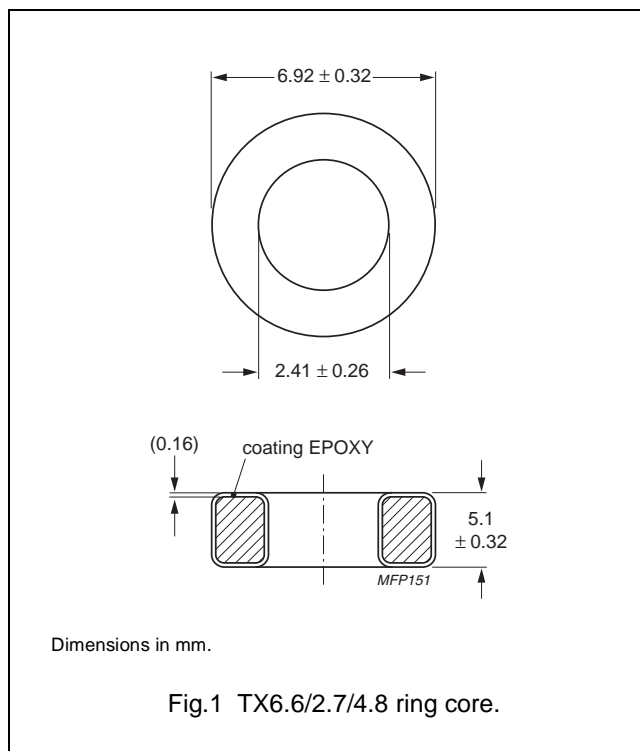
SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.48	mm ⁻¹
V_e	effective volume	125	mm ³
l_e	effective length	13.6	mm
A_e	effective area	9.2	mm ²
m	mass of core (for μ_i 125)	MPP	1.09 g
		Sendust	0.77 g
		High-Flux	1.03 g

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)	μ_i	TYPE NUMBER
MPP	14 ± 8 %	14	TX6.6/4.8-M2-A14
	21 ± 8 %	26	TX6.6/4.8-M2-A21
	50 ± 8 %	60	TX6.6/4.8-M2-A50
	103 ± 8 %	125	TX6.6/4.8-M2-A103
	122 ± 8 %	147	TX6.6/4.8-M2-A122
	132 ± 8 %	160	TX6.6/4.8-M2-A132
	144 ± 8 %	173	TX6.6/4.8-M2-A144
	165 ± 8 %	200	TX6.6/4.8-M2-A165
Sendust	247 ± 8 %	300	TX6.6/4.8-M2-A247
	50 ± 12 %	60	TX6.6/4.8-S7-A50
	62 ± 12 %	75	TX6.6/4.8-S7-A62
	74 ± 12 %	90	TX6.6/4.8-S7-A74
	103 ± 12 %	125	TX6.6/4.8-S7-A103

Powder material toroids

TX6.6/2.7/4.8

GRADE	A_L (nH)	μ_i	TYPE NUMBER
High-Flux	$12 \pm 8 \%$	14	TX6.6/4.8-H2-A12
	$21 \pm 8 \%$	26	TX6.6/4.8-H2-A21
	$50 \pm 8 \%$	60	TX6.6/4.8-H2-A50
	$103 \pm 8 \%$	125	TX6.6/4.8-H2-A103
	$122 \pm 8 \%$	147	TX6.6/4.8-H2-A122
	$132 \pm 8 \%$	160	TX6.6/4.8-H2-A132

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	0.188
	26	≥ 700	0.150
	60	≥ 760	0.094
	125	≥ 800	0.094
	147	≥ 800	0.100
	160	≥ 800	0.100
	173	≥ 800	0.100
	200	≥ 800	0.188
	300	≥ 800	0.188
Sendust	60	≥ 1030	0.107
	75	≥ 1040	0.107
	90	≥ 1050	0.107
	125	≥ 1060	0.107
High-Flux	14	≥ 890	0.314
	26	≥ 980	0.251
	60	≥ 1280	0.226
	125	≥ 1370	0.251
	147	≥ 1385	0.276
	160	≥ 1400	0.439




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.