DATA SHEET

TX6.4/2.8/2.8
Alloy powder toroids

New data

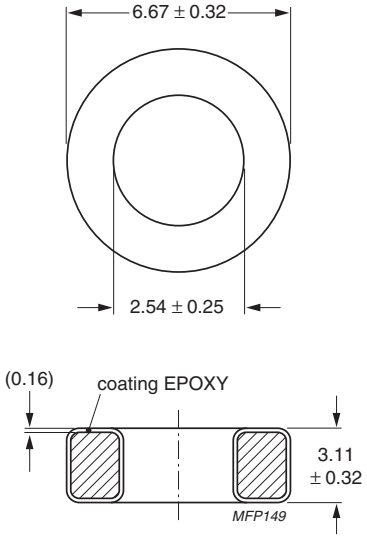
2008 Sep 01

FERROXCUBE
A YAGEO COMPANY

RING CORES (TOROIDS)

Effective core parameters

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



Dimensions in mm.

Fig.1 TX6.4/2.8/2.8 ring core.

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)	μ_i	B (mT) at	CORE LOSS (W) at	TYPE NUMBER
			H = 100 kA/m; f = 10 kHz; T = 25 °C	$\hat{B}$ = 100 mT; f = 100 kHz; 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
	120 ± 8 %	300	≥ 800	0.096	TX6.4/2.8-M2-A120
Sendust (1)	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
	50 ± 12 %	125	≥ 1060	0.055	TX6.4/2.8-S7-A50–MC
High-Flux	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.
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	prot	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	sup	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.