DATA SHEET

TX57/26/15
Powder material toroids

New data

2007 Jan 01

FERROXCUBE
A YAGEO COMPANY

RING CORES (TOROIDS)

Effective core parameters

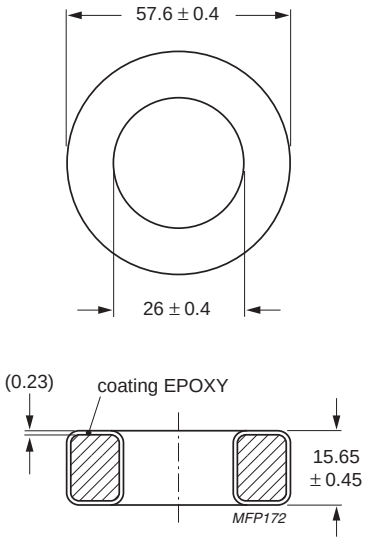
SYMBOL	PARAMETER		VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)		0.546	mm^{-1}
V_e	effective volume		28600	mm^3
l_e	effective length		125	mm
A_e	effective area		229	mm^2
m	mass of core (for μ_i 125)	MPP	240	g
		Sendust	176	g
		High-Flux	226	g

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.



Dimensions in mm.

Fig.1 TX57/26/15 ring core.

Ring core data

GRADE	A_L (nH)	μ_i	TYPE NUMBER
MPP	32 ± 8 %	14	TX57/15-M2-A32
	60 ± 8 %	26	TX57/15-M2-A60
	138 ± 8 %	60	TX57/15-M2-A138
	287 ± 8 %	125	TX57/15-M2-A287
	306 ± 8 %	147	TX57/15-M2-A306
	333 ± 8 %	160	TX57/15-M2-A333
	360 ± 8 %	173	TX57/15-M2-A360
	417 ± 8 %	200	TX57/15-M2-A417
Sendust	60 ± 8 %	26	TX57/15-S7-A60
	138 ± 8 %	60	TX57/15-S7-A138
	172 ± 8 %	75	TX57/15-S7-A172
	207 ± 8 %	90	TX57/15-S7-A207
	287 ± 8 %	125	TX57/15-S7-A287

GRADE	A_L (nH)	μ_i	TYPE NUMBER
High-Flux	32 ± 8 %	14	TX57/15-H2-A32
	60 ± 8 %	26	TX57/15-H2-A60
	138 ± 8 %	60	TX57/15-H2-A138
	287 ± 8 %	125	TX57/15-H2-A287

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	$\hat{f}$ = 100 kHz; $\hat{B}$ = 100 mT; T = 25 °C
MPP	14	≥ 640	42.9
	26	≥ 700	34.3
	60	≥ 760	21.5
	125	≥ 800	21.5
	147	≥ 800	22.9
	160	≥ 800	22.9
	173	≥ 800	22.9
	200	≥ 800	42.9
Sendust	26	≥ 1000	45.8
	60	≥ 1030	24.5
	75	≥ 1040	24.5
	90	≥ 1050	24.5
	125	≥ 1060	24.5
High-Flux	14	≥ 890	71.5
	26	≥ 980	57.2
	60	≥ 1280	51.5
	125	≥ 1370	57.2

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.
Design-in	des	These products are recommended for new designs.
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.