

# DATA SHEET

**TX27/15/11**  
Alloy powder toroids

New data

2008 Sep 01

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## RING CORES (TOROIDS)

### Effective core parameters

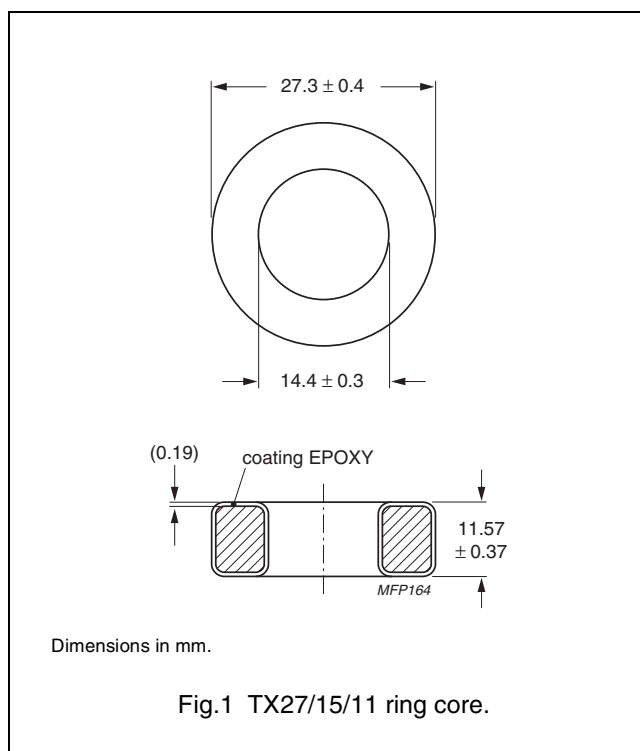
SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(l/A)$	core factor (C1)	0.971	mm <sup>-1</sup>	
$V_e$	effective volume	4150	mm <sup>3</sup>	
$l_e$	effective length	63.5	mm	
$A_e$	effective area	65.4	mm <sup>2</sup>	
m	mass of core (for $\mu_i$ 125)	MPP	35.8	g
		Sendust	25.5	g
		High-Flux	33.8	g

### 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 ≤ 27.7, ID ≥ 14.1, H ≤ 11.99

GRADE	$A_L$ (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; $\hat{B} = 100$ mT; T = 25 °C	
MPP	18 ± 8 %	14	≥ 640	6.23	TX27/11-M2-A18
	32 ± 8 %	26	≥ 700	4.98	TX27/11-M2-A32
	75 ± 8 %	60	≥ 760	3.11	TX27/11-M2-A75
	157 ± 8 %	125	≥ 800	3.11	TX27/11-M2-A157
	185 ± 8 %	147	≥ 800	3.32	TX27/11-M2-A185
	201 ± 8 %	160	≥ 800	3.32	TX27/11-M2-A201
	217 ± 8 %	173	≥ 800	3.32	TX27/11-M2-A217
	251 ± 8 %	200	≥ 800	6.22	TX27/11-M2-A251
	377 ± 8 %	300	≥ 800	6.22	TX27/11-M2-A377
Sendust <sup>(1)</sup>	32 ± 8 %	26	≥ 1000	6.64	TX27/11-S7-A32-MC
	75 ± 8 %	60	≥ 1030	3.55	TX27/11-S7-A75-MC
	94 ± 8 %	75	≥ 1040	3.55	TX27/11-S7-A94-MC
	113 ± 8 %	90	≥ 1050	3.55	TX27/11-S7-A113-MC
	157 ± 8 %	125	≥ 1060	3.55	TX27/11-S7-A157-MC
High-Flux	18 ± 8 %	14	≥ 890	10.4	TX27/11-H2-A18
	32 ± 8 %	26	≥ 980	8.30	TX27/11-H2-A32
	75 ± 8 %	60	≥ 1280	7.47	TX27/11-H2-A75
	157 ± 8 %	125	≥ 1370	8.30	TX27/11-H2-A157
	185 ± 8 %	147	≥ 1385	9.13	TX27/11-H2-A185
	201 ± 8 %	160	≥ 1400	14.5	TX27/11-H2-A201

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## 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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<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
<b>Support</b>		These products are <b>not</b> recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.