

# DATA SHEET

**TX78/49/16**  
Alloy powder toroids

New data

2008 Sep 01

**RING CORES (TOROIDS)**

**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT	
$\Sigma(I/A)$	core factor (C1)	0.879	mm <sup>-1</sup>	
$V_e$	effective volume	45300	mm <sup>3</sup>	
$l_e$	effective length	200	mm	
$A_e$	effective area	227	mm <sup>2</sup>	
m	mass of core (for $\mu_i$ 125)	MPP	377	g
		Sendust	262 <sup>(1)</sup>	g
		High-Flux	356	g

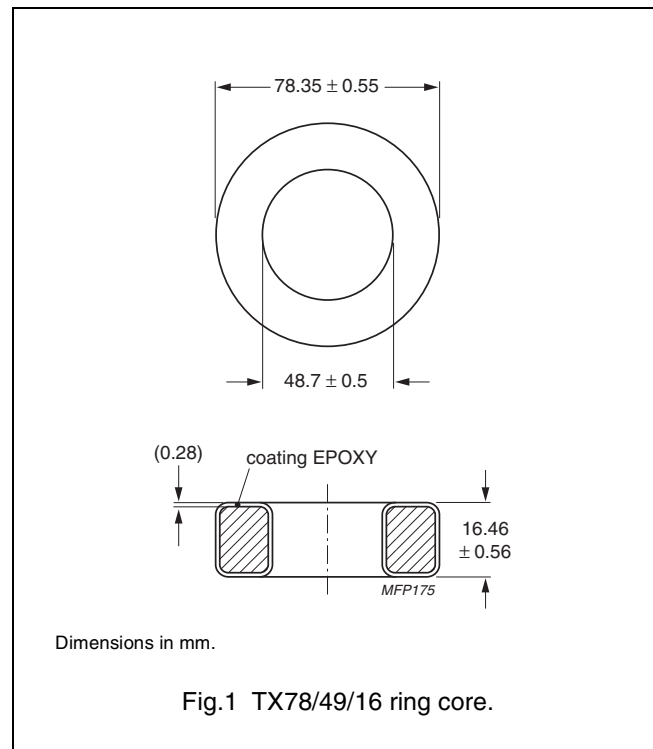
(1) for material permeability 60

**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)	$\mu_i$	B (mT) at	CORE LOSS (W) at	TYPE NUMBER
			H = 100 kA/m; f = 10 kHz; T = 25 °C	f = 100 kHz; B̂ = 100 mT; T = 25 °C	
MPP	20 ± 8 %	14	≥ 640	68.0	TX78/16-M2-A20
	37 ± 8 %	26	≥ 700	54.4	TX78/16-M2-A37
	85 ± 8 %	60	≥ 760	34.0	TX78/16-M2-A85
	178 ± 8 %	125	≥ 800	34.0	TX78/16-M2-A178
Sendust	37 ± 8 %	26	≥ 1000	72.5	TX78/16-S7-A37
	85 ± 8 %	60	≥ 1030	38.7	TX78/16-S7-A85
High-Flux	20 ± 8 %	14	≥ 890	113	TX78/16-H2-A20
	37 ± 8 %	26	≥ 980	90.6	TX78/16-H2-A37
	85 ± 8 %	60	≥ 1280	81.5	TX78/16-H2-A85
	178 ± 8 %	125	≥ 1370	90.6	TX78/16-H2-A178




**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**

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<b>Prototype</b>		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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