

# DATA SHEET

**TX58/41/18**  
Ferrite toroids

Supersedes data of February 2002

2004 Sep 01

## Ferrite toroids

TX58/41/18

## RING CORES (TOROIDS)

## Effective core parameters

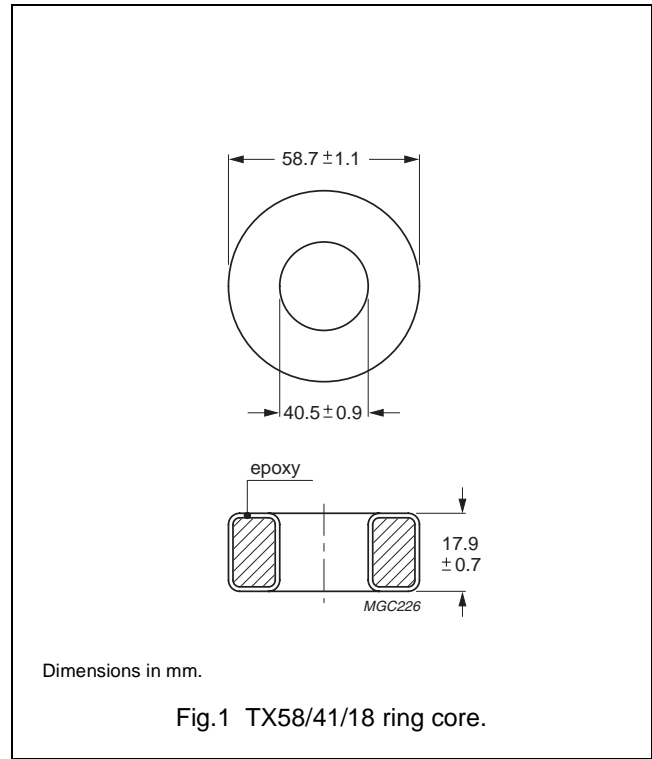
SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.0	$\text{mm}^{-1}$
$V_e$	effective volume	23200	$\text{mm}^3$
$l_e$	effective length	152	mm
$A_e$	effective area	152	$\text{mm}^2$
m	mass of core	$\approx 110$	g

## Coating

The cores are coated with epoxy, flame retardant in accordance with "UL 94V-0"; UL file number E 228348. The colour is white.

## Isolation voltage

DC isolation voltage: 2000 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)	$\mu_i$	TYPE NUMBER
3C90 <small>des</small>	$2890 \pm 25\%$	$\approx 2300$	TX58/41/18-3C90
3C11	$5400 \pm 25\%$	$\approx 4300$	TX58/41/18-3C11
3E25	$6900 \pm 25\%$	$\approx 5500$	TX58/41/18-3E25

## Properties of cores under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B = 200 mT; T = 100 °C	f = 100 kHz; B = 100 mT; T = 100 °C
3C90	$\geq 320$	$\leq 2.6$	$\leq 2.6$

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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
<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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<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.