### **FERROXCUBE**

## DATA SHEET

# TX140/106/25 Ferrite toroids

Supersedes data of September 2004

2008 Sep 01



Ferrite toroids TX140/106/25

#### **RING CORES (TOROIDS)**

#### **Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
Σ(I/A)	core factor (C1)	0.903	mm <sup>-1</sup>
V <sub>e</sub>	effective volume	161 100	mm <sup>3</sup>
l <sub>e</sub>	effective length	382	mm
A <sub>e</sub>	effective area	422	mm <sup>2</sup>
m	mass of core	≈ 800	g

#### Coating

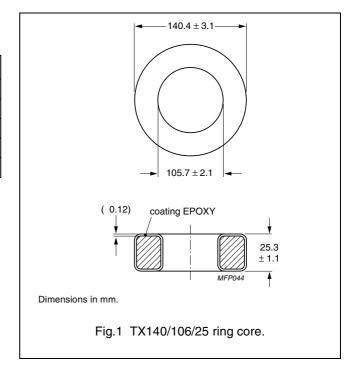
The cores are coated with epoxy, flame retardant in accordance with "UL 94V-0"; UL file number E 235873. The colour is white.

Maximum operating temperature is 200  $^{\circ}$ C.

#### 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 <sub>L</sub> (nH)	μί	TYPE NUMBER
3C90	$3200 \pm 20\%$	≈ <b>2300</b>	TX140/106/25-3C90
3E25	7700 ± 30%	≈ 5500	TX140/106/25-3E25

#### Properties of cores under power conditions

	B (mT) at	CORE LOSS (W) at		
GRADE	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	≥320	≤ 22.7	≤ 22.7	

2008 Sep 01 1786

Ferrite toroids TX140/106/25

#### **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.

#### **DISCLAIMER**

**Life support applications** — These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.

#### **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 <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.

2008 Sep 01 1787