

# DATA SHEET

**TC5.8/3.1/1.5**  
Ferrite toroids

Supersedes data of September 2004

2008 Sep 01

Ferrite toroids

TC5.8/3.1/1.5

RING CORES (TOROIDS)

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	6.52	mm <sup>-1</sup>
$V_e$	effective volume	26.1	mm <sup>3</sup>
$l_e$	effective length	13.0	mm
$A_e$	effective area	2.00	mm <sup>2</sup>
m	mass of core	≈ 0.13	g

Coating

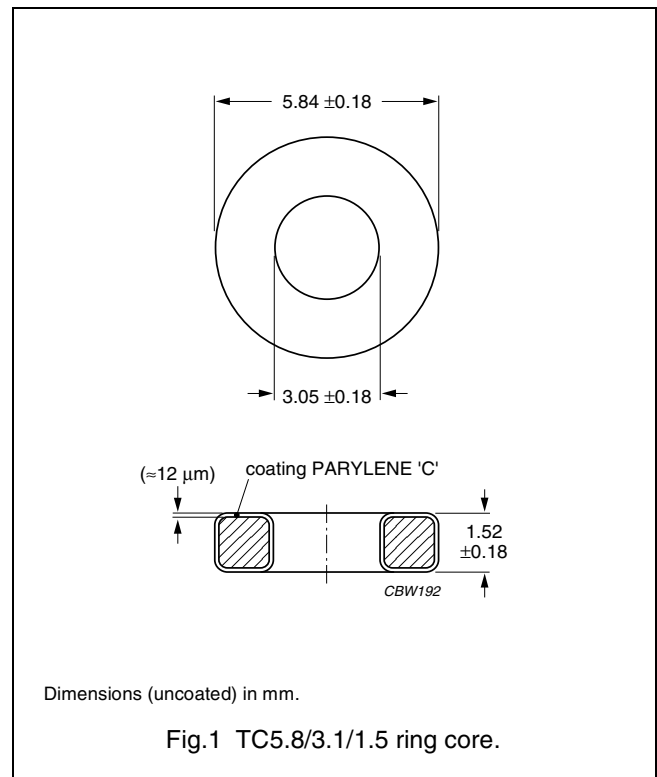
The cores are coated with parylene C, flame retardant in accordance with "UL 94V-2"; UL file number E 194397. The coating is transparent.

Maximum operating temperature is 90 °C.

Isolation voltage

DC 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)	$\mu_i$	TYPE NUMBER
4C65	25 ± 25%	≈ 125	TC5.8/3.1/1.5-4C65
4B1 <span style="border: 1px solid black; padding: 1px;">des</span>	50 ± 25%	≈ 250	TC5.8/3.1/1.5-4B1
3B7 <span style="border: 1px solid black; padding: 1px;">sup</span>	450 ± 20%	≈ 2300	TC5.8/3.1/1.5-3B7 <sup>(1)</sup>
3E27	890 ± 20%	≈ 4600	TC5.8/3.1/1.5-3E27
3E6	1960 ± 30%	≈ 9925	TC5.8/3.1/1.5-3E6
3E8 <span style="border: 1px solid black; padding: 1px;">des</span>	2940 ± 30%	≈ 15000	TC5.8/3.1/1.5-3E8

Note

1. OD = 6 ± 0.18




**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
<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.
<b>Design-in</b>		These products are recommended for new designs.
<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.