

DATA SHEET

TC5.8/3.1/3.2
Ferrite toroids

Supersedes data of September 2004

2008 Sep 01

RING CORES (TOROIDS)

Effective core parameters

| SYMBOL | PARAMETER | VALUE | UNIT |
|---------------|------------------|--------|------------------|
| $\Sigma(l/A)$ | core factor (C1) | 3.04 | mm ⁻¹ |
| V_e | effective volume | 55.8 | mm ³ |
| l_e | effective length | 13.0 | mm |
| A_e | effective area | 4.28 | mm ² |
| m | mass of core | ≈ 0.31 | g |

Coating

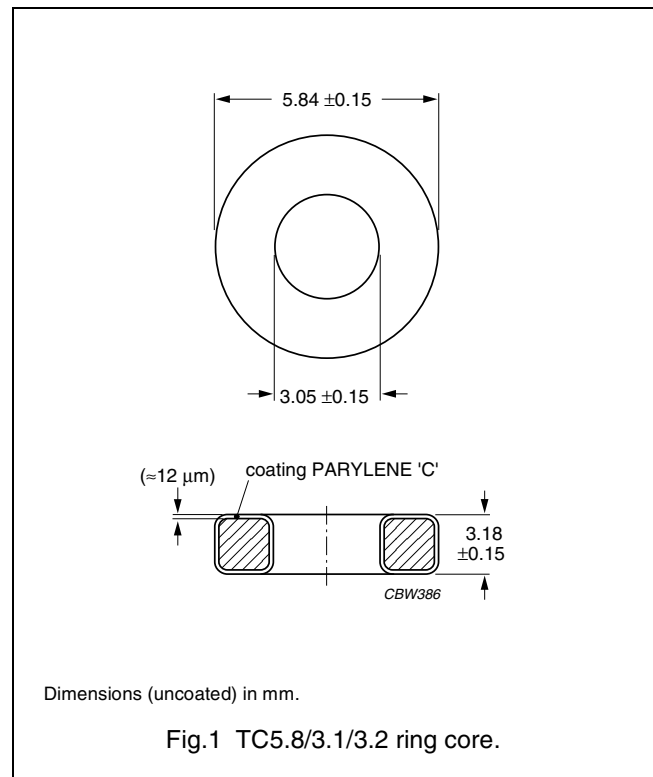
The cores are coated with parylene C, flame retardant in accordance with "UL 94V-2"; UL file number E 194397. The coating is transparent.

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) | μ_i | TYPE NUMBER |
|--|---------------|---------|----------------------------------|
| 3D3 des | 310 ± 20% | ≈ 750 | TC5.8/3.1/3.2-3D3 |
| 3B7 sup | 940 ± 25% | ≈ 2300 | TC5.8/3.1/3.2-3B7 ⁽¹⁾ |
| 3E28 des | 1650 ± 25% | ≈ 4000 | TC5.8/3.1/3.2-3E28 |
| 3E6 des | 4130 ± 30% | ≈ 10000 | TC5.8/3.1/3.2-3E6 |

Note

1. Dimensions with coating.




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 |  | 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 |  | 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 |  | These products are not recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability. |