

DATA SHEET

TX63/38/25
Ferrite toroids

Supersedes data of September 2004

2008 Sep 01

Ferrite toroids

TX63/38/25

RING CORES (TOROIDS)

Effective core parameters

| SYMBOL | PARAMETER | VALUE | UNIT |
|---------------|------------------|-------|------------------|
| $\Sigma(l/A)$ | core factor (C1) | 0.497 | mm ⁻¹ |
| V_e | effective volume | 46500 | mm ³ |
| l_e | effective length | 152 | mm |
| A_e | effective area | 306 | mm ² |
| m | mass of core | ≈ 220 | g |

Coating

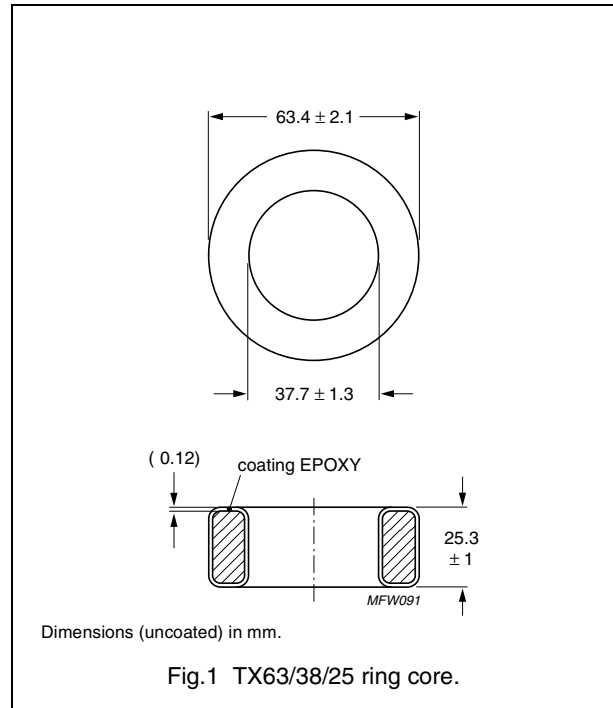
The cores are coated with epoxy, flame retardant in accordance with "UL 94V-0"; UL file number E 235873. The colour is white.

Maximum operating temperature is 200 °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_L (nH) | μ_i | TYPE NUMBER |
|-----------------------------------------------------------------------|--------------|---------|-----------------|
| 3F3 | 4550 ± 25 % | ≈ 1800 | TX63/38/25-3F3 |
| 3E25 | 13900 ± 25 % | ≈ 5500 | TX63/38/25-3E25 |
| 3E6 des | 25280 ± 30 % | ≈ 10000 | TX63/38/25-3E6 |

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 = 100 kHz; B = 100 mT; T = 100 °C | f = 400 kHz; B = 50 mT; T = 100 °C |
| 3F3 | ≥320 | ≤ 5.1 | ≤ 8.8 |




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. |
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PRODUCT STATUS DEFINITIONS

| STATUS | INDICATION | DEFINITION |
|------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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