

# DATA SHEET

**U100/57/25**

U cores and accessories

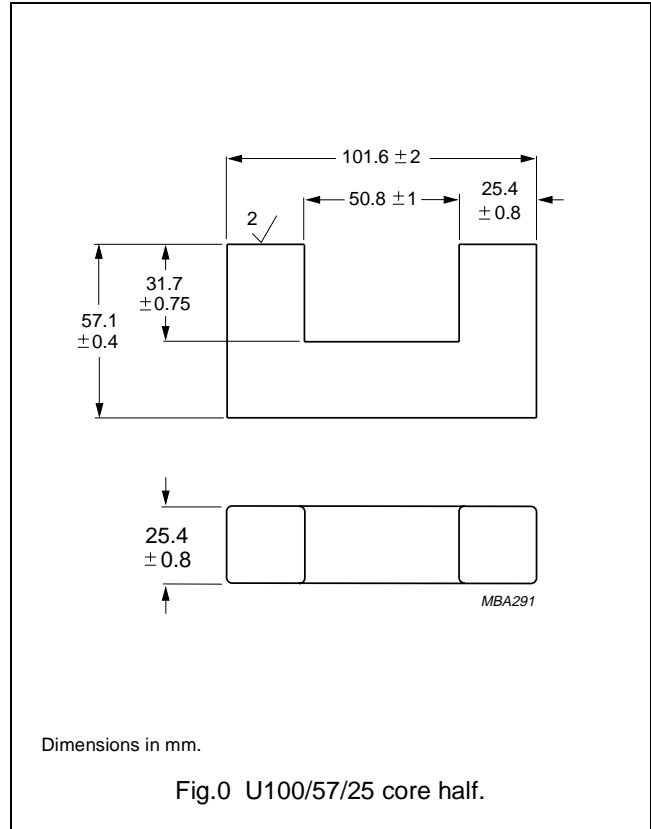
Supersedes data of February 2002

2004 Sep 01

**U CORES**

**Effective core parameters**

| SYMBOL        | PARAMETER         | VALUE   | UNIT             |
|---------------|-------------------|---------|------------------|
| $\Sigma(l/A)$ | core factor (C1)  | 0.478   | mm <sup>-1</sup> |
| $V_e$         | effective volume  | 199 000 | mm <sup>3</sup>  |
| $l_e$         | effective length  | 308     | mm               |
| $A_e$         | effective area    | 645     | mm <sup>2</sup>  |
| $m$           | mass of core half | ≈ 500   | g                |



**Core halves**

$A_L$  measured on a combination of 2 U cores.

| GRADE | $A_L$<br>(nH) | $\mu_e$ | TYPE NUMBER     |
|-------|---------------|---------|-----------------|
| 3C90  | 5500 ±25%     | ≈ 2200  | U100/57/25-3C90 |
| 3C94  | 5500 ±25%     | ≈ 2200  | U100/57/25-3C94 |

**Properties of core sets under power conditions**

| GRADE | B (mT) at                                 | CORE LOSS (W) at                          |  |
|-------|---|---|--|
|       | H = 250 A/m;<br>f = 25 kHz;<br>T = 100 °C | f = 25 kHz;<br>B̂ = 200 mT;<br>T = 100 °C | f = 100 kHz;<br>B̂ = 100 mT;<br>T = 100 °C |
| 3C90  | ≥ 320                                     | ≤ 26                                      | ≤ 32                                       |
| 3C94  | ≥ 320                                     | –   | ≤ 26                                       |




**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   |
|------------------|---|--|
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