# FERROXCUBE



Supersedes data of September 2004

2008 Sep 01



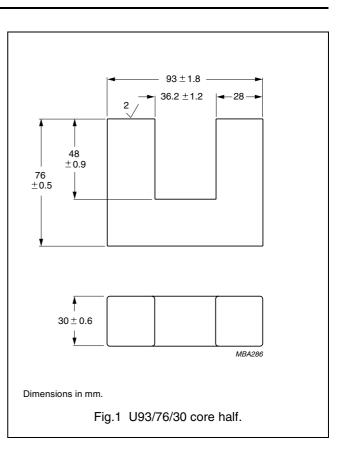
# U, I cores and accessories

## U93/76/30

### **U CORES**

### Effective core parameters

| SYMBOL         | PARAMETER         | VALUE  | UNIT             |
|----------------|-------------------|--------|------------------|
| Σ(I/A)         | core factor (C1)  | 0.421  | mm <sup>-1</sup> |
| Ve             | effective volume  | 297000 | mm <sup>3</sup>  |
| l <sub>e</sub> | effective length  | 354    | mm               |
| A <sub>e</sub> | effective area    | 840    | mm <sup>2</sup>  |
| m              | mass of core half | ≈ 760  | g                |



### Core halves

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

| GRADE | A <sub>L</sub><br>(nH) | μ <sub>e</sub> | TYPE NUMBER    |
|-------|------------------------|----------------|----------------|
| 3C90  | 6400 ±25%              | ≈ 2200         | U93/76/30-3C90 |
| 3C94  | 6400 ±25%              | ≈ 2200         | U93/76/30-3C94 |

### Properties of core sets under power conditions

|       | B (mT) at                                 | CORE LO                                  | SS (W) at                                 |
|-------|---|--|---|
| GRADE | H = 250 A/m;<br>f = 25 kHz;<br>T = 100 °C | f = 25 kHz;<br>B = 200 mT;<br>T = 100 °C | f = 100 kHz;<br>B = 100 mT;<br>T = 100 °C |
| 3C90  | ≥ 320                                     | ≤ 40                                     | ≤ 52                                      |
| 3C94  | ≥ 320                                     | - ≤ 39                                   |   |

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#### DATA SHEET STATUS DEFINITIONS

| DATA SHEET<br>STATUS      | PRODUCT<br>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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