

DATA SHEET

U93/52/30

U, I cores and accessories

Supersedes data of September 2004

2008 Sep 01

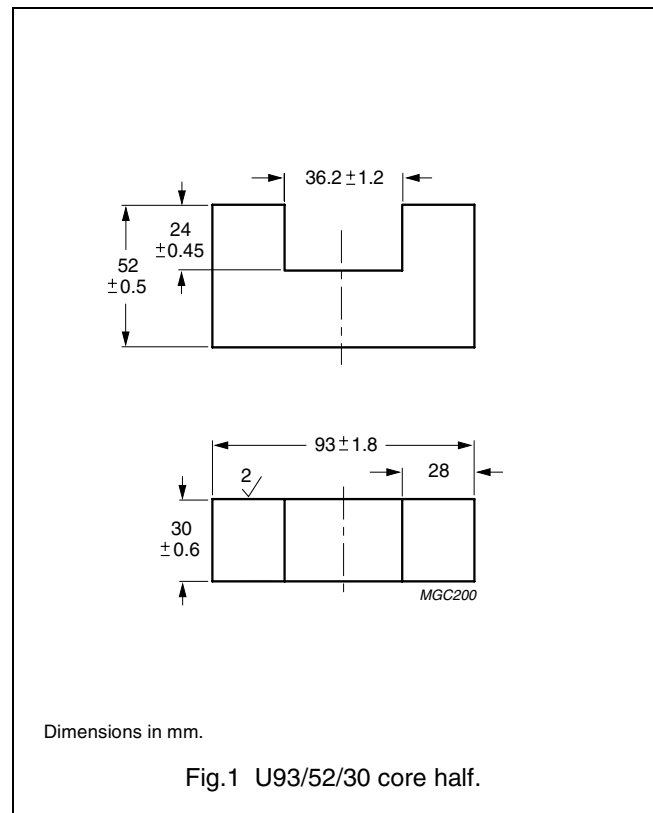


FERROXCUBE
A YAGEO COMPANY

U CORES

Effective core parameters

| SYMBOL | PARAMETER | VALUE | UNIT |
|---------------|-------------------|---------|------------------|
| $\Sigma(l/A)$ | core factor (C1) | 0.307 | mm ⁻¹ |
| V_e | effective volume | 217 000 | mm ³ |
| l_e | effective length | 258 | mm |
| A_e | effective area | 840 | mm ² |
| m | mass of core half | ≈ 560 | g |



Core halves

A_L measured on a combination of 2 U cores.

| GRADE | A_L (nH) | μ_e | TYPE NUMBER |
|-------|------------|---------|----------------|
| 3C90 | 8700 ±25% | ≈ 2100 | U93/52/30-3C90 |
| 3C94 | 8700 ±25% | ≈ 2100 | U93/52/30-3C94 |

Properties of core sets under power conditions

| GRADE | B (mT) at | CORE LOSS (W) at | |
|-------|---|--|---|
| | H = 250 A/m; f = 25 kHz; T = 100 °C | f = 25 kHz; B = 200 mT; T = 100 °C | f = 100 kHz; B = 100 mT; T = 100 °C |
| 3C90 | ≥ 320 | ≤ 28 | ≤ 38 |
| 3C94 | ≥ 320 | – | ≤ 30 |




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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| Preferred | | These products are recommended for use in current designs and are available via our sales channels. |
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