

# DATA SHEET

**U25/20/13**

U cores and accessories

Supersedes data of February 2002

2004 Sep 01

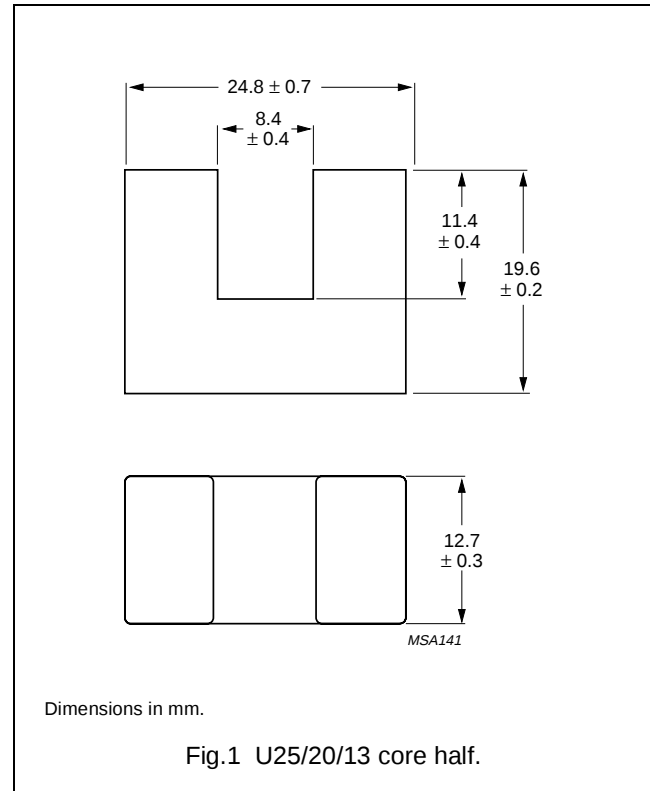
## U cores and accessories

U25/20/13

## CORE SETS

## Effective core parameters

| SYMBOL        | PARAMETER         | VALUE          | UNIT             |
|---------------|-------------------|----------------|------------------|
| $\Sigma(l/A)$ | core factor (C1)  | 0.85           | $\text{mm}^{-1}$ |
| $V_e$         | effective volume  | 9180           | $\text{mm}^3$    |
| $l_e$         | effective length  | 88.2           | mm               |
| $A_e$         | effective area    | 104            | $\text{mm}^2$    |
| m             | mass of core half | $\approx 23.5$ | g                |



## Core halves

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

| GRADE | $A_L$<br>(nH)   | $\mu_e$        | TYPE NUMBER    |
|-------|-----------------|----------------|----------------|
| 3C90  | $2900 \pm 25\%$ | $\approx 2000$ | U25/20/13-3C90 |
| 3C94  | $2900 \pm 25\%$ | $\approx 2000$ | U25/20/13-3C94 |
| 3C11  | $5000 \pm 25\%$ | $\approx 3400$ | U25/20/13-3C11 |
| 3E27  | $6300 \pm 25\%$ | $\approx 4300$ | U25/20/13-3E27 |

## 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>$\hat{B} = 200 \text{ mT}$ ;<br>T = 100 °C | f = 100 kHz;<br>$\hat{B} = 100 \text{ mT}$ ;<br>T = 100 °C | f = 100 kHz;<br>$\hat{B} = 200 \text{ mT}$ ;<br>T = 100 °C |
| 3C90  | $\geq 320$                                | $\leq 1.1$                                                | $\leq 1.2$                                                 | —                                                          |
| 3C94  | $\geq 320$                                | —                                                         | $\leq 0.9$                                                 | $\leq 5.5$                                                 |

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U25/20/13

## DATA SHEET STATUS DEFINITIONS

| DATA SHEET STATUS         | PRODUCT STATUS | DEFINITIONS                                                                                                                                                                              |
|---------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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## PRODUCT STATUS DEFINITIONS

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