

DATA SHEET

U100/57/25

U cores and accessories

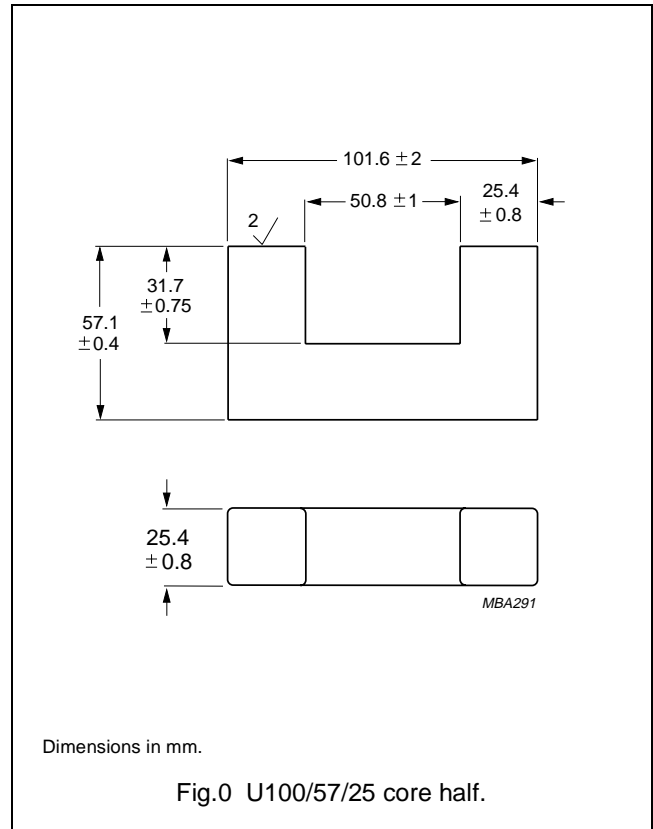
Supersedes data of February 2002

2004 Sep 01

U CORES

Effective core parameters

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



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_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; f = 25 kHz; T = 100 °C	f = 25 kHz; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C
3C90	≥ 320	≤ 26	≤ 32
3C94	≥ 320	–	≤ 26

U cores and accessories

U100/57/25




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.

DISCLAIMER

Life support applications — These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.

PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
Prototype		These are products that have been made as development samples for the purposes of technical evaluation only. The data for these types is provisional and is subject to change.
Design-in		These products are recommended for new designs.
Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support		These products are not recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.

DATA SHEET

I100/25/25

I cores and accessories

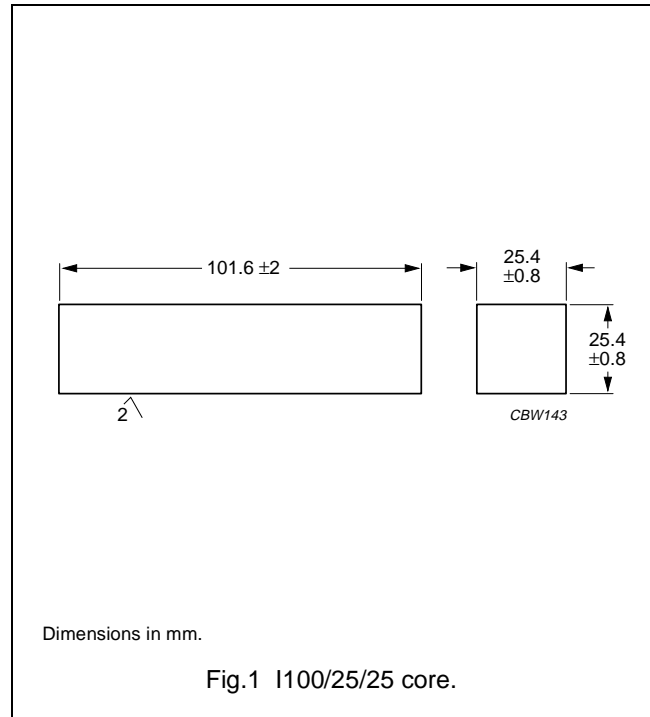
Supersedes data of February 2002

2004 Sep 01

CORE SETS

Effective core parameters in combination with U100/57/25

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.379	mm ⁻¹
V_e	effective volume	158000	mm ³
l_e	effective length	245	mm
A_e	effective area	645	mm ²
m	mass of core	≈ 300	g



Core data

A_L measured in combination with "U100/57/25".

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	6700 ±25%	≈ 2150	I100/25/25-3C90
3C94	6700 ±25%	≈ 2150	I100/25/25-3C94

Properties of core sets under power conditions

Core loss measured in combination with "U100/57/25".

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C
3C90	≥ 330	≤ 21	≤ 25
3C94	≥ 330	–	≤ 21




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