

# DATA SHEET

**U15/11/6**

U cores and accessories

Supersedes data of February 2002

2004 Sep 01

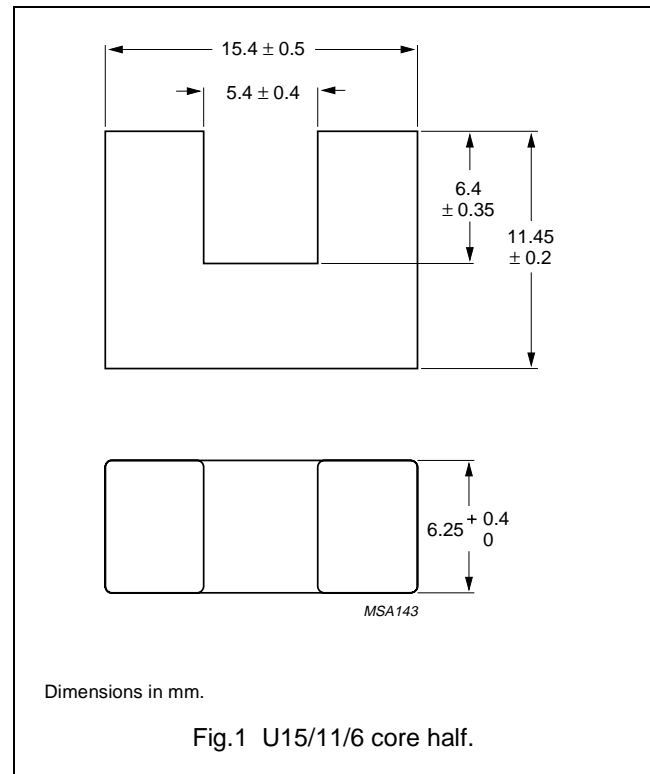
## U cores and accessories

U15/11/6

## CORE SETS

## Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.60	mm <sup>-1</sup>
$V_e$	effective volume	1680	mm <sup>3</sup>
$l_e$	effective length	52	mm
$A_e$	effective area	32.3	mm <sup>2</sup>
m	mass of core half	≈ 4	g



## Core halves

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

GRADE	$A_L$ (nH)	$\mu_e$	TYPE NUMBER
3C90	1400 ±25%	≈ 1900	U15/11/6-3C90
3C94	1400 ±25%	≈ 1900	U15/11/6-3C94
3C11	2400 ±25%	≈ 3080	U15/11/6-3C11
3E27	3400 ±25%	≈ 4300	U15/11/6-3E27

## 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; $\hat{B}$ = 200 mT; T = 100 °C	f = 100 kHz; $\hat{B}$ = 100 mT; T = 100 °C	f = 100 kHz; $\hat{B}$ = 200 mT; T = 100 °C
3C90	≥320	≤ 0.2	≤ 0.22	–
3C94	≥320	–	≤ 0.17	≤ 1.0

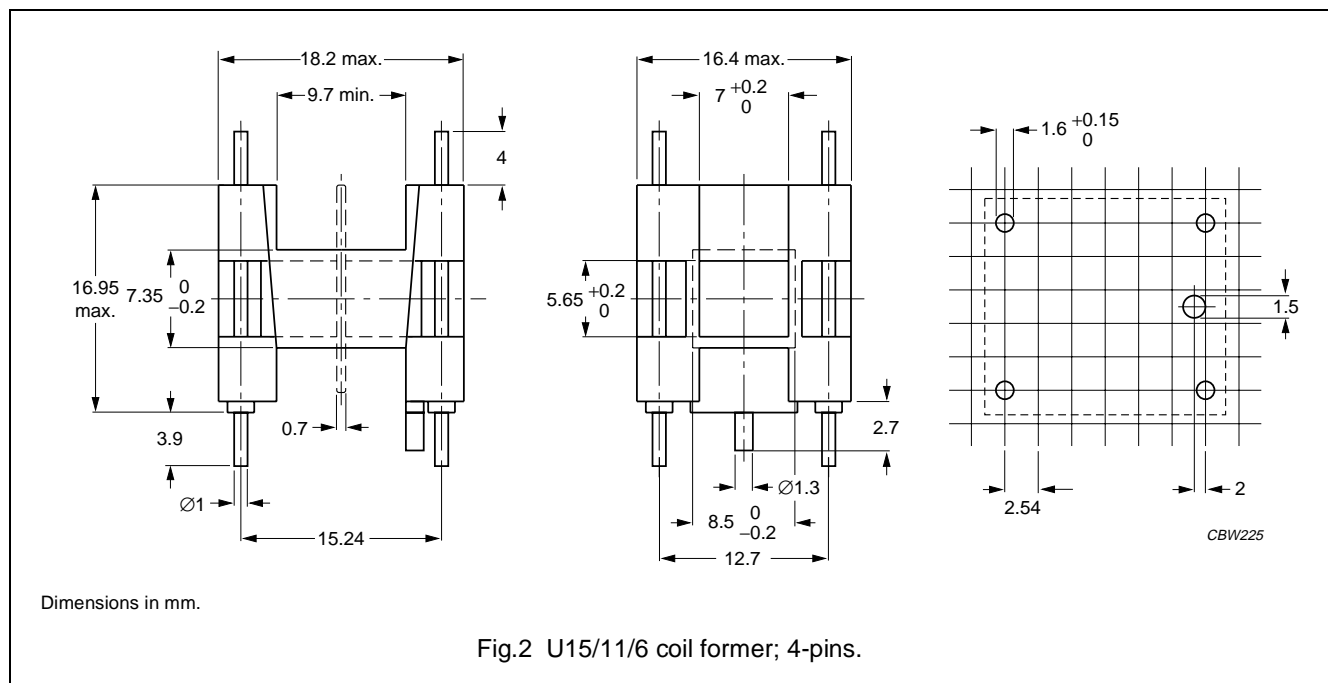
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## COIL FORMERS

## General data 4-pins U15/11/6 coil former

PARAMETER	SPECIFICATION
Coil former material	polyethyleneterephthalate (PET), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E69578 (M)
Pin material	copper-tin alloy (CuSn), tin (Sn) plated
Maximum operating temperature	155 °C, "IEC 60085", class F
Resistance to soldering heat	"IEC 60068-2-20", Part 2, Test Tb, method 1B: 350 °C, 3.5 s
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1: 235 °C, 2 s



## Winding data for 4-pins U15/11/6 coil former

NUMBER OF SECTIONS	WINDING AREA (mm <sup>2</sup> )	MINIMUM WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	38.7	9.7	46.6	CPH-U15/11/6-1S-4P
2	2 × 17.9	2 × 4.45	46.6	CPH-U15/11/6-2S-4P

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## 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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