

# DATA SHEET

**U15/11/6**

**U cores and accessories**

Product specification  
Supersedes data of November 1997  
File under Ferrite Ceramics, MA01

2000 Apr 20

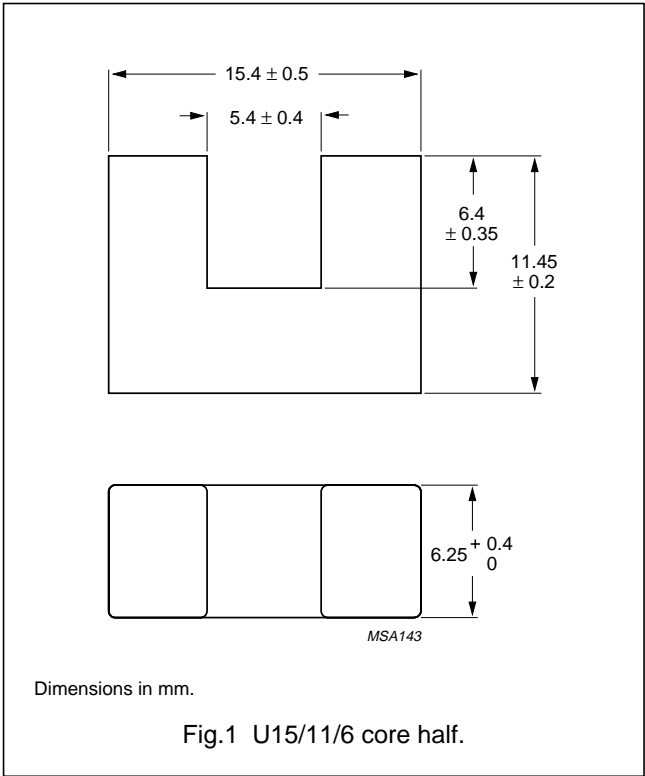
U cores and accessories

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CORE SETS

Effective core parameters

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



Core halves

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

GRADE	$A_L$ (nH)	$\mu_e$	TYPE NUMBER
3C90	$1\,400 \pm 25\%$	$\approx 1900$	U15/11/6-3C90
3E25 <small>des</small>	$3\,400 \pm 25\%$	$\approx 4300$	U15/11/6-3E25

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
3C90	$\geq 320$	$\leq 0.20$	$\leq 0.22$

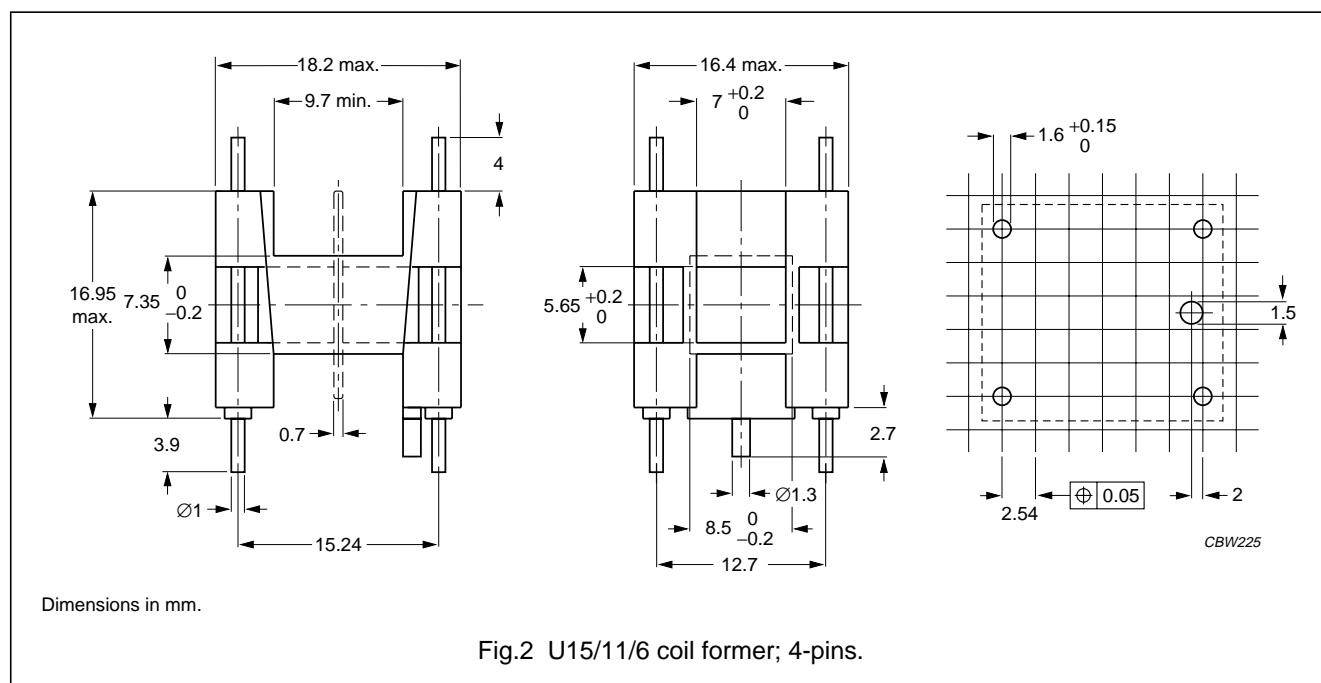
## U cores and accessories

## U15/11/6

## 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-lead alloy (SnPb) 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. Philips Components 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. Philips Components 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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