

DATA SHEET

U46/40/28

U, I cores and accessories

New data

2008 Sep 01

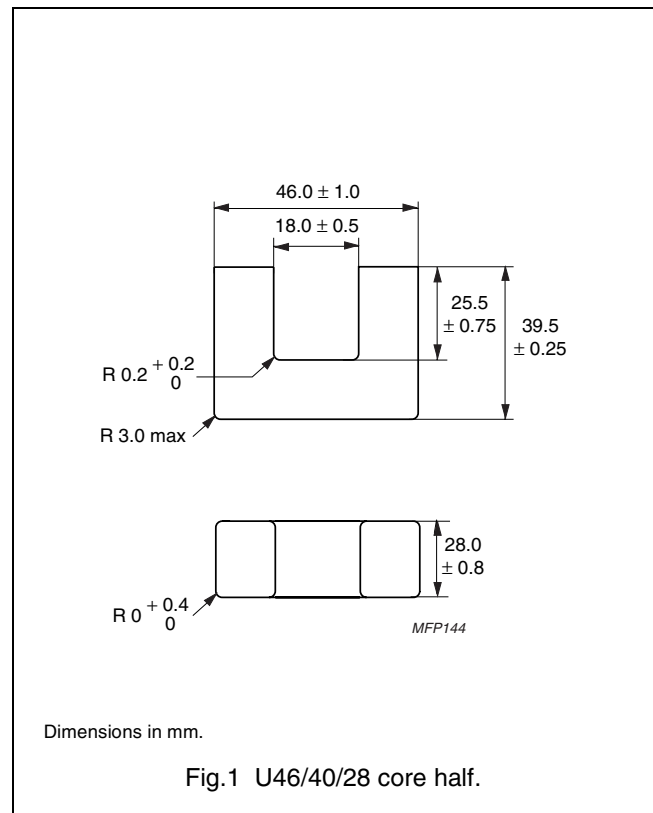


FERROXCUBE
A YAGEO COMPANY

U CORES

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.464	mm ⁻¹
V_e	effective volume	71300	mm ³
l_e	effective length	182	mm
A_e	effective area	392	mm ²
A_{min}	minimum area	392	mm ²
m	mass of core half	≈ 182	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	6000 ± 25 %	≈ 2215	U46/40/28-3C90
3F3	5100 ± 25 %	≈ 1880	U46/40/28-3F3

Cores can be gapped on request in one leg.

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 = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C	f = 400 kHz; \hat{B} = 50 mT; T = 100 °C
3C90	≥ 320	≤ 9.6	≤ 45	–
3F3	≥ 320	≤ 9.6	–	≤ 45

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
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.