DATA SHEET

U67/27/14
U, I cores and accessories

Supersedes data of September 2004 2008 Sep 01

FERROXCUBE
A YAGEO COMPANY

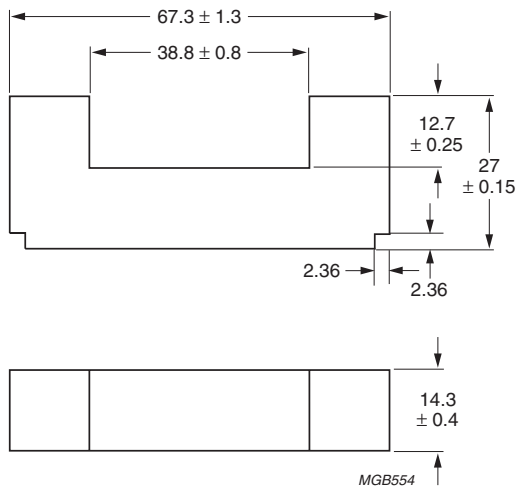
U, I cores and accessories

U67/27/14 (1F10)

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.850	mm^{-1}
V_e	effective volume	35200	mm^3
l_e	effective length	173	mm
A_e	effective area	204	mm^2
m	mass of core half	≈ 85	g



Dimensions in mm.

Fig.1 U67/27/14 core half.

Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C81	3800 ±25%	≈ 2570	U67/27/14-3C81
3C91 des	3800 ±25%	≈ 2570	U67/27/14-3C91

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
3C81	≥320	≤ 8.1	–	–
3C91	≥320	–	≤ 2.1(1)	≤ 16(1)

Note

1. Measured at 60 °C.

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	prot	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	des	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	sup	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.