

# DATA SHEET

## **EQ25/LP** EQ cores and accessories

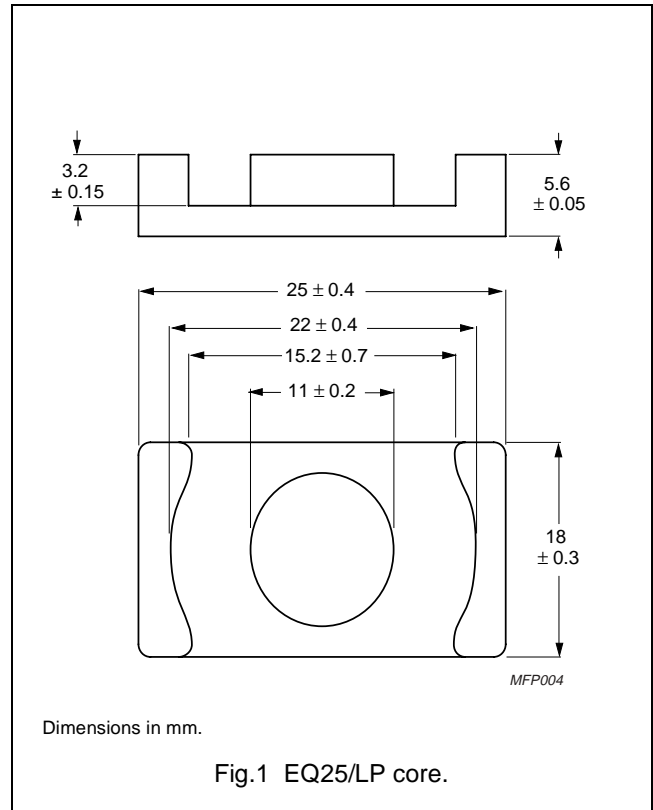
Supersedes data of February 2002

2004 Sep 01

**CORES**

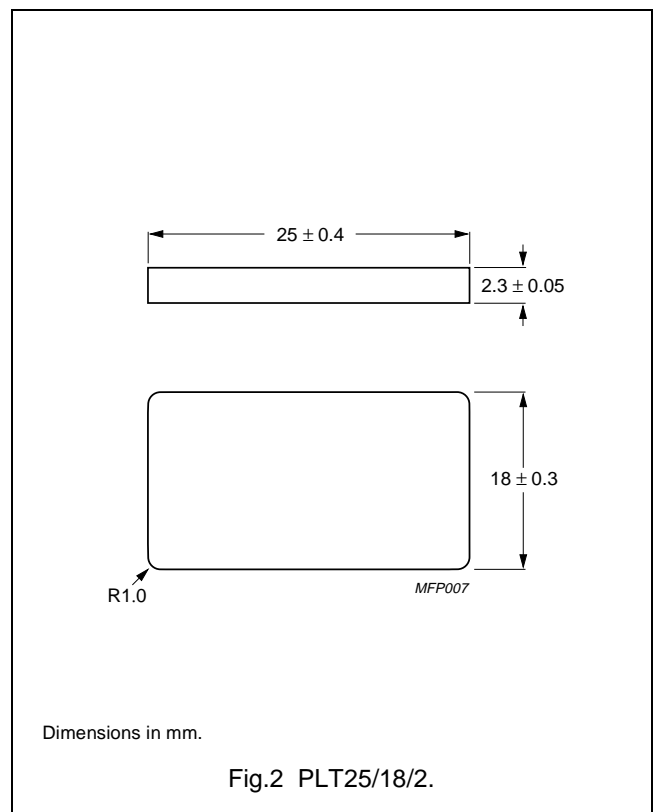
**Effective core parameters of a EQ/LP/PLT combination**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.294	mm <sup>-1</sup>
$V_e$	effective volume	2370	mm <sup>3</sup>
$l_e$	effective length	26.4	mm
$A_e$	effective area	89.7	mm <sup>2</sup>
$A_{min}$	minimum area	82.8	mm <sup>2</sup>
m	mass of core half	≈ 8.2	g
m	mass of plate	≈ 4.9	g



**Ordering information for plates**

GRADE	TYPE NUMBER
3C94	PLT25/18/2-3C94
3C96 <small>des</small>	PLT25/18/2-3C96
3F35 <small>prot</small>	PLT25/18/2-3F35
3F4 <small>des</small>	PLT25/18/2-3F4
3F45 <small>prot</small>	PLT25/18/2-3F45







## EQ cores and accessories

## EQ25/LP

**Core halves for use in combination with a plate (PLT)**

$A_L$  measured in combination with a plate (PLT), clamping force for  $A_L$  measurements,  $40 \pm 20$  N.

GRADE	$A_L$ (nH)	$\mu_e$	AIR GAP ( $\mu\text{m}$ )	TYPE NUMBER
3C94	$6100 \pm 25 \%$	$\approx 1430$	$\approx 0$	EQ25/LP-3C94
3C96 	$5600 \pm 25 \%$	$\approx 1310$	$\approx 0$	EQ25/LP-3C96
3F35 	$4350 \pm 25 \%$	$\approx 1020$	$\approx 0$	EQ25/LP-3F35
3F4 	$3100 \pm 25 \%$	$\approx 725$	$\approx 0$	EQ25/LP-3F4
3F45 	$3100 \pm 25 \%$	$\approx 725$	$\approx 0$	EQ25/LP-3F45

**Properties of core sets under power conditions**

CORE COMBINATION	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 10 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 = 500 kHz; $\hat{B} = 50$ mT; T = 100 °C
EQ/LP+PLT25-3C94	$\geq 320$	$\leq 0.21$	$\leq 1.4$	–
EQ/LP+PLT25-3C96	$\geq 340$	$\leq 0.16$	$\leq 1.1$	$\leq 0.89$
EQ/LP+PLT25-3F35	$\geq 300$	–	–	$\leq 0.32$

**Properties of core sets under power conditions (continued)**

CORE COMBINATION	B (mT) at	CORE LOSS (W) at			
	H = 250 A/m; f = 10 kHz; T = 100 °C	f = 500 kHz; $\hat{B} = 100$ mT; T = 100 °C	f = 1 MHz; $\hat{B} = 30$ mT; T = 100 °C	f = 1 MHz; $\hat{B} = 50$ mT; T = 100 °C	f = 3 MHz; $\hat{B} = 10$ mT; T = 100 °C
EQ/LP+PLT25-3F35	$\geq 300$	$\leq 2.5$	–	–	–
EQ/LP+PLT25-3F4	$\geq 300$	–	$\leq 0.71$	–	$\leq 1.14$
EQ/LP+PLT25-3F45	$\geq 300$	–	$\leq 0.48$	$\leq 1.2$	$\leq 0.83$




**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**

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<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
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