

# DATA SHEET

## **RM7/ILP**

**RM, RM/I, RM/ILP cores and accessories**

Supersedes data of September 2004

2008 Sep 01

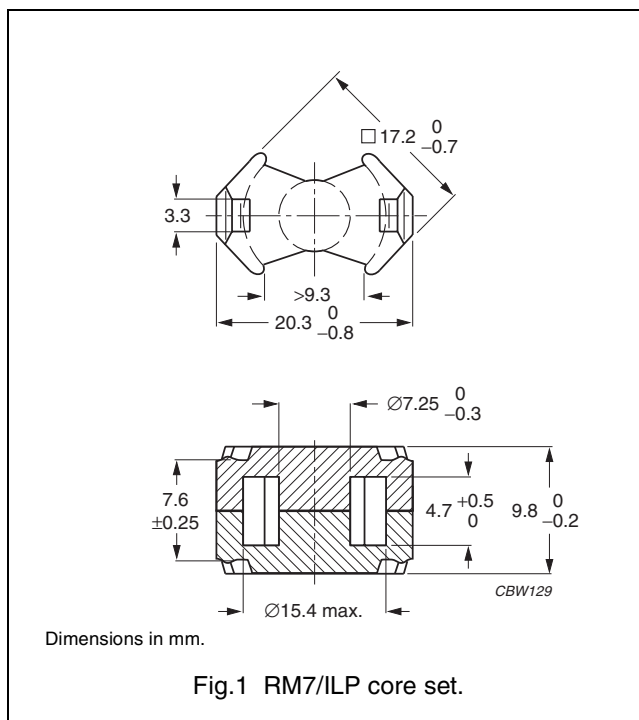


**FERROXCUBE**  
A YAGEO COMPANY

**CORE SETS**

**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.520	mm <sup>-1</sup>
$V_e$	effective volume	1 060	mm <sup>3</sup>
$l_e$	effective length	23.5	mm
$A_e$	effective area	45.3	mm <sup>2</sup>
$A_{min}$	minimum area	39.6	mm <sup>2</sup>
m	mass of set	≈ 6.0	g



**Core sets for general purpose transformers and power applications**

Clamping force for  $A_L$  measurements  $40 \pm 20$  N.

GRADE	$A_L$ (nH)	$\mu_e$	AIR GAP ( $\mu$ m)	TYPE NUMBER
3C90 <sup>sup</sup>	$3650 \pm 25\%$	≈ 1510	≈ 0	RM7/ILP-3C90
3F3 <sup>sup</sup>	$3100 \pm 25\%$	≈ 1280	≈ 0	RM7/ILP-3F3
3F4 <sup>sup</sup>	$1800 \pm 25\%$	≈ 740	≈ 0	RM7/ILP-3F4

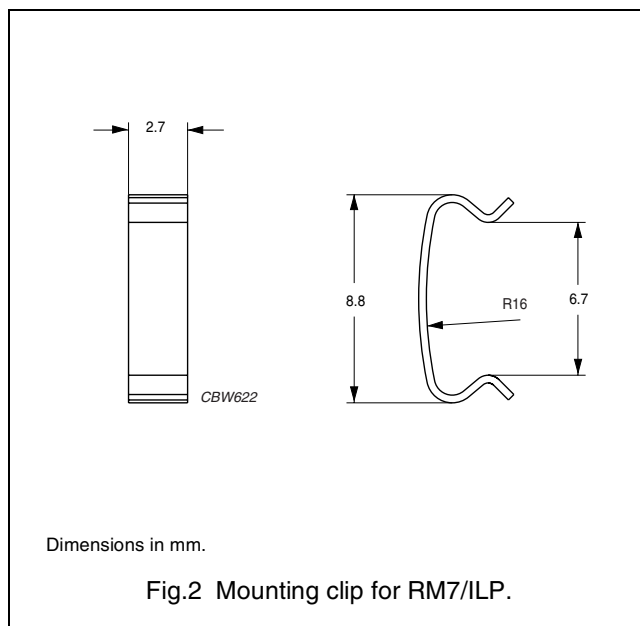
**Properties of core sets under power conditions**

GRADE	B (mT) at	CORE LOSS (W) at				
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C	f = 400 kHz; B̂ = 50 mT; T = 100 °C	f = 1 MHz; B̂ = 30 mT; T = 100 °C	f = 3 MHz; B̂ = 10 mT; T = 100 °C
3C90	≥320	≤ 0.13	≤ 0.14	–	–	–
3F3	≥300	–	≤ 0.12	≤ 0.20	–	–
3F4	≥250	–	–	–	≤ 0.32	≤ 0.5

**MOUNTING PARTS**

**General data**

ITEM	SPECIFICATION
Clamping force	≈20 N
Clip material	stainless steel (CrNi)
Type number	CLI-RM7/ILP






**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
<b>Prototype</b>		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.
<b>Design-in</b>		These products are recommended for new designs.
<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
<b>Support</b>		These products are <b>not</b> recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.