



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

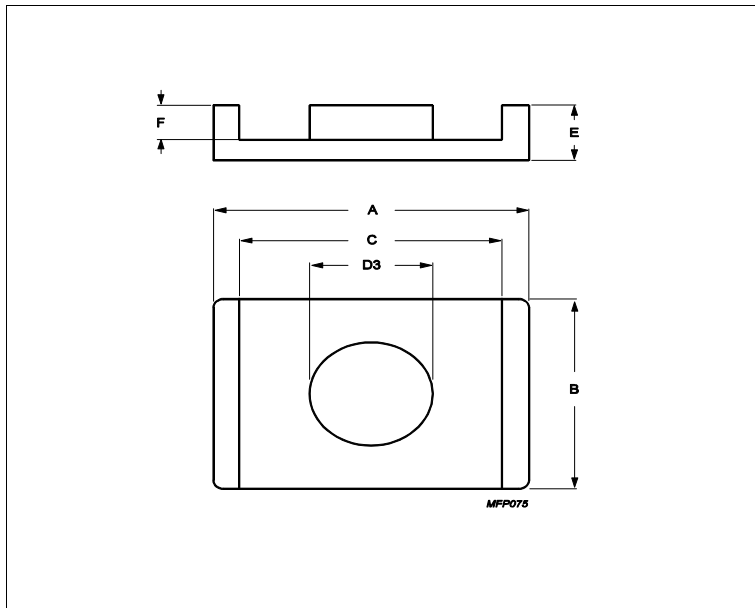
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## Core **ER14.5/3/7**



| Effective parameters |                  |       |                  |
|----------------------|------------------|-------|------------------|
|                      | Parameter        | Value | Unit             |
| $\Sigma(I/A)$        | core factor (C1) | 1.08  | mm <sup>-1</sup> |
| <b>Ve</b>            | effective volume | 333   | mm <sup>3</sup>  |
| <b>Le</b>            | effective length | 19    | mm               |
| <b>Ae</b>            | effective area   | 17.6  | mm <sup>2</sup>  |
| <b>Amin</b>          | minimum area     | 17.3  | mm <sup>2</sup>  |
| <b>m</b>             | ER14.5/3/7       | ≈ 0.9 | g/pcs            |

**Dimensions for product: ER14.5/3/7**

|           | Nom   | Tol + | Tol - | Max   | Min   | Unit |
|-----------|-------|-------|-------|-------|-------|------|
| <b>A</b>  | 14.50 | 0.20  | 0.20  | 14.70 | 14.30 | mm   |
| <b>B</b>  | 6.80  | 0.00  | 0.20  | 6.80  | 6.60  | mm   |
| <b>C</b>  | 11.80 | 0.20  | 0.20  | 12.00 | 11.60 | mm   |
| <b>D3</b> | 4.80  | 0.00  | 0.20  | 4.80  | 4.60  | mm   |
| <b>E</b>  | 2.95  | 0.05  | 0.05  | 3.00  | 2.90  | mm   |
| <b>F</b>  | 1.55  | 0.20  | 0.00  | 1.75  | 1.55  | mm   |

**Inductance factor**

| Material | Value | Tol + | Tol - | Unit                  |
|----------|-------|-------|-------|-----------------------|
| 3C92     | 1250  | 25%   | 25%   | nH/turns <sup>2</sup> |
| 3C95     | 1850  | 25%   | 25%   | nH/turns <sup>2</sup> |
| 3C96     | 1500  | 25%   | 25%   | nH/turns <sup>2</sup> |
| 3C97     | 1850  | 25%   | 25%   | nH/turns <sup>2</sup> |
| 3F36     | 1100  | 25%   | 25%   | nH/turns <sup>2</sup> |
| 3F46     | 730   | 25%   | 25%   | nH/turns <sup>2</sup> |

**Power loss: 3C92**

| Measuring conditions |        |        | Max   | Unit  |
|----------------------|--------|--------|-------|-------|
| 100 kHz              | 200 mT | 100 °C | 0.170 | W/set |

**Power loss: 3C95**

| Measuring conditions |        |        | Max   | Unit  |
|----------------------|--------|--------|-------|-------|
| 100 kHz              | 200 mT | 100 °C | 0.160 | W/set |
| 100 kHz              | 200 mT | 25 °C  | 0.170 | W/set |

## Core **ER14.5/3/7**

| Power loss: 3C96     |        |        |       |       |
|----------------------|--------|--------|-------|-------|
| Measuring conditions |        |        | Max   | Unit  |
| 100 kHz              | 200 mT | 100 °C | 0.150 | W/set |
| 400 kHz              | 50 mT  | 100 °C | 0.060 | W/set |
| Power loss: 3C97     |        |        |       |       |
| Measuring conditions |        |        | Max   | Unit  |
| 100 kHz              | 200 mT | 60 °C  | 0.170 | W/set |
| 100 kHz              | 200 mT | 120 °C | 0.160 | W/set |
| 100 kHz              | 200 mT | 140 °C | 0.200 | W/set |
| Power loss: 3F36     |        |        |       |       |
| Measuring conditions |        |        | Max   | Unit  |
| 500 kHz              | 50 mT  | 100 °C | 0.050 | W/set |
| 500 kHz              | 100 mT | 100 °C | 0.380 | W/set |
| Power loss: 3F46     |        |        |       |       |
| Measuring conditions |        |        | Max   | Unit  |
| 1000 kHz             | 50 mT  | 100 °C | 0.130 | W/set |
| 3000 kHz             | 10 mT  | 100 °C | 0.032 | W/set |

| Bsat                 |         |        |          |     |      |
|----------------------|---------|--------|----------|-----|------|
| Measuring conditions |         |        | Material | Min | Unit |
| 25 kHz               | 250 A/m | 100 °C | 3C92     | 370 | mT   |
| 25 kHz               | 250 A/m | 100 °C | 3C95     | 330 | mT   |
| 25 kHz               | 250 A/m | 100 °C | 3C96     | 340 | mT   |
| 25 kHz               | 250 A/m | 100 °C | 3C97     | 330 | mT   |
| 25 kHz               | 250 A/m | 100 °C | 3F36     | 340 | mT   |
| 25 kHz               | 250 A/m | 100 °C | 3F46     | 330 | mT   |

| Accessories          |  |               |
|----------------------|--|---------------|
| Ordering name        | Description                              | Ordering code |
| CLM-ER14.5           | Clamp                                    | 432202101541  |
| CPVS-ER14.5-1S-10P-Z | Coil former, termoplastic, vertical, SMD | 432202106151  |