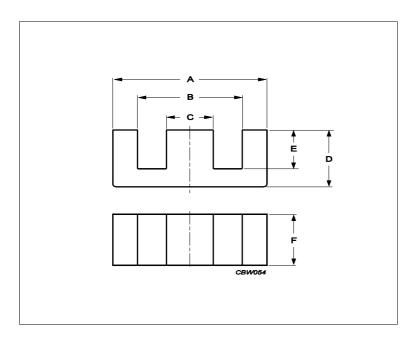


## Core **E42/21/20**



|        | Effective parameters |       |                  |  |  |  |
|--------|----------------------|-------|------------------|--|--|--|
|        | Parameter            | Value | Unit             |  |  |  |
| Σ(I/A) | core factor (C1)     | 0.417 | mm <sup>-1</sup> |  |  |  |
| Ve     | effective volume     | 22700 | mm³              |  |  |  |
| Le     | effective length     | 97    | mm               |  |  |  |
| Ae     | effective area       | 233   | mm²              |  |  |  |
| Amin   | minimum area         | 233   | mm²              |  |  |  |
| m      | E42/21/20            | ≈ 56  | g/pcs            |  |  |  |

|   | Dimensions for product: E42/21/20 |       |       |       |       |      |
|---|-----------------------------------|-------|-------|-------|-------|------|
|   | Nom                               | Tol + | Tol - | Max   | Min   | Unit |
| Α | 43.00                             | 0.00  | 1.70  | 43.00 | 41.30 | mm   |
| В | 29.50                             | 1.40  | 0.00  | 30.90 | 29.50 | mm   |
| С | 12.20                             | 0.00  | 0.50  | 12.20 | 11.70 | mm   |
| D | 21.00                             | 0.20  | 0.20  | 21.20 | 20.80 | mm   |
| E | 14.80                             | 0.60  | 0.00  | 15.40 | 14.80 | mm   |
| F | 20.00                             | 0.00  | 0.80  | 20.00 | 19.20 | mm   |

|          | Inductance factor |       |       |           |  |  |
|----------|-------------------|-------|-------|-----------|--|--|
| Material | Value             | Tol + | Tol - | Unit      |  |  |
| 3C91     | 6950              | 25%   | 25%   | nH/turns² |  |  |
| 3C92     | 4100              | 25%   | 25%   | nH/turns² |  |  |
| 3C94     | 5200              | 25%   | 25%   | nH/turns² |  |  |
| 3C95     | 6950              | 25%   | 25%   | nH/turns² |  |  |
| 3F36     | 3500              | 25%   | 25%   | nH/turns² |  |  |

|                      | Power loss: 3C91    |        |        |       |  |  |
|----------------------|---------------------|--------|--------|-------|--|--|
| ı                    | Measuring condition | s      | Max    | Unit  |  |  |
| 100 kHz              | 200 mT              | 60 °C  | 11.000 | W/set |  |  |
|                      | Power loss: 3C92    |        |        |       |  |  |
| Measuring conditions |                     | Max    | Unit   |       |  |  |
| 100 kHz              | 200 mT              | 100 °C | 11.000 | W/set |  |  |
|                      | Power loss: 3C94    |        |        |       |  |  |
| Measuring conditions |                     | Max    | Unit   |       |  |  |
| 100 kHz              | 200 mT              | 100 °C | 11.000 | W/set |  |  |

## Product specifications



## Core **E42/21/20**

| Power loss: 3C95 |                      |        |        |       |  |
|------------------|----------------------|--------|--------|-------|--|
| r                | Measuring conditions | 5      | Max    | Unit  |  |
| 100 kHz          | 200 mT               | 100 °C | 11.000 | W/set |  |
| 100 kHz          | 200 mT               | 25 °C  | 12.000 | W/set |  |
| Power loss: 3F36 |                      |        |        |       |  |
| N                | Measuring conditions | 5      | Max    | Unit  |  |
| 500 kHz          | 50 mT                | 100 °C | 3.900  | W/set |  |
| 500 kHz          | 100 mT               | 100 °C | 28.000 | W/set |  |

|        | Bsat                |        |          |     |      |  |
|--------|---------------------|--------|----------|-----|------|--|
|        | Measuring condition | s      | Material | Min | Unit |  |
| 25 kHz | 250 A/m             | 100 °C | 3C91     | 320 | mT   |  |
| 25 kHz | 250 A/m             | 100 °C | 3C92     | 370 | mT   |  |
| 25 kHz | 250 A/m             | 100 °C | 3C94     | 320 | mT   |  |
| 25 kHz | 250 A/m             | 100 °C | 3C95     | 330 | mT   |  |
| 25 kHz | 250 A/m             | 100 °C | 3F36     | 340 | mT   |  |

| Accessories          |                                       |               |  |  |
|----------------------|---------------------------------------|---------------|--|--|
| Ordering name        | Description                           | Ordering code |  |  |
| CP-E42/21/20-1S      | Coil former, termoplastic             | 433500027011  |  |  |
| CPH-E42/20-1S-12PD-Z | Coil former, termoplastic, horizontal | 433506027121  |  |  |