

## 《超大感量 10mH 贴片电感 CKNR5040E-103MC-E》

今凯电子实现量产的超大感值 10mH 贴片电感

尺寸规格 5\*5\*4mm

L: 10mH  $\pm$  20%

Isat: 65mA Max

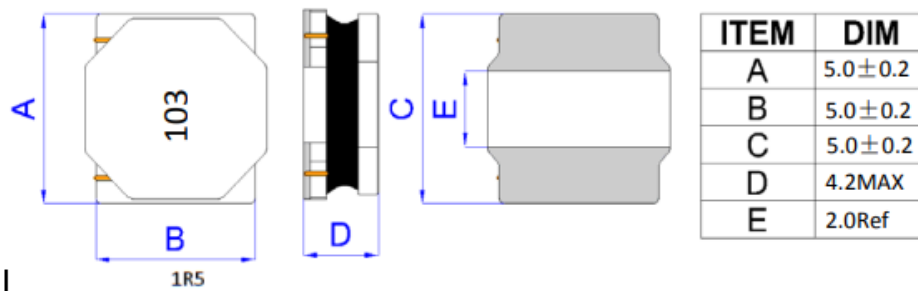
Dcr: 45 $\Omega$  Max 33 $\Omega$  Typ

通常能达到 10mH 的电感皆为大尺寸的磁环电感，但磁环电感在电路板中非常占空间，无法满足客户对产品的小型化需求且成本高昂，需要进行较高成本的 DIP 插件。今凯电子的 CKNR5040E-103MC-E 为贴片小尺寸电感，可进行 SMT 大批量贴片生产，且满足产品小型化的需求，但绕线涂胶类 5040-10mH 因绕线圈数多，生产效率低，磁芯与常规感值无法通用，大部分贴片电感厂家不愿意生产该感值，导致大部分客户有该产品的需求却无法找到配合厂家，难以进行批量化生产。

今凯电子已对该产品进行批量生产并备有安全库存，可随时对应客户采购需求

今凯电子的客户把该产品应用于信号线中，作信号处理功能

# SHAPE & DIMENSION (UNIT:mm)

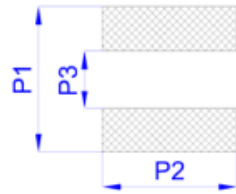


Marking Code:026

Size:

Color: 黑色 typeface:

PAD LAYOUT(mm):



| ITEM | DIM    |
|------|--------|
| P1   | 4.5Ref |
| P2   | 5.5Ref |
| P3   | 1.5Ref |

ELECREICAL SCHEMATIC:

## ELECREICAL SPECIFICATION

| MEAS. ITEM | SPEC. |    |       | TEST FREQ. | CONDITIONS      |
|------------|-------|----|-------|------------|-----------------|
| L          | 10000 | μH | ± 20% | 100KHz/1V  | Ta=25℃ · Idc=0A |
| DCR        | 45    | Ω  | Max.  |            | Ta=25℃          |
| Isat       | 0.065 | A  | Max.  | 100KHz/1V  | ΔL/L≤30%        |
| Irms       |       | A  | Max.  | 100KHz/1V  | Δ≤40℃           |

## GENERAL SPECIFICATION

Electrical specifications at20~ 25℃

Operation Temperature : -40~+125℃

Storage Temperature : -40~+125℃

(1)WIRE TYPE: Φ 0.06mm

(2)WINDING:500.5Ts(Ref.)

| TEST DATA FOR PREPRODUCTION SAMPLE                                                  |               |          |          |                                                                                     |  |  |  |                                                                                       |                       |               |        |  |
|-------------------------------------------------------------------------------------|---------------|----------|----------|-------------------------------------------------------------------------------------|--|--|--|---------------------------------------------------------------------------------------|-----------------------|---------------|--------|--|
| TEST RESOLUTION                                                                     |               |          |          |                                                                                     |  |  |  |                                                                                       | DIMENSION (Unit : mm) |               |        |  |
| MEAS.                                                                               | L             | D.C.R    |          |                                                                                     |  |  |  |                                                                                       | 长                     | 宽             | 高      |  |
| ITEM                                                                                | $\mu\text{H}$ | $\Omega$ |          |                                                                                     |  |  |  |                                                                                       | mm                    | mm            | mm     |  |
| SPEC.                                                                               | 10000.0       | 45       |          |                                                                                     |  |  |  |                                                                                       | 5.0 $\pm$ 0.2         | 5.0 $\pm$ 0.2 | 4.2MAX |  |
|                                                                                     | $\pm$         | Max.     |          |                                                                                     |  |  |  |                                                                                       |                       |               |        |  |
|                                                                                     | 20%           |          |          |                                                                                     |  |  |  |                                                                                       |                       |               |        |  |
| TEST                                                                                | 100KHz/1V     |          | Isat     | $\Delta\text{L/L}$                                                                  |  |  |  |                                                                                       |                       |               |        |  |
| FREQ.                                                                               |               |          | 0.065A   | $\leq 30\%$                                                                         |  |  |  |                                                                                       |                       |               |        |  |
| 1                                                                                   | 9336          | 32.2     | 7453     | -20.2%                                                                              |  |  |  |                                                                                       | 5.08                  | 5.04          | 3.89   |  |
| 2                                                                                   | 9303          | 32.4     | 7446     | -20.0%                                                                              |  |  |  |                                                                                       | 5.01                  | 5.05          | 3.91   |  |
| 3                                                                                   | 9242          | 31.8     | 7303     | -21.0%                                                                              |  |  |  |                                                                                       | 5.08                  | 5.00          | 3.95   |  |
| 4                                                                                   | 9370          | 32.4     | 7573     | -19.2%                                                                              |  |  |  |                                                                                       | 5.07                  | 5.04          | 3.94   |  |
| 5                                                                                   | 9401          | 32.4     | 7614     | -19.0%                                                                              |  |  |  |                                                                                       | 5.06                  | 5.05          | 3.92   |  |
| 6                                                                                   | 9351          | 32.5     | 7214     | -22.9%                                                                              |  |  |  |                                                                                       |                       |               |        |  |
| 7                                                                                   | 9220          | 32.4     | 7283     | -21.0%                                                                              |  |  |  |                                                                                       |                       |               |        |  |
| 8                                                                                   | 9367          | 32.8     | 7306     | -22.0%                                                                              |  |  |  |                                                                                       |                       |               |        |  |
| 9                                                                                   | 9510          | 31.8     | 7482     | -21.3%                                                                              |  |  |  |                                                                                       |                       |               |        |  |
| 10                                                                                  | 9553          | 32.5     | 7503     | -21.5%                                                                              |  |  |  |                                                                                       |                       |               |        |  |
| AVG.                                                                                | 9365.30       | 32.3     | 7417.700 | -20.8%                                                                              |  |  |  |                                                                                       |                       |               |        |  |
| R                                                                                   | 333.00        | 1.0      | 400      | 0.038                                                                               |  |  |  |                                                                                       |                       |               |        |  |
|                                                                                     |               |          |          |                                                                                     |  |  |  |                                                                                       |                       |               |        |  |
| APPROVED BY                                                                         |               |          |          | CHECKED BY                                                                          |  |  |  | DRAWN BY                                                                              |                       |               |        |  |
|  |               |          |          |  |  |  |  |  |                       |               |        |  |

