

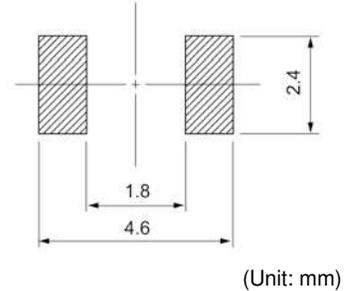
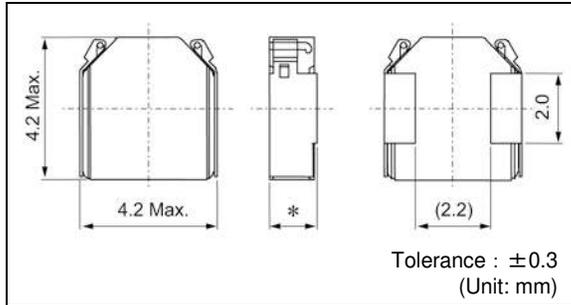
FSD0412

RoHS

REACH

Inductance Range: 0.33~4.7μH

Recommended patterns
推荐焊盘尺寸



Note (*) 1.2mm Max. height

(Unit: mm)

FEATURES 特点

- 4.0 × 4.0mm Max. square and 1.2mm Max. height.
- Magnetically shielded construction, low DC resistance.
- The use of magnetic iron powder ensure capability for large current.
- Low audible core noise.
- Ideal for DC-DC converter applications
- Operating temperature : -20~+100°C
- 最大4.0 × 4.0毫米的平面，最大高度1.2毫米
- 磁性屏蔽结构，低直流电阻
- 使用合金系磁性粉，保证了大电流
- 低芯片噪音
- DC-DC转换器电感器的理想选择
- 使用温度范围：-20~+100°C

STANDARD PART NUMBERS 标准零件号码

TYPE FSD0412 (Quantity/reel; 4,000 PCS)

| 零件号码 | 电感值 ⁽¹⁾ | 公差 | 最大直流电阻 ⁽²⁾ | 最大电感减小电流 ⁽³⁾ | 最大温度上升电流 ⁽⁴⁾ |
|--------------------|-----------------------------------|------------------|---|---|--|
| Part Number | Inductance ⁽¹⁾ (μH) | Tolerance (%) | DC Resistance ⁽²⁾ (mΩ) Max. (Typ.) | Inductance Decrease Current ⁽³⁾ (A) Max. (Typ.) $\frac{\Delta L}{L} = 30\%$ | Temperature Rise Current ⁽⁴⁾ $\Delta T = 40^\circ C$ (A) Max. (Typ.) |
| FDSD0412-H-R33M=P3 | 0.33 | ± 20 | 19 (16) | 7.5 (10) | 6.4 (7.5) |
| FDSD0412-H-R47M=P3 | 0.47 | ± 20 | 23 (19) | 6.5 (8.6) | 6.0 (7.0) |
| FDSD0412-H-1R0M=P3 | 1.0 | ± 20 | 44 (37) | 4.7 (6.2) | 4.3 (5.0) |
| FDSD0412-H-1R2M=P3 | 1.2 | ± 20 | 48 (40) | 4.5 (6.0) | 3.7 (4.3) |
| FDSD0412-H-1R5M=P3 | 1.5 | ± 20 | 64 (53) | 4.1 (5.5) | 3.3 (3.8) |
| FDSD0412-H-2R2M=P3 | 2.2 | ± 20 | 84 (70) | 3.5 (4.7) | 2.8 (3.3) |
| FDSD0412-H-3R3M=P3 | 3.3 | ± 20 | 122 (102) | 2.8 (3.8) | 2.2 (2.6) |
| FDSD0412-H-4R7M=P3 | 4.7 | ± 20 | 161 (136) | 2.5 (3.3) | 1.9 (2.2) |

(1) Inductance is measured with a LCR meter 4284A (Agilent Technologies) or equivalent.
Test frequency at 100kHz

(2) DC resistance is measured with 34420A (Agilent Technologies) or 3541 (HIOKI). (Reference ambient temperature 25°C)

(3) Inductance Decrease Current based upon 30% inductance reduction from the initial value

(4) Temperature Rise Current based upon 40°C temperature rise. (Reference ambient temperature 25°C)

(5) Absolute maximum voltage 30VDC.

(1) LCR仪表4284A (Agilent技术) 或者功能相同的仪器在100kHz下测试电感值。

(2) 通过数码万用表34420A (Agilent技术) 或者3541(HIOKI)测试直流电阻。(环境温度为25°C)

(3) 电感值降低电流是基于电感值从最初的值降低30%计算的。

(4) 温度升高电流是基于温度上升40°C的基础上衡量的。(参考周围环境温度25°C)

(5) 绝对最高电压30伏特。

注意：如果你准备使用该产品作为商业用途等，请确认你与我们的销售部仔细讨论了你的购买计划。

NOTICE: Please be sure that you carefully discuss your planned purchase with our sales division if you intend to use the product for business use etc. is severe.