

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!



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### **Metal Alloy Inductors**

### 金属合金功率电感器

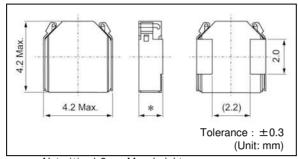
# FDSD0412





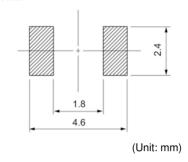
Inductance Range: 0.33~4.7µH





Note (\*) 1.2mm Max. height

### Recommended patterns 推荐焊盘尺寸



### 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 FDSD0412 (Quantity/reel: 4.000 PCS)

零件号码	电感值 <sup>(1)</sup>	公差	最大直流电阻 <sup>(2)</sup>	最大电感减小电流 <sup>(3)</sup>	最大温度上升电流(4)
Part Number	Inductance <sup>(1)</sup> (μΗ)	Tolerance (%)	DC Resistance <sup>(2)</sup> (mΩ) Max. (Typ.)	Inductance Decrease Current <sup>(3)</sup> (A) Max. (Typ.) <u>AL</u> =30%	Temperature Rise Current <sup>(4)</sup> ΔT=40°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.
- 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.
- (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。