

# On-Board Type Coils / Chip Inductors



## SMD Type Power Inductors LPS Series

### LPS Series

Ultra Super Low Profile Power Inductors.



#### ■ Features

- 1.The LPS series has the unique feature of small profile for a power inductor.
- 2.The LPS series is well suited for a wide variety of flat profile gadgets.
- 3.Suitable for flow and reflow soldering.
- 4.Low DC resistance and for large currents.
- 5.The products contain no lead and also support lead-free soldering.

#### ■ Applications

LCD driving circuits (DC-DC converters) such as notebook-sized personal computers, portable terminal equipment, game units etc.

#### ■ Lead Free Part Numbering

**LPS** **5012** **F** - **100** **M**  
 A B C D E

A : Series  
 B : Dimension A x C  
 C : Lead Free Code  
 D : Inductance 100=10uH  
 E : Inductance Tolerance M=±20%

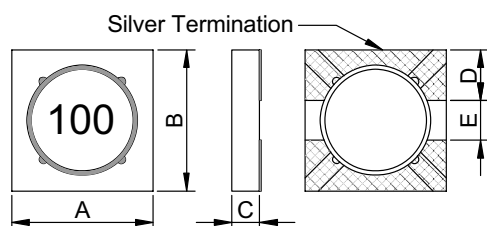
#### ● 特徵

1. LPS系列是具扁薄外觀之獨特特性的功率電感。
2. LPS系列非常適合應用於扁薄小巧的機件。
3. 適合一般焊接及迴焊。
4. 適合低阻抗及大電流。
5. 產品無鉛適合無鉛錫。

#### ● 應用

適用於液晶顯示器驅動電路(直流一直流轉換器)，例如筆記型電腦、個人電腦、便攜式終端設備、遊戲卡等類型的產品。

#### ■ Dimensions



Chip size					
Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
LPS5012	5.2 max.	5.2 max.	1.2 max.	1.5 ref.	2.0 ref.

- All the data listed in this catalogue are for reference only,TAI-TECH reserves the right to alter or revise the specifications without prior notification.

■ LPS 5012 Series

Part Number	Inductance (μH)	Test Frequency (Hz)	DCR (Ω) max.	Isat (A) max.	Irms (A) typ.
LPS 5012-R47M	0.47 ±20%	0.1V/100K	0.0246	3.860	3.190
LPS 5012-1R2M	1.2 ±20%	0.1V/100K	0.0366	2.450	2.620
LPS 5012-1R5M	1.5 ±20%	0.1V/100K	0.0521	2.080	2.190
LPS 5012-2R2M	2.2 ±20%	0.1V/100K	0.0747	1.800	1.830
LPS 5012-3R3M	3.3 ±20%	0.1V/100K	0.1043	1.420	1.550
LPS 5012-4R7M	4.7 ±20%	0.1V/100K	0.1177	1.290	1.460
LPS 5012-6R2M	6.2 ±20%	0.1V/100K	0.1699	1.080	1.210
LPS 5012-8R2M	8.2 ±20%	0.1V/100K	0.2399	0.931	1.020
LPS 5012-100M	10 ±20%	0.1V/100K	0.2844	0.818	0.938
LPS 5012-150M	15 ±20%	0.1V/100K	0.4089	0.692	0.782
LPS 5012-220M	22 ±20%	0.1V/100K	0.6388	0.574	0.628
LPS 5012-330M	33 ±20%	0.1V/100K	0.9289	0.474	0.519
LPS 5012-470M	47 ±20%	0.1V/100K	1.370	0.391	0.418
LPS 5012-680M	68 ±20%	0.1V/100K	2.160	0.325	0.341
LPS 5012-820M	82 ±20%	0.1V/100K	2.360	0.297	0.326
LPS 5012-101M	100 ±20%	0.1V/100K	2.640	0.273	0.308
LPS 5012-151M	150 ±20%	0.1V/100K	3.960	0.220	0.251
LPS 5012-221M	220 ±20%	0.1V/100K	4.760	0.181	0.229
LPS 5012-331M	330 ±20%	0.1V/100K	7.250	0.148	0.186
LPS 5012-471M	470 ±20%	0.1V/100K	8.950	0.126	0.167
LPS 5012-681M	680 ±20%	0.1V/100K	11.30	0.104	0.149
LPS 5012-821M	820 ±20%	0.1V/100K	14.93	0.095	0.129
LPS 5012-102M	1000 ±20%	0.1V/100K	17.20	0.086	0.121

Note:

- (1) Inductance is measured by LCR-meter 4284A(HP) or equivalent.
- (2) DC Resistance is measured by HP4338B Milliohms Meter or equivalent.
- (3) Rated current is measured by LCR-meter 3260B (WK) & DC Bias 3265B(WK).
- (4) Maximum allowable DC current is that which causes a 35% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 25°C).