

# SMB Series

SMD POWER INDUCTOR

SMB型贴片功率电感

**HIRED**

SMD POWER INDUCTOR SMB型贴片功率电感

特征及应用

- 使用载带包装运用于SMT。
- 耐大电流，低直流电阻，圆形，直径6.5mm~12.5mm，高度：3.2mm~5.5MM
- 磁性屏蔽结构。
- 适用于回流焊SMT工艺。
- 无铅产品，符合ROHS指令。
- 广泛应用于电源设备，数码产品，安防产品，扫描仪，升降压转换，CD-ROM，DVD播放器，笔记本电脑，主板和显卡等。

FEATURES/APPLICATIONS

- Carrier tape packing use for SMT
- High rated current & Low DCR, Rotundity,Diameter:6.5mm~12.5mm,Height:3.2mm~5.5mm
- Magnetically shielded construction.
- Suitable for reflow SMT Craft soldering.
- Lead free products, ROHS compliant.
- Widely use in Power supply equipment/Digital Products/Scanner & surveillance products/Scanner/DC-Dc converter/CD-RoM/DVD player/Laptop & Notebook/Mainboard/Displaycard etc.

产品标示

SMB  
①

74  
②

101  
③

M  
④

T/B  
⑤

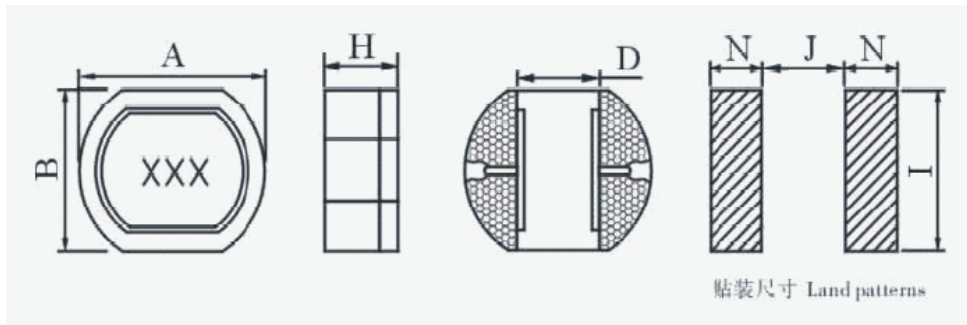
PRODUCT INDICATION

- ①产品类型：SMB型。  
②外观尺寸：圆形，7表示直径7.8mm，4表示高4.5mm。  
③电气特性表示101表示100μH。  
④允许公差：M表示±20%，N表示±30%。  
⑤包装方式：T表示载带盘装；B表示袋装。

- ①Product type:SMB type.  
②External dimensions:Rotundity, 7 for Diameter7.8mm, 4 for Height 4.5mm.  
③Electrical code:101 for 100μH.  
④Tolerance:M for±20%, N for±30%.  
⑤Packing style:T for carrier tape reel; B for in bulk

外形尺寸（单位：mm）

SHAPE AND DIMENSIONS (unit:mm)



| 型号TYPE | A        | B        | H       | D   | N   | I    | J   |
|--------|----------|----------|---------|-----|-----|------|-----|
| SMB63  | 6.2±0.3  | 5.6±0.3  | 3.2±0.5 | 1.7 | 3.0 | 6.0  | 1.5 |
| SMB74  | 7.8±0.3  | 7.0±0.3  | 4.5±0.5 | 1.9 | 3.5 | 7.5  | 1.5 |
| SMB105 | 10.0±0.4 | 9.0±0.4  | 5.0±0.5 | 2.5 | 4.0 | 9.5  | 2.0 |
| SMB125 | 12.6±0.5 | 11.6±0.4 | 5.4±0.5 | 3.0 | 5.0 | 12.0 | 2.5 |

SMD Shielded Power Inductors

SMB Series

电气性能 Electrical Characteristics SMB63 Series

| Part No<br>产品编号 | Test condition<br>测试条件 | Inductance<br>电感 (μ H) | Toierance<br>公差 (%) | DC Resistance<br>直流电阻 (Ω ) MAX | Rated DC current<br>额定电流 (A) MAX |
|-----------------|------------------------|------------------------|---------------------|--------------------------------|----------------------------------|
| SMB63-100M      | 1kHz/0. 25V            | 10                     | ±20                 | 0. 14                          | 1. 00                            |
| SMB63-120M      | 1kHz/0. 25V            | 12                     | ±20                 | 0. 16                          | 0. 94                            |
| SMB63-150M      | 1kHz/0. 25V            | 15                     | ±20                 | 0. 18                          | 0. 86                            |
| SMB63-180M      | 1kHz/0. 25V            | 18                     | ±20                 | 0. 25                          | 0. 78                            |
| SMB63-220M      | 1kHz/0. 25V            | 22                     | ±20                 | 0. 32                          | 0. 76                            |
| SMB63-270M      | 1kHz/0. 25V            | 27                     | ±20                 | 0. 36                          | 0. 64                            |
| SMB63-330M      | 1kHz/0. 25V            | 33                     | ±20                 | 0. 41                          | 0. 61                            |
| SMB63-390M      | 1kHz/0. 25V            | 39                     | ±20                 | 0. 47                          | 0. 53                            |
| SMB63-470M      | 1kHz/0. 25V            | 47                     | ±20                 | 0. 51                          | 0. 50                            |
| SMB63-560M      | 1kHz/0. 25V            | 56                     | ±20                 | 0. 72                          | 0. 46                            |
| SMB63-680M      | 1kHz/0. 25V            | 68                     | ±20                 | 0. 82                          | 0. 42                            |

※超出以上规格的特殊要求也可以满足。Special inquiries besides the above common used types can be meet.

电气性能 Electrical Characteristics SMB74 Series

| Part No<br>产品编号 | Test condition<br>测试条件 | Inductance<br>电感 (μ H) | Toierance<br>公差 (%) | DC Resistance<br>直流电阻 (Ω ) MAX | Rated DC current<br>额定电流 (A) MAX |
|-----------------|------------------------|------------------------|---------------------|--------------------------------|----------------------------------|
| SMB74-100M      | 1kHz/0. 25V            | 10                     | ±20                 | 0. 07                          | 1. 65                            |
| SMB74-120M      | 1kHz/0. 25V            | 12                     | ±20                 | 0. 07                          | 1. 57                            |
| SMB74-150M      | 1kHz/0. 25V            | 15                     | ±20                 | 0. 08                          | 1. 39                            |
| SMB74-180M      | 1kHz/0. 25V            | 18                     | ±20                 | 0. 10                          | 1. 29                            |
| SMB74-220M      | 1kHz/0. 25V            | 22                     | ±20                 | 0. 13                          | 1. 12                            |
| SMB74-270M      | 1kHz/0. 25V            | 27                     | ±20                 | 0. 16                          | 1. 06                            |
| SMB74-330M      | 1kHz/0. 25V            | 33                     | ±20                 | 0. 18                          | 0. 97                            |
| SMB74-390M      | 1kHz/0. 25V            | 39                     | ±20                 | 0. 18                          | 0. 91                            |
| SMB74-470M      | 1kHz/0. 25V            | 47                     | ±20                 | 0. 27                          | 0. 80                            |
| SMB74-560M      | 1kHz/0. 25V            | 56                     | ±20                 | 0. 29                          | 0. 76                            |
| SMB74-680M      | 1kHz/0. 25V            | 68                     | ±20                 | 0. 33                          | 0. 68                            |
| SMB74-820M      | 1kHz/0. 25V            | 82                     | ±20                 | 0. 43                          | 0. 62                            |
| SMB74-101K      | 1kHz/0. 25V            | 100                    | ±10                 | 0. 49                          | 0. 55                            |
| SMB74-121K      | 1kHz/0. 25V            | 120                    | ±10                 | 0. 68                          | 0. 49                            |
| SMB74-151K      | 1kHz/0. 25V            | 150                    | ±10                 | 0. 94                          | 0. 44                            |
| SMB74-181K      | 1kHz/0. 25V            | 180                    | ±10                 | 1. 00                          | 0. 40                            |
| SMB74-221K      | 1kHz/0. 25V            | 220                    | ±10                 | 1. 18                          | 0. 36                            |
| SMB74-271K      | 1kHz/0. 25V            | 270                    | ±10                 | 1. 30                          | 0. 33                            |

※超出以上规格的特殊要求也可以满足。Special inquiries besides the above common used types can be meet.

电气性能 Electrical Characteristics SMB105 Series

| Part No<br>产品编号 | Test condition<br>测试条件 | Inductance<br>电感 (μ H) | Toierance<br>公差 (%) | DC Resistance<br>直流电阻 (Ω) MAX | Rated DC current<br>额定电流 (A) MAX |
|-----------------|------------------------|------------------------|---------------------|-------------------------------|----------------------------------|
| SMB105-100M     | 1kHz/0.25V             | 10                     | ±20                 | 0.06                          | 2.06                             |
| SMB105-120M     | 1kHz/0.25V             | 12                     | ±20                 | 0.07                          | 1.94                             |
| SMB105-150M     | 1kHz/0.25V             | 15                     | ±20                 | 0.07                          | 1.72                             |
| SMB105-180M     | 1kHz/0.25V             | 18                     | ±20                 | 0.08                          | 1.58                             |
| SMB105-220M     | 1kHz/0.25V             | 22                     | ±20                 | 0.08                          | 1.42                             |
| SMB105-270M     | 1kHz/0.25V             | 27                     | ±20                 | 0.10                          | 1.32                             |
| SMB105-330M     | 1kHz/0.25V             | 33                     | ±20                 | 0.11                          | 1.16                             |
| SMB105-390M     | 1kHz/0.25V             | 39                     | ±20                 | 0.12                          | 1.10                             |
| SMB105-470M     | 1kHz/0.25V             | 47                     | ±20                 | 0.14                          | 1.00                             |
| SMB105-560M     | 1kHz/0.25V             | 56                     | ±20                 | 0.19                          | 0.93                             |
| SMB105-680M     | 1kHz/0.25V             | 68                     | ±20                 | 0.21                          | 0.85                             |
| SMB105-820M     | 1kHz/0.25V             | 82                     | ±20                 | 0.28                          | 0.79                             |
| SMB105-101K     | 1kHz/0.25V             | 100                    | ±10                 | 0.34                          | 0.72                             |
| SMB105-121K     | 1kHz/0.25V             | 120                    | ±10                 | 0.37                          | 0.63                             |
| SMB105-151K     | 1kHz/0.25V             | 150                    | ±10                 | 0.51                          | 0.55                             |
| SMB105-181K     | 1kHz/0.25V             | 180                    | ±10                 | 0.57                          | 0.50                             |
| SMB105-221K     | 1kHz/0.25V             | 220                    | ±10                 | 0.78                          | 0.47                             |
| SMB105-271K     | 1kHz/0.25V             | 270                    | ±10                 | 0.87                          | 0.41                             |
| SMB105-331K     | 1kHz/0.25V             | 330                    | ±10                 | 1.20                          | 0.37                             |
| SMB105-391K     | 1kHz/0.25V             | 390                    | ±10                 | 1.34                          | 0.35                             |
| SMB105-471K     | 1kHz/0.25V             | 470                    | ±10                 | 1.50                          | 0.33                             |

※超出以上规格的特殊要求也可以满足。Special inquiries besides the above common used types can be meet.

电气性能 Electrical Characteristics SMB125 Series

| Part No<br>产品编号 | Test condition<br>测试条件 | Inductance<br>电感 (μ H) | Toierance<br>公差 (%) | DC Resistance<br>直流电阻 (Ω) MAX | Rated DC current<br>额定电流 (A) MAX |
|-----------------|------------------------|------------------------|---------------------|-------------------------------|----------------------------------|
| SMB125-100M     | 1kHz/0.25V             | 10                     | ±20                 | 0.05                          | 2.65                             |
| SMB125-120M     | 1kHz/0.25V             | 12                     | ±20                 | 0.05                          | 2.50                             |
| SMB125-150M     | 1kHz/0.25V             | 15                     | ±20                 | 0.06                          | 2.45                             |
| SMB125-180M     | 1kHz/0.25V             | 18                     | ±20                 | 0.06                          | 2.40                             |
| SMB125-220M     | 1kHz/0.25V             | 22                     | ±20                 | 0.07                          | 2.20                             |
| SMB125-270M     | 1kHz/0.25V             | 27                     | ±20                 | 0.08                          | 2.00                             |
| SMB125-330M     | 1kHz/0.25V             | 33                     | ±20                 | 0.10                          | 1.80                             |
| SMB125-390M     | 1kHz/0.25V             | 39                     | ±20                 | 0.11                          | 1.65                             |
| SMB125-470M     | 1kHz/0.25V             | 47                     | ±20                 | 0.12                          | 1.50                             |
| SMB125-560M     | 1kHz/0.25V             | 56                     | ±20                 | 0.15                          | 1.38                             |
| SMB125-680M     | 1kHz/0.25V             | 68                     | ±20                 | 0.17                          | 1.26                             |
| SMB125-820M     | 1kHz/0.25V             | 82                     | ±20                 | 0.20                          | 1.14                             |
| SMB125-101K     | 1kHz/0.25V             | 100                    | ±10                 | 0.25                          | 1.05                             |
| SMB125-121K     | 1kHz/0.25V             | 120                    | ±10                 | 0.28                          | 0.95                             |
| SMB125-151K     | 1kHz/0.25V             | 150                    | ±10                 | 0.40                          | 0.85                             |
| SMB125-181K     | 1kHz/0.25V             | 180                    | ±10                 | 0.48                          | 0.77                             |
| SMB125-221K     | 1kHz/0.25V             | 220                    | ±10                 | 0.52                          | 0.70                             |
| SMB125-271K     | 1kHz/0.25V             | 270                    | ±10                 | 0.70                          | 0.63                             |
| SMB125-331K     | 1kHz/0.25V             | 330                    | ±10                 | 0.80                          | 0.57                             |
| SMB125-391K     | 1kHz/0.25V             | 390                    | ±10                 | 1.08                          | 0.52                             |
| SMB125-471K     | 1kHz/0.25V             | 470                    | ±10                 | 1.20                          | 0.48                             |
| SMB125-561K     | 1kHz/0.25V             | 560                    | ±10                 | 1.34                          | 0.44                             |
| SMB125-681K     | 1kHz/0.25V             | 680                    | ±10                 | 1.78                          | 0.40                             |
| SMB125-821K     | 1kHz/0.25V             | 820                    | ±10                 | 1.50                          | 0.36                             |

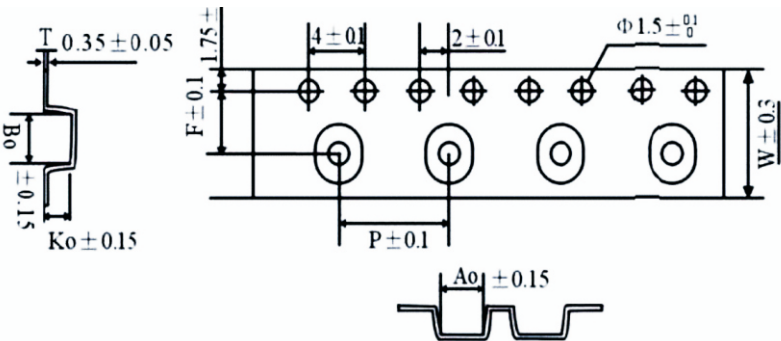
※超出以上规格的特殊要求也可以满足。Special inquiries besides the above common used types can be meet.

- 备注 Notes:
- 电感值测试仪： HP4286A/CH1062A或同等LCR Meter。  
Inductance instrument:HP4286A or LCR Meter equivalent.
- 电感测试条件：1KHz/100KHz。  
Inductance testing condition:1KHz/100KHz .
- 电阻测试仪TH2512B或同等的DCR测试设备。  
DCR instrument: TH2512B or DCR test equipment equivalent.
- 额定电流测试：VR7210 & R113H。  
Rated Current test:VR7210 & R113H.
- 额定电流定义：电感下降25%或温度上升40℃时取其最小值作为额定电流。  
Rated Current definition:Inductance drop by 25% or temperature rise by 40℃，  
the iesser of the minimum as the rated current.
- 贮藏温度：-25℃~80℃；相对湿度：RH65%~85%。  
Temperature storage range:-25℃~80℃;the relative humidity:RH65%~85%.

HIRED

SMB TYPE PACKAGING SMB型包装规格

编带尺寸 Dimensions of tape(unit:mm)



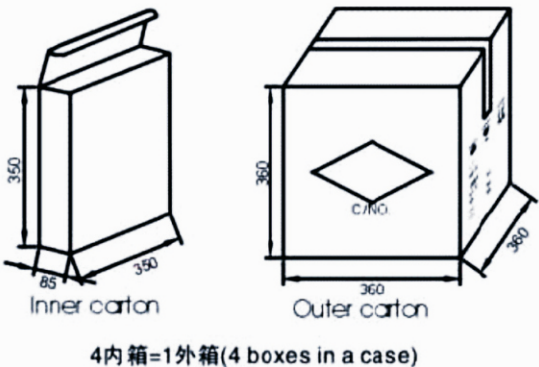
| 型号Type | 尺寸Dimensions |       |       |       |       |      | 带轮Reel | Quantities(数量) |
|--------|--------------|-------|-------|-------|-------|------|--------|----------------|
|        | A0           | B0    | W     | P     | F     | K0   |        | PCS/reel (每卷)  |
| SMB63  | 6.00         | 6.50  | 16.00 | 12.00 | 5.50  | 3.50 | 330*12 | 1000           |
| SMB74  | 7.80         | 8.30  | 16.00 | 12.00 | 7.50  | 5.00 | 330*16 | 1000           |
| SMB105 | 10.00        | 10.50 | 24.00 | 12.00 | 11.50 | 5.50 | 330*24 | 1000           |
| SMB125 | 11.60        | 13.00 | 24.00 | 16.00 | 11.50 | 5.80 | 330*24 | 500            |

※超出以上规格的特殊要求也可以满足。Special inquiries besides the above common used types can be meet.

带轮尺寸 Dimensions of Reel(unit:mm) 编带简图及拉伸方向 Taping figures and drawing direction

| Type | A   | B   | C    | D    | T    |
|------|-----|-----|------|------|------|
| 12mm | 330 | 100 | 13.5 | 12.4 | 16.4 |
| 16mm | 330 | 100 | 13.5 | 16.4 | 20.4 |
| 24mm | 330 | 100 | 13.5 | 24.4 | 28.4 |

包装箱盒尺寸 BOX and case dimensions (unit:mm) 包装数量 Packag quantities(unit:PCS)



| 型号Type | Quantities(数量) | Quantities(数量)  |
|--------|----------------|-----------------|
|        | Inner carton内箱 | Outer carton 外箱 |
| SMB63  | 4/4000         | 4/16K           |
| SMB74  | 4/4000         | 4/16K           |
| SMB105 | 2/2000         | 4/8K            |
| SMU125 | 2/1000         | 4/4K            |