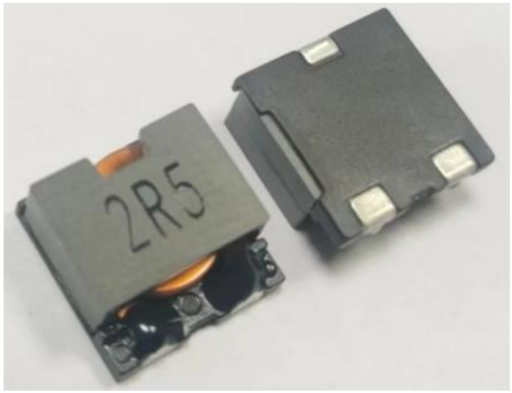
# High Current SMD Power Inductor

## Product Description:



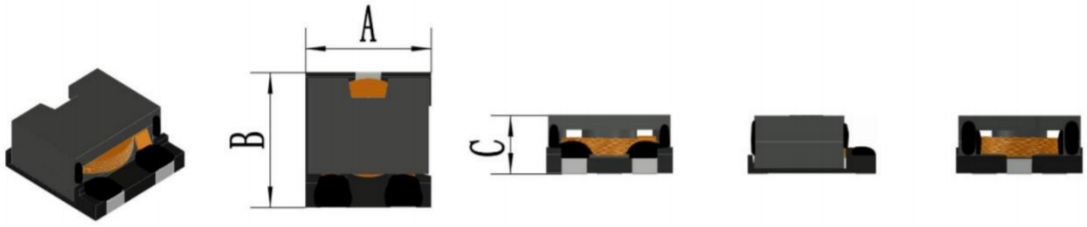

1.High curretnt,low loss of iron powder core
2.Low profile for machine placement
3.Minimize electromagnetic interference
4.Suppress common mode noise
5.Prevent EMI effect via precise impedance
6.Custom design available

## Lead Free Part Numbering

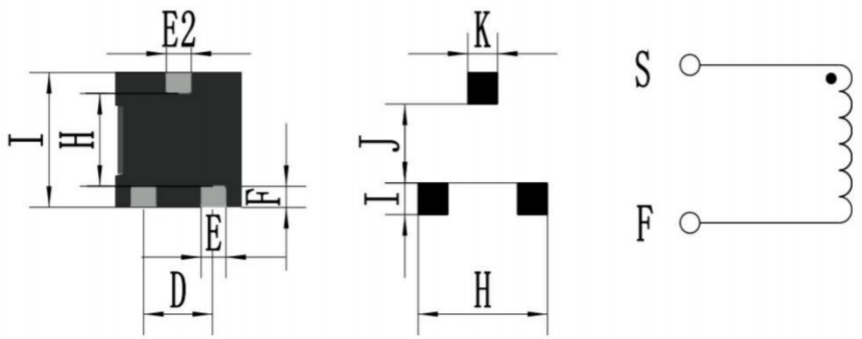
**SLB 1050 P 1R8 M S T**
**(1)** (2) (3) (4) (5) (6) (7)

(1).Series Type
(2).Dimension
(3).Material Code
(4).Inductance:1R8=1.8uH 2R2=2.2uH 100=10uH
(5).Inductance Tolerance:M=±20% N=±30%
(6).Company Code
(7).Packaging:T-Tape&reel

## DImensions:(mm)




z



| Series | A | B | C | D | E | E2 | F | H | I |
|---|---|---|---|---|---|---|---|---|---|
| SLB1050P | 10.6Max | 10.6Max | 5.2Max | 5.5±0.5 | 2.5 | 1.5 | 2.0 | 8.2 | 2.5 |
| SLB1360P | 13.0Max | 13.5Max | 5.8Max | 6.9±0.5 | 2.5 | 2.5 | 2.0 | 9.0 | 2.5 |
| SLB1390P | 13.0Max | 13.5Max | 9.0Max | 6.9±0.5 | 2.5 | 2.5 | 2.0 | 9.0 | 2.5 |
| SLB1470P | 47.9Max | 15.1Max | 8.2Max | 9.0±0.5 | 2.8 | 2.5 | 1.8 | 13.0 | 2.7 |
| SLB1412P | 14.9Max | 15.1Max | 12.2Max | 9.0±0.5 | 2.8 | 2.5 | 1.8 | 13.0 | 2.7 |

## ◆ Electrical Characteristics:

| Part No | L(A) uH ±20% | Irms(A) Type | Isat(A) Type | DCR(mΩ) Type | DCR(mΩ) Max |
|---|---|---|---|---|---|
| SLB1050P Series | | | | | |
| SLB1050PR80MST | 0.8 | 16.3 | 25.6 | 3.8 | 4.0 |
| SLB1050P1R0MST | 1.0 | 16.3 | 17.5 | 3.8 | 4.0 |
| SLB1050P1R2MST | 1.2 | 15.0 | 21.3 | 5.4 | 6.0 |
| SLB1050P1R3MST | 1.3 | 16.3 | 17.2 | 3.8 | 4.0 |
| SLB1050P1R5MST | 1.5 | 15.0 | 14.5 | 3.8 | 4.0 |
| SLB1050P1R8MST | 1.8 | 15.0 | 14.3 | 5.4 | 6.0 |
| SLB1050P2R0MST | 2.0 | 11.5 | 16.2 | 7.8 | 9.0 |
| SLB1050P2R2MST | 2.2 | 16.3 | 10.0 | 3.8 | 4.0 |
| SLB1050P2R5MST | 2.5 | 12.0 | 12.1 | 5.4 | 7.5 |
| SLB1050P3R2MST | 3.2 | 15.0 | 8.50 | 5.4 | 6.0 |
| SLB1050P4R0MST | 4.0 | 11.5 | 8.80 | 7.8 | 9.0 |
| SLB1050P4R3MST | 4.3 | 12.0 | 7.00 | 5.4 | 7.5 |
| SLB1050P5R7MST | 5.7 | 11.5 | 6.00 | 7.8 | 9.0 |

| Part No | L(A) uH ±20% | Irms(A) Type | Isat(A) Type | DCR(mΩ) Type | DCR(mΩ) Max |
|---|---|---|---|---|---|
| SLB1360P Series | | | | | |
| SLB1360P1R0MST | 1.0 | 13.0 | 33.5 | 2.36 | 2.6 |
| SLB1360P1R8MST | 1.8 | 13.0 | 20.0 | 2.36 | 2.6 |
| SLB1360P2R7MST | 2.7 | 13.0 | 14.0 | 2.36 | 2.6 |
| SLB1360P4R0MST | 4.0 | 9.4 | 13.0 | 5.5 | 6.05 |
| SLB1360P4R7MST | 4.7 | 9.4 | 12.0 | 5.5 | 6.05 |
| SLB1360P6R0MST | 6.0 | 9.4 | 9.5 | 5.5 | 6.05 |
| SLB1360P8R0MST | 8.0 | 7.6 | 9.0 | 9.83 | 10.81 |
| SLB1360P100MST | 10.0 | 7.2 | 7.5 | 9.83 | 10.81 |
| SLB1390P Series | | | | | |
| SLB1390P100MST | 10 | 9.2 | 13.16 | 13.7 | 15.0 |
| SLB1390P150MST | 15 | 9.2 | 8.6 | 13.7 | 15.0 |
| SLB1390P220MST | 22 | 7.7 | 7.36 | 21.0 | 23.1 |
| SLB1390P330MST | 33 | 7.7 | 4.76 | 21.0 | 23.1 |
| SLB1390P470MST | 47 | 7.7 | 3.2 | 21.0 | 23.1 |

※

**All data is tested based on 25°C ambient temperature.**

**1.Inductance measure condition at 100kHz,0.1V.**

**2.Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.**

**3.Temperature rise current: the actual value of DC current when the temperature rise is △T40°C(Ta=25C).**

**Special remind:Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.**

| Part No | L(A) uH ±20% | Irms(A) Type | Isat(A) Type | DCR(mΩ) Type | DCR(mΩ) Max |
|---|---|---|---|---|---|
| SLB1470P Series | | | | | |
| SLB1470PR40MST | 0.4 | 23.0 | 66.0 | 1.0 | 1.2 |
| SLB1470PR90MST | 0.9 | 21.5 | 45.0 | 1.2 | 1.5 |
| SLB1470P1R5MST | 1.5 | 20.0 | 34.0 | 1.7 | 2.0 |
| SLB1470P2R4MST | 2.4 | 17.5 | 28.0 | 2.7 | 3.2 |
| SLB1470P3R4MST | 3.4 | 16.0 | 23.0 | 4.1 | 5.0 |
| SLB1470P4R7MST | 4.7 | 12.5 | 19.0 | 5.0 | 6.0 |
| SLB1470P6R1MST | 6.1 | 11.0 | 18.5 | 6.5 | 7.8 |
| SLB1470P7R7MST | 7.7 | 10.0 | 15.5 | 8.2 | 9.9 |
| SLB1470P9R5MST | 9.5 | 8.5 | 14.0 | 11.1 | 13.3 |
| SLB1470P100MST | 10.0 | 10.0 | 11.5 | 8.2 | 9.9 |
| SLB1470P120MST | 12.0 | 8.5 | 10.0 | 11.1 | 13.3 |
| SLB1470P470MST | 47.0 | 2.5 | 3.0 | 22.3 | 27.0 |
| SLB1412P Series | | | | | |
| SLB1412P7R4MST | 7.4 | 13.0 | 10.8 | 3.7 | 4.5 |
| SLB1412P100MST | 10.0 | 12.5 | 9.2 | 4.5 | 5.4 |
| SLB1412P120MST | 12.0 | 10.3 | 8.5 | 6.3 | 7.5 |
| SLB1412P150MST | 15.0 | 9.6 | 8.0 | 7.4 | 8.4 |
| SLB1412P180MST | 18.0 | 9.0 | 7.2 | 8.1 | 9.8 |
| SLB1412P220MST | 22.0 | 8.3 | 6.4 | 9.4 | 11.3 |

※

**All data is tested based on 25°C ambient temperature.**

**1.Inductance measure condition at 100kHz,0.1V.**

**2.Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.**

**3.Temperature rise current: the actual value of DC current when the temperature rise is △T40°C(Ta=25C).**

**Special remind:Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.**

## ◆Packing

| Series | SLB1050 Series | SLB1360 Series | SLB1390 Series | SLB1470 Series | SLB1412 Series |
|---|---|---|---|---|---|
| QTY (PCS/Reel) | 800Ref | 500Ref | 300Ref | 300Ref | 250Ref |