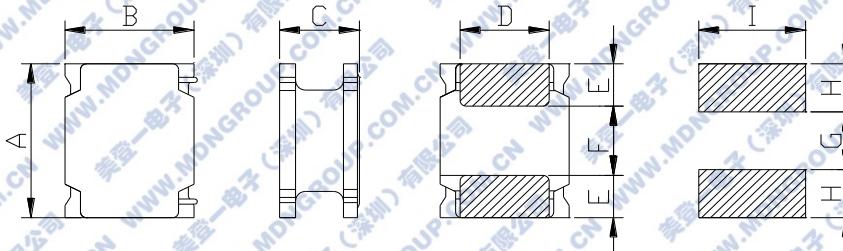


SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感**SPH 系列****FEATURES**

- With magnetic shield against radiation.
- Low resistance with high current rating, 30% lower DCR than SCB-series and larger current.
- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels.
- Suitable for surface mount equipment.

APPLICATIONS

- Power supply choke for smart phone, small electrical equipments such as VTR, LCD display, Note book, communication equipment, LED lighting, automotive system, OA equipments, Mother board, display card, sound card; Power supply or MP3, MP4, MP5, PDA, IPAD, DC-DC converter, DC-AC inverters etc.

DIMENSIONS AND LAND PATTERNS(mm) AND SHAPES**特征**

- 磁屏蔽结构，防止高频辐射干扰；
- 低直流电阻及高额定电流；该系列较 SCB 系列直流电阻降低 30%左右，具有更大的电流；
- 导磁胶水涂覆结构极大减少了蜂鸣声；
- 适合表面贴装。

用途

- 智能手机、录像机、液晶显示器、笔记本电脑、通讯设备、汽车产品、LED 照明、电脑主机板、声卡、显卡、办公自动化设备的电源扼流；MP3、MP4、MP5,PDA、IPAD，直流-直流整流器，直流-交流换流器等的电源供应器。

| TYPE | A±0.2 | B±0.2 | C(Max) | D±0.2 | E±0.2 | F±0.2 | G(Ref) | H(Ref) | I(Ref) |
|---------------|-------|-------|--------|-------|-------|-------|--------|--------|--------|
| SPH201610H/S- | 2.0 | 1.6 | 1.0 | 1.2 | 0.6 | 0.80 | 0.70 | 0.70 | 1.70 |
| SPH202012H- | 2.0 | 2.0 | 1.2 | 1.5 | 0.6 | 0.80 | 0.65 | 0.70 | 2.00 |
| SPH252010H- | 2.5 | 2.0 | 1.0 | 1.5 | 0.8 | 0.80 | 0.80 | 0.85 | 2.00 |
| SPH252012H- | 2.5 | 2.0 | 1.2 | 1.5 | 0.8 | 0.80 | 0.80 | 0.85 | 2.00 |
| SPH3012H- | 3.0 | 3.0 | 1.2 | 2.5 | 0.75 | 1.50 | 1.50 | 0.80 | 2.70 |
| SPH3015H- | 3.0 | 3.0 | 1.5 | 2.5 | 0.75 | 1.50 | 1.50 | 0.80 | 2.70 |
| SPH4012H- | 4.0 | 4.0 | 1.2 | 3.3 | 0.95 | 2.10 | 1.90 | 1.10 | 3.70 |
| SPH4018H- | 4.0 | 4.0 | 1.8 | 3.3 | 0.95 | 2.10 | 1.90 | 1.10 | 3.70 |
| SPH4020H- | 4.0 | 4.0 | 2.0 | 3.3 | 0.95 | 2.10 | 1.90 | 1.10 | 3.70 |
| SPH4030H- | 4.0 | 4.0 | 3.0 | 3.3 | 0.95 | 2.10 | 1.90 | 1.10 | 3.70 |
| SPH8030H- | 8.0 | 8.0 | 3.0 | 6.3 | 2.00 | 4.00 | 3.00 | 2.20 | 7.50 |

SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感**SPH 系列****SPH201610H-SERIES**

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| R16M | 0.16 | 0.031 | 0.026 | 4.30 | 4.80 | 3.20 | 3.50 |
| R24M | 0.24 | 0.040 | 0.033 | 3.70 | 4.10 | 3.00 | 3.25 |
| R33M | 0.33 | 0.040 | 0.033 | 2.50 | 3.10 | 2.90 | 3.20 |
| R47M | 0.47 | 0.059 | 0.049 | 2.30 | 2.85 | 2.35 | 2.60 |
| R68M | 0.68 | 0.076 | 0.063 | 1.95 | 2.45 | 2.05 | 2.25 |
| 1R0M | 1.0 | 0.114 | 0.095 | 1.65 | 1.85 | 1.45 | 1.60 |
| 1R5M | 1.5 | 0.174 | 0.145 | 1.35 | 1.65 | 1.25 | 1.40 |
| 2R2M | 2.2 | 0.264 | 0.220 | 1.20 | 1.45 | 1.10 | 1.20 |
| 3R3M | 3.3 | 0.335 | 0.279 | 0.90 | 1.05 | 0.88 | 0.98 |
| 4R7M | 4.7 | 0.479 | 0.399 | 0.70 | 0.85 | 0.74 | 0.82 |
| 6R8M | 6.8 | 0.816 | 0.680 | 0.60 | 0.70 | 0.52 | 0.58 |
| 100M | 10 | 1.020 | 0.850 | 0.50 | 0.55 | 0.45 | 0.50 |

SPH201610U-SERIES

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|--------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| 50NM | 0.05 | 0.022 | 0.018 | 7.50 | 8.00 | 3.65 | 4.25 |
| R10M | 0.10 | 0.022 | 0.018 | 4.80 | 5.70 | 3.65 | 4.25 |
| R16M | 0.16 | 0.031 | 0.026 | 4.70 | 5.40 | 3.20 | 3.50 |
| R24M | 0.24 | 0.040 | 0.033 | 4.50 | 5.00 | 2.90 | 3.20 |
| R33M | 0.33 | 0.040 | 0.033 | 3.00 | 3.60 | 2.90 | 3.20 |
| R47M | 0.47 | 0.052 | 0.043 | 2.90 | 3.40 | 2.35 | 2.60 |
| R47MY1 | 0.47 | 0.040 | 0.033 | 2.00 | 2.40 | 2.90 | 3.20 |
| R68M | 0.68 | 0.072 | 0.060 | 2.50 | 2.70 | 2.05 | 2.25 |
| 1R0M | 1.00 | 0.072 | 0.060 | 1.30 | 1.50 | 2.05 | 2.25 |
| 2R2M | 2.20 | 0.171 | 0.143 | 1.10 | 1.20 | 1.23 | 1.40 |

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感**SPH 系列****SPH202012H-SERIES**

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| R16M | 0.16 | 0.031 | 0.026 | 5.20 | 5.80 | 2.50 | 2.75 |
| R24M | 0.24 | 0.040 | 0.035 | 4.70 | 5.20 | 2.20 | 2.40 |
| R33M | 0.33 | 0.042 | 0.035 | 3.50 | 4.00 | 2.20 | 2.40 |
| R47M | 0.47 | 0.050 | 0.042 | 3.55 | 3.75 | 2.00 | 2.20 |
| R68M | 0.68 | 0.060 | 0.050 | 2.95 | 3.10 | 1.80 | 2.00 |
| 1R0M | 1.0 | 0.088 | 0.073 | 2.70 | 2.85 | 1.50 | 1.65 |
| 1R5M | 1.5 | 0.112 | 0.093 | 2.00 | 2.20 | 1.30 | 1.45 |
| 2R2M | 2.2 | 0.127 | 0.106 | 1.40 | 1.65 | 1.20 | 1.35 |
| 3R3M | 3.3 | 0.276 | 0.230 | 1.20 | 1.35 | 0.85 | 0.95 |
| 4R7M | 4.7 | 0.294 | 0.245 | 0.97 | 1.10 | 0.82 | 0.90 |
| 6R8M | 6.8 | 0.479 | 0.399 | 0.82 | 0.92 | 0.64 | 0.70 |
| 100M | 10 | 0.785 | 0.654 | 0.72 | 0.82 | 0.49 | 0.54 |
| 150M | 15 | 1.368 | 1.14 | 0.55 | 0.65 | 0.38 | 0.42 |
| 180M | 18 | 1.680 | 1.400 | 0.60 | 0.68 | 0.35 | 0.38 |
| 220M | 22 | 1.680 | 1.400 | 0.40 | 0.50 | 0.35 | 0.38 |
| 330M | 33 | 2.160 | 1.800 | 0.35 | 0.40 | 0.30 | 0.33 |

SPH252010H-SERIES

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|--------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| R24M | 0.24 | 0.034 | 0.028 | 3.60 | 4.40 | 2.75 | 3.00 |
| R33M | 0.33 | 0.043 | 0.036 | 3.80 | 4.60 | 2.40 | 2.65 |
| R47M | 0.47 | 0.044 | 0.037 | 2.40 | 2.80 | 2.40 | 2.65 |
| R68M | 0.68 | 0.061 | 0.051 | 2.75 | 3.10 | 2.10 | 2.35 |
| R68MY1 | 0.68 | 0.061 | 0.051 | 2.75 | 3.10 | 2.10 | 2.35 |
| R68MY2 | 0.68 | 0.065 | 0.055 | 3.20 | 3.50 | 2.10 | 2.30 |
| 1R0M | 1.00 | 0.080 | 0.067 | 2.05 | 2.45 | 1.80 | 2.00 |
| 1R5M | 1.50 | 0.108 | 0.090 | 1.70 | 2.05 | 1.55 | 1.70 |
| 2R2M | 2.20 | 0.137 | 0.114 | 1.55 | 1.80 | 1.40 | 1.55 |
| 3R3M | 3.30 | 0.228 | 0.170 | 1.10 | 1.40 | 1.10 | 1.20 |

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40 °C.

SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感 **SPH 系列**
SPH252010H-SERIES

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| 4R7M | 4.7 | 0.323 | 0.269 | 1.00 | 1.15 | 0.91 | 1.00 |
| 6R8M | 6.8 | 0.451 | 0.376 | 0.82 | 0.95 | 0.76 | 0.84 |
| 100M | 10 | 0.584 | 0.487 | 0.65 | 0.75 | 0.67 | 0.74 |
| 150M | 15 | 0.954 | 0.795 | 0.55 | 0.65 | 0.50 | 0.55 |
| 220M | 22 | 1.548 | 1.290 | 0.45 | 0.55 | 0.40 | 0.45 |
| 330M | 33 | 1.548 | 1.290 | 0.25 | 0.30 | 0.40 | 0.45 |

SPH252012H-SERIES

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|--------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| R16M | 0.16 | 0.022 | 0.018 | 6.50 | 7.20 | 4.05 | 4.50 |
| R24M | 0.24 | 0.022 | 0.018 | 4.00 | 4.75 | 4.05 | 4.50 |
| R33M | 0.33 | 0.029 | 0.024 | 4.00 | 4.70 | 3.35 | 3.70 |
| R47M | 0.47 | 0.036 | 0.030 | 3.70 | 4.10 | 3.00 | 3.30 |
| R47MY1 | 0.47 | 0.038 | 0.032 | 4.90 | 5.20 | 2.90 | 3.20 |
| R68M | 0.68 | 0.061 | 0.051 | 3.00 | 3.30 | 2.10 | 2.30 |
| R68MY1 | 0.68 | 0.042 | 0.035 | 3.20 | 3.50 | 2.50 | 2.70 |
| R68MY2 | 0.68 | 0.060 | 0.051 | 3.80 | 4.20 | 2.10 | 2.30 |
| 1R0M | 1.0 | 0.044 | 0.037 | 1.70 | 1.90 | 2.20 | 240 |
| 1R0MY3 | 1.0 | 0.043 | 0.037 | 2.40 | 2.60 | 2.40 | 2.60 |
| 1R5M | 1.5 | 0.078 | 0.065 | 2.00 | 2.35 | 1.95 | 2.10 |
| 2R2M | 2.2 | 0.096 | 0.080 | 1.80 | 1.95 | 1.80 | 1.95 |
| 3R3M | 3.3 | 0.144 | 0.120 | 1.15 | 1.25 | 1.40 | 1.50 |
| 4R7M | 4.7 | 0.210 | 0.175 | 1.10 | 1.20 | 1.12 | 1.25 |
| 6R8M | 6.8 | 0.360 | 0.300 | 0.80 | 1.00 | 0.95 | 1.05 |
| 100M | 10 | 0.522 | 0.435 | 0.70 | 0.85 | 0.79 | 0.87 |
| 150M | 15 | 1.000 | 0.830 | 0.65 | 0.75 | 0.57 | 0.63 |
| 180M | 18 | 1.000 | 0.830 | 0.50 | 0.65 | 0.57 | 0.63 |
| 220M | 22 | 1.090 | 0.910 | 0.45 | 0.55 | 0.54 | 0.60 |
| 330M | 33 | 1.840 | 1.530 | 0.35 | 0.40 | 0.42 | 0.46 |
| 470M | 47 | 2.220 | 1.850 | 0.25 | 0.30 | 0.30 | 0.35 |

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感
SPH 系列
SPH3012H-SERIES

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|--------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| 1R0M | 1.0 | 0.040 | 0.032 | 2.20 | 2.50 | 2.30 | 2.50 |
| 1R0MY2 | 1.0 | 0.056 | 0.047 | 2.80 | 3.20 | 1.90 | 2.00 |
| 2R2M | 2.2 | 0.090 | 0.075 | 1.50 | 1.80 | 1.40 | 1.60 |
| 3R3M | 3.3 | 0.134 | 0.112 | 1.23 | 1.55 | 1.40 | 1.60 |
| 100M | 10 | 0.372 | 0.310 | 0.75 | 0.90 | 0.75 | 0.80 |
| 100MY1 | 10 | 0.495 | 0.413 | 1.00 | 1.10 | 0.90 | 1.00 |
| 220M | 22 | 0.840 | 0.700 | 0.50 | 0.60 | 0.50 | 0.55 |

SPH3015H-SERIES

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| R47M | 0.47 | 0.022 | 0.018 | 2.40 | 2.80 | 3.00 | 3.50 |
| 1R0M | 1.0 | 0.040 | 0.033 | 2.70 | 3.00 | 2.20 | 2.50 |
| 1R5M | 1.5 | 0.048 | 0.040 | 2.00 | 2.30 | 2.00 | 2.30 |
| 2R2M | 2.2 | 0.060 | 0.050 | 1.50 | 1.70 | 1.80 | 2.05 |
| 3R3M | 3.3 | 0.084 | 0.070 | 1.30 | 1.50 | 1.50 | 1.70 |
| 4R7M | 4.7 | 0.115 | 0.096 | 1.10 | 1.20 | 1.30 | 1.50 |
| 6R8M | 6.8 | 0.144 | 0.120 | 0.80 | 0.90 | 1.16 | 1.35 |
| 100M | 10 | 0.276 | 0.230 | 0.75 | 0.90 | 0.84 | 0.97 |
| 150M | 15 | 0.360 | 0.300 | 0.60 | 0.70 | 0.73 | 0.84 |
| 220M | 22 | 0.540 | 0.450 | 0.52 | 0.60 | 0.60 | 0.70 |
| 330M | 33 | 1.090 | 0.910 | 0.50 | 0.55 | 0.50 | 0.55 |
| 470M | 47 | 1.250 | 1.040 | 0.35 | 0.42 | 0.45 | 0.50 |

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感 **SPH 系列**

| SPH4012H-SERIES | | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------------------------|--------------------------------------|---------------------------------|-------|--|------|---|------|
| P/N | L(uH) Inductance @1MHz ±20% | Max | Typ | Max | Typ | Max | Typ |
| R47N | 0.47 | 0.032 | 0.027 | 3.50 | 4.20 | 2.90 | 3.20 |
| R82N | 0.82 | 0.042 | 0.035 | 3.00 | 3.50 | 2.50 | 2.90 |
| 1R0N | 1.0 | 0.050 | 0.042 | 2.80 | 3.30 | 2.20 | 2.50 |
| 1R8N | 1.5 | 0.050 | 0.042 | 2.10 | 2.20 | 2.20 | 2.50 |
| 2R2M | 2.2 | 0.066 | 0.055 | 1.70 | 1.80 | 2.00 | 2.30 |
| 2R7M | 2.7 | 0.084 | 0.070 | 1.90 | 2.20 | 1.70 | 2.00 |
| 3R3M | 3.3 | 0.084 | 0.070 | 1.40 | 1.70 | 1.70 | 2.00 |
| 3R6M | 3.6 | 0.090 | 0.075 | 1.20 | 1.60 | 1.70 | 2.00 |
| 4R3M | 4.3 | 0.108 | 0.090 | 1.20 | 1.50 | 1.50 | 1.80 |
| 4R7M | 4.7 | 0.108 | 0.090 | 1.20 | 1.30 | 1.50 | 1.80 |
| 5R1M | 5.1 | 0.132 | 0.110 | 1.20 | 1.40 | 1.40 | 1.60 |
| 5R6M | 5.6 | 0.132 | 0.110 | 1.10 | 1.40 | 1.40 | 1.60 |
| 6R8M | 6.8 | 0.150 | 0.125 | 0.90 | 1.10 | 1.30 | 1.60 |
| 100M | 10 | 0.204 | 0.170 | 0.80 | 0.90 | 1.10 | 1.30 |
| 100MY1 | 10 | 0.240 | 0.200 | 0.90 | 1.10 | 1.00 | 1.10 |
| 120M | 12 | 0.312 | 0.260 | 0.85 | 1.00 | 0.90 | 1.00 |
| 150M | 15 | 0.312 | 0.260 | 0.65 | 0.80 | 0.90 | 1.00 |
| 180M | 18 | 0.432 | 0.360 | 0.65 | 0.80 | 0.78 | 0.90 |
| 220M | 22 | 0.460 | 0.380 | 0.50 | 0.65 | 0.78 | 0.90 |
| 270M | 27 | 0.672 | 0.560 | 0.50 | 0.60 | 0.63 | 0.73 |
| 330M | 33 | 0.756 | 0.630 | 0.45 | 0.55 | 0.57 | 0.68 |
| 360M | 36 | 0.756 | 0.630 | 0.40 | 0.50 | 0.57 | 0.68 |
| 390M | 39 | 1.188 | 0.990 | 0.55 | 0.62 | 0.47 | 0.54 |
| 470M | 47 | 1.188 | 0.990 | 0.40 | 0.50 | 0.47 | 0.54 |
| 560M | 56 | 1.320 | 1.100 | 0.35 | 0.45 | 0.45 | 0.52 |
| 680M | 68 | 1.800 | 1.500 | 0.38 | 0.45 | 0.38 | 0.44 |
| 820M | 82 | 2.040 | 1.700 | 0.30 | 0.38 | 0.36 | 0.42 |
| 101M | 100 | 2.040 | 1.700 | 0.25 | 0.31 | 0.36 | 0.42 |

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感**SPH 系列****SPH4018H-SERIES**

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| 1R0N | 1.0 | 0.032 | 0.027 | 4.00 | 4.80 | 3.20 | 3.70 |
| 1R5N | 1.5 | 0.037 | 0.031 | 3.60 | 4.30 | 2.95 | 3.30 |
| 2R2M | 2.2 | 0.050 | 0.042 | 3.00 | 3.40 | 2.20 | 2.90 |
| 3R3M | 3.3 | 0.066 | 0.055 | 2.30 | 2.90 | 2.00 | 2.50 |
| 4R7M | 4.7 | 0.084 | 0.070 | 2.00 | 2.20 | 1.70 | 2.10 |
| 6R8M | 6.8 | 0.118 | 0.098 | 1.60 | 1.80 | 1.45 | 1.70 |
| 100M | 10 | 0.180 | 0.150 | 1.30 | 1.50 | 1.20 | 1.50 |
| 150M | 15 | 0.252 | 0.210 | 1.10 | 1.20 | 0.85 | 1.20 |
| 220M | 22 | 0.348 | 0.290 | 0.90 | 1.10 | 0.70 | 1.00 |
| 330M | 33 | 0.552 | 0.460 | 0.70 | 0.90 | 0.55 | 0.82 |
| 470M | 47 | 0.744 | 0.620 | 0.57 | 0.70 | 0.91 | 1.01 |
| 680M | 68 | 0.972 | 0.810 | 0.53 | 0.62 | 0.68 | 0.73 |
| 101M | 100 | 1.560 | 1.300 | 0.49 | 0.57 | 0.40 | 0.47 |
| 151M | 150 | 3.120 | 2.600 | 0.41 | 0.47 | 0.28 | 0.33 |
| 221M | 220 | 3.840 | 3.200 | 0.33 | 0.38 | 0.25 | 0.29 |
| 331M | 331 | 5.880 | 4.900 | 0.260 | 0.31 | 0.20 | 0.23 |

SPH4020H-SERIES

| P/N | L(uH) Inductance @1MHz ±30% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| R33N | 0.33 | 0.016 | 0.013 | 7.50 | 8.50 | 3.30 | 4.90 |

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感 **SPH 系列**
SPH4030H-SERIES

| P/N | L(uH) Inductance @1MHz ±30% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|-------|-------------------------------------|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| R10N | 0.10 | 0.007 | 0.006 | 17.00 | 18.50 | 4.60 | 6.30 |
| R22N | 0.22 | 0.007 | 0.006 | 11.50 | 12.50 | 3.90 | 5.20 |
| R47N | 0.47 | 0.013 | 0.011 | 8.20 | 9.20 | 4.50 | 5.20 |

SPH8030H-SERIES

| P/N | L(uH) Inductance @1MHz ±20% | DCR(Ω) DC Resistance | | Isat(A) Inductance decrease current | | Irms(A) Temperature rise current | |
|------|--------------------------------------|-------------------------|-------|---|------|--|------|
| | | Max | Typ | Max | Typ | Max | Typ |
| 1R0N | 1.0 | 0.012 | 0.009 | 7.80 | 9.00 | 6.20 | 7.30 |
| 1R5N | 1.5 | 0.016 | 0.012 | 6.20 | 7.60 | 5.30 | 6.20 |
| 2R2M | 2.2 | 0.020 | 0.015 | 4.90 | 6.30 | 4.80 | 5.70 |
| 3R3M | 3.3 | 0.025 | 0.019 | 4.20 | 5.10 | 4.30 | 5.10 |
| 4R7M | 4.7 | 0.029 | 0.022 | 3.60 | 4.30 | 4.00 | 4.70 |
| 6R8M | 6.8 | 0.038 | 0.029 | 3.00 | 3.50 | 3.40 | 3.90 |
| 100M | 10 | 0.043 | 0.033 | 2.40 | 2.80 | 3.00 | 3.70 |
| 150M | 15 | 0.078 | 0.060 | 2.00 | 2.40 | 2.20 | 2.80 |
| 220M | 22 | 0.091 | 0.070 | 1.75 | 2.00 | 1.90 | 2.40 |
| 330M | 33 | 0.156 | 0.120 | 1.30 | 1.70 | 1.50 | 2.10 |
| 470M | 47 | 0.221 | 0.170 | 1.10 | 1.40 | 1.30 | 1.70 |

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.