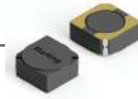


Shielded Surface Mount Power Inductor— SMRH2 Series



FEATURES

- ROHS, Halogen free and REACH Compliance.
- Magnetic shielded surface mount inductor.
- High current rating, low DC resistance.
- Various package size and wide inductance range.

APPLICATIONS

AP Routers, STBs and LCD TVs, LED televisions, TV,DC/DC converter and power supply for VTRs.

PRODUCT IDENTIFICATION

01
SMRH

02
4D28

03
—
3R3

04
M

05
T

| 01 Type | |
|---------|---------------------------------------|
| SMRH2 | Shielded Surface Mount Power Inductor |

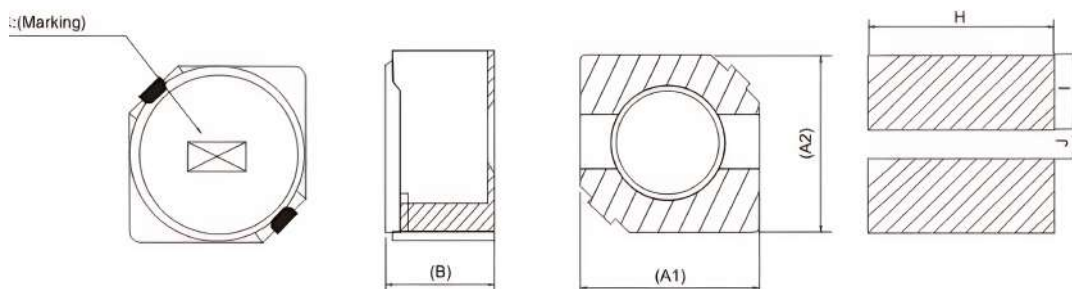
| 02 External Dimensions (LxW)(mm) | |
|----------------------------------|----------|
| 2D11 | 3.3x 1.4 |
| 2D14 | 3.3x 1.7 |
| 2D18 | 3.3x 2.1 |
| 3D16 | 4.0x 1.9 |
| 3D18 | 4.0x 2.1 |
| 3D28 | 4.0x 3.1 |
| 4D18 | 5.0x 2.1 |
| 4D28 | 5.0x 3.1 |
| 5D18 | 6.0x 2.1 |
| 5D28 | 6.0x 3.1 |
| 6D28 | 7.0x 3.1 |
| 6D38 | 7.0x 4.1 |

| 04 Nominal Inductance | |
|-----------------------|---------------|
| Example | Nominal value |
| 2R2 | 2.2uH |
| 220 | 22uH |
| 221 | 220uH |

| 05 Tolerance | |
|--------------|------|
| K | ±10% |
| M | ±20% |
| N | ±30% |

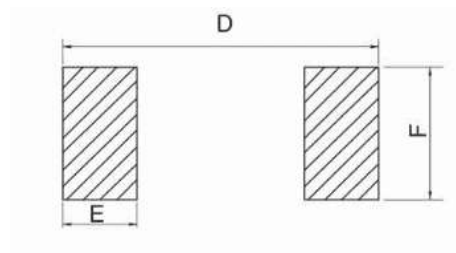
| 05 Packing | |
|------------|-------------|
| T | Tape & Reel |

SHAPE AND DIMENSIONS



| Part Number | Dimensions(mm) | | | | | |
|-------------|----------------|---------|--------|-----|------|-----|
| | A1(Max) | A2(Max) | B(Max) | H | I | J |
| SMRH2D11 | 3.3 | 3.3 | 1.4 | 3.5 | 1.35 | 0.8 |
| SMRH2D14 | 3.3 | 3.3 | 1.7 | 3.5 | 1.35 | 0.8 |
| SMRH2D18 | 3.3 | 3.3 | 2.1 | 3.5 | 1.35 | 0.8 |
| SMRH3D16 | 4.0 | 4.0 | 1.9 | 4.5 | 1.5 | 1.2 |
| SMRH3D18 | 4.0 | 4.0 | 2.1 | 4.5 | 1.5 | 1.2 |
| SMRH3D28 | 4.0 | 4.0 | 3.1 | 4.5 | 1.5 | 1.2 |
| SMRH4D18 | 5.0 | 5.0 | 2.1 | 5.3 | 1.9 | 1.5 |
| SMRH4D28 | 5.0 | 5.0 | 3.1 | 5.3 | 1.9 | 1.5 |
| SMRH5D18 | 6.0 | 6.0 | 2.1 | 6.3 | 2.2 | 2.0 |
| SMRH5D28 | 6.0 | 6.0 | 3.1 | 6.3 | 2.2 | 2.0 |
| SMRH6D28 | 7.0 | 7.0 | 3.1 | 7.3 | 2.7 | 2.0 |
| SMRH6D38 | 7.0 | 7.0 | 4.1 | 7.3 | 2.7 | 2.0 |

RECOMMENDED PC BOARD PATTERN



| Part Number | Dimensions(mm) | | |
|-------------|----------------|------|-----|
| | D | E | F |
| SMRH2D11 | 3.5 | 1.35 | 3.5 |
| SMRH2D14 | 3.5 | 1.35 | 3.5 |
| SMRH2D18 | 3.5 | 1.35 | 3.5 |
| SMRH3D16 | 4.2 | 1.5 | 4.5 |
| SMRH3D18 | 4.2 | 1.5 | 4.5 |
| SMRH3D28 | 4.2 | 1.5 | 4.5 |
| SMRH4D18 | 5.3 | 1.9 | 5.3 |
| SMRH4D28 | 5.3 | 1.9 | 5.3 |
| SMRH5D18 | 6.4 | 2.2 | 6.3 |
| SMRH5D28 | 6.4 | 2.2 | 6.3 |
| SMRH6D28 | 7.4 | 2.7 | 7.3 |
| SMRH6D38 | 7.4 | 2.7 | 7.3 |

SPECIFICATIONS



SPECIFICATIONS

● SMRH2D11 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH2D11-1R5 | 1.5 | K、M | 100/0.25 | 0.08 | 880 |
| SMRH2D11-2R2 | 2.2 | | 100/0.25 | 0.12 | 700 |
| SMRH2D11-3R3 | 3.3 | | 100/0.25 | 0.155 | 580 |
| SMRH2D11-4R7 | 4.7 | | 100/0.25 | 0.21 | 500 |
| SMRH2D11-5R6 | 5.6 | | 100/0.25 | 0.29 | 440 |
| SMRH2D11-6R8 | 6.8 | | 100/0.25 | 0.33 | 390 |
| SMRH2D11-8R2 | 8.2 | | 100/0.25 | 0.37 | 350 |
| SMRH2D11-100 | 10 | | 100/0.25 | 0.40 | 320 |
| SMRH2D11-120 | 12 | | 100/0.25 | 0.55 | 300 |
| SMRH2D11-150 | 15 | | 100/0.25 | 0.78 | 260 |
| SMRH2D11-220 | 22 | | 100/0.25 | 1.05 | 210 |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%、M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

● SMRRH2D14 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|---------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRRH2D14-1R5 | 1.5 | K、M | 100/0.25 | 0.075 | 1000 |
| SMRRH2D14-2R2 | 2.2 | | 100/0.25 | 0.094 | 810 |
| SMRRH2D14-3R3 | 3.3 | | 100/0.25 | 0.125 | 680 |
| SMRRH2D14-4R7 | 4.7 | | 100/0.25 | 0.169 | 580 |
| SMRRH2D14-5R6 | 5.6 | | 100/0.25 | 0.188 | 510 |
| SMRRH2D14-6R8 | 6.8 | | 100/0.25 | 0.232 | 480 |
| SMRRH2D14-8R2 | 8.2 | | 100/0.25 | 0.281 | 430 |
| SMRRH2D14-100 | 10 | | 100/0.25 | 0.35 | 370 |
| SMRRH2D14-120 | 12 | | 100/0.25 | 0.40 | 360 |
| SMRRH2D14-150 | 15 | | 100/0.25 | 0.57 | 320 |
| SMRRH2D14-220 | 22 | | 100/0.25 | 0.87 | 270 |
| SMRRH2D14-330 | 33 | | 100/0.25 | 1.20 | 220 |



● SMRH2D18 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH2D18-1R5 | 1.5 | K、M | 100/0.25 | 0.049 | 1100 |
| SMRH2D18-2R2 | 2.2 | | 100/0.25 | 0.071 | 890 |
| SMRH2D18-3R3 | 3.3 | | 100/0.25 | 0.095 | 750 |
| SMRH2D18-4R7 | 4.7 | | 100/0.25 | 0.125 | 650 |
| SMRH2D18-5R6 | 5.6 | | 100/0.25 | 0.165 | 570 |
| SMRH2D18-6R8 | 6.8 | | 100/0.25 | 0.180 | 540 |
| SMRH2D18-8R2 | 8.2 | | 100/0.25 | 0.235 | 480 |
| SMRH2D18-100 | 10 | | 100/0.25 | 0.310 | 440 |
| SMRH2D18-120 | 12 | | 100/0.25 | 0.350 | 400 |
| SMRH2D18-150 | 15 | | 100/0.25 | 0.450 | 350 |
| SMRH2D18-220 | 22 | | 100/0.25 | 0.700 | 300 |
| SMRH2D18-330 | 33 | | 100/0.25 | 0.910 | 240 |
| SMRH2D18-470 | 47 | | 100/0.25 | 1.400 | 200 |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

● SMRH3D16 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|---------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRRH3D16-2R2 | 2.2 | K、M | 100/0.25 | 0.090 | 800 |
| SMRRH3D16-3R3 | 3.3 | | 100/0.25 | 0.110 | 680 |
| SMRRH3D16-4R7 | 4.7 | | 100/0.25 | 0.130 | 580 |
| SMRRH3D16-5R6 | 5.6 | | 100/0.25 | 0.180 | 510 |
| SMRRH3D16-6R8 | 6.8 | | 100/0.25 | 0.230 | 460 |
| SMRRH3D16-8R2 | 8.2 | | 100/0.25 | 0.270 | 420 |
| SMRRH3D16-100 | 10 | | 100/0.25 | 0.300 | 380 |
| SMRRH3D16-120 | 12 | | 100/0.25 | 0.390 | 340 |
| SMRRH3D16-150 | 15 | | 100/0.25 | 0.450 | 310 |
| SMRRH3D16-220 | 22 | | 100/0.25 | 0.560 | 280 |
| SMRRH3D16-330 | 33 | | 100/0.25 | 0.650 | 260 |
| SMRRH3D16-470 | 47 | | 100/0.25 | 1.00 | 210 |



● SMRH3D18 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH3D18-1R0 | 1.0 | K、M | 100/0.25 | 0.045 | 1400 |
| SMRH3D18-1R8 | 1.8 | | 100/0.25 | 0.066 | 1050 |
| SMRH3D18-2R2 | 2.2 | | 100/0.25 | 0.072 | 950 |
| SMRH3D18-3R3 | 3.3 | | 100/0.25 | 0.100 | 800 |
| SMRH3D18-4R7 | 4.7 | | 100/0.25 | 0.132 | 680 |
| SMRH3D18-5R6 | 5.6 | | 100/0.25 | 0.164 | 620 |
| SMRH3D18-6R8 | 6.8 | | 100/0.25 | 0.200 | 580 |
| SMRH3D18-8R2 | 8.2 | | 100/0.25 | 0.240 | 510 |
| SMRH3D18-100 | 10 | | 100/0.25 | 0.275 | 460 |
| SMRH3D18-120 | 12 | | 100/0.25 | 0.350 | 420 |
| SMRH3D18-150 | 15 | | 100/0.25 | 0.400 | 380 |
| SMRH3D18-180 | 18 | | 100/0.25 | 0.500 | 340 |
| SMRH3D18-220 | 22 | | 100/0.25 | 0.600 | 310 |
| SMRH3D18-270 | 27 | | 100/0.25 | 0.700 | 280 |
| SMRH3D18-330 | 33 | | 100/0.25 | 0.900 | 260 |
| SMRH3D18-390 | 39 | | 100/0.25 | 1.05 | 240 |
| SMRH3D18-470 | 47 | | 100/0.25 | 1.47 | 210 |
| SMRH3D18-560 | 56 | | 100/0.25 | 2.10 | 190 |
| SMRH3D18-680 | 68 | | 100/0.25 | 2.40 | 170 |
| SMRH3D18-820 | 82 | | 100/0.25 | 2.90 | 150 |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

● SMRH3D28 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|---------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRRH3D28-1R0 | 1.0 | K、M | 100/0.25 | 0.090 | 800 |
| SMRRH3D28-1R2 | 1.2 | | 100/0.25 | 0.110 | 680 |
| SMRRH3D28-1R8 | 1.8 | | 100/0.25 | 0.130 | 580 |
| SMRRH3D28-2R2 | 2.2 | | 100/0.25 | 0.180 | 510 |



| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH3D28-2R5 | 2.5 | K、M | 100/0.25 | 0.070 | 2000 |
| SMRH3D28-2R7 | 2.7 | | 100/0.25 | 0.073 | 1950 |
| SMRH3D28-3R3 | 3.3 | | 100/0.25 | 0.087 | 1800 |
| SMRH3D28-3R9 | 3.9 | | 100/0.25 | 0.082 | 1600 |
| SMRH3D28-4R7 | 4.7 | | 100/0.25 | 0.100 | 1500 |
| SMRH3D28-5R6 | 5.6 | | 100/0.25 | 0.110 | 1350 |
| SMRH3D28-6R8 | 6.8 | | 100/0.25 | 0.150 | 1200 |
| SMRH3D28-8R2 | 8.2 | | 100/0.25 | 0.160 | 1100 |
| SMRH3D28-100 | 10 | | 100/0.25 | 0.170 | 1050 |
| SMRH3D28-120 | 12 | | 100/0.25 | 0.175 | 900 |
| SMRH3D28-150 | 15 | | 100/0.25 | 0.230 | 850 |
| SMRH3D28-180 | 18 | | 100/0.25 | 0.250 | 750 |
| SMRH3D28-220 | 22 | | 100/0.25 | 0.335 | 680 |
| SMRH3D28-270 | 27 | | 100/0.25 | 0.420 | 620 |
| SMRH3D28-330 | 33 | | 100/0.25 | 0.600 | 560 |
| SMRH3D28-390 | 39 | | 100/0.25 | 0.750 | 510 |
| SMRH3D28-470 | 47 | | 100/0.25 | 0.900 | 481 |
| SMRH3D28-560 | 56 | | 100/0.25 | 1.20 | 430 |
| SMRH3D28-680 | 68 | | 100/0.25 | 1.40 | 400 |
| SMRH3D28-820 | 82 | | 100/0.25 | 1.80 | 360 |
| SMRH3D28-101 | 100 | | 100/0.25 | 2.00 | 330 |
| SMRH3D28-121 | 120 | | 100/0.25 | 2.20 | 300 |
| SMRH3D28-151 | 150 | | 100/0.25 | 3.20 | 270 |
| SMRH3D28-181 | 180 | | 100/0.25 | 3.50 | 250 |
| SMRH3D28-221 | 220 | | 100/0.25 | 4.00 | 220 |
| SMRH3D28-271 | 270 | | 100/0.25 | 5.60 | 200 |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current



● SMRH4D18 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) | |
|--------------|-----------------|-----------|------------------------|------------|------------------------|-----|
| SMRH4D18-1R0 | 1.0 | M | 100/0.25 | 0.030 | 2300 | |
| SMRH4D18-1R2 | 1.2 | | 100/0.25 | 0.035 | 2000 | |
| SMRH4D18-1R8 | 1.8 | | 100/0.25 | 0.037 | 1960 | |
| SMRH4D18-2R2 | 2.2 | | 100/0.25 | 0.040 | 1900 | |
| SMRH4D18-2R5 | 2.5 | | 100/0.25 | 0.044 | 1840 | |
| SMRH4D18-2R7 | 2.7 | | 100/0.25 | 0.062 | 1770 | |
| SMRH4D18-3R3 | 3.3 | | 100/0.25 | 0.070 | 1650 | |
| SMRH4D18-3R9 | 3.9 | | 100/0.25 | 0.095 | 1450 | |
| SMRH4D18-4R7 | 4.7 | | 100/0.25 | 0.100 | 1400 | |
| SMRH4D18-5R6 | 5.6 | | 100/0.25 | 0.150 | 1200 | |
| SMRH4D18-6R8 | 6.8 | | 100/0.25 | 0.153 | 980 | |
| SMRH4D18-8R2 | 8.2 | | 100/0.25 | 0.165 | 940 | |
| SMRH4D18-100 | 10 | | K、M | 100/0.25 | 0.180 | 820 |
| SMRH4D18-120 | 12 | | | 100/0.25 | 0.240 | 760 |
| SMRH4D18-150 | 15 | 100/0.25 | | 0.300 | 730 | |
| SMRH4D18-180 | 18 | 100/0.25 | | 0.340 | 680 | |
| SMRH4D18-220 | 22 | 100/0.25 | | 0.400 | 630 | |
| SMRH4D18-270 | 27 | 100/0.25 | | 0.440 | 560 | |
| SMRH4D18-330 | 33 | 100/0.25 | | 0.695 | 520 | |
| SMRH4D18-390 | 39 | 100/0.25 | | 0.700 | 480 | |
| SMRH4D18-470 | 47 | 100/0.25 | | 0.920 | 420 | |
| SMRH4D18-560 | 56 | 100/0.25 | | 1.08 | 370 | |
| SMRH4D18-680 | 68 | 100/0.25 | | 1.30 | 320 | |
| SMRH4D18-820 | 82 | 100/0.25 | | 1.55 | 300 | |
| SMRH4D18-101 | 100 | 100/0.25 | | 1.75 | 270 | |
| SMRH4D18-121 | 120 | 100/0.25 | | 2.00 | 250 | |
| SMRH4D18-151 | 150 | 100/0.25 | 2.80 | 200 | | |
| SMRH4D18-181 | 180 | 100/0.25 | 3.10 | 180 | | |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current



● SMRH4D28 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH4D28-1R2 | 1.2 | M | 100/0.25 | 0.025 | 2500 |
| SMRH4D28-1R8 | 1.8 | | 100/0.25 | 0.035 | 2200 |
| SMRH4D28-2R2 | 2.2 | | 100/0.25 | 0.040 | 2000 |
| SMRH4D28-2R7 | 2.7 | | 100/0.25 | 0.050 | 1600 |
| SMRH4D28-3R3 | 3.3 | | 100/0.25 | 0.060 | 1500 |
| SMRH4D28-3R9 | 3.9 | | 100/0.25 | 0.065 | 1400 |
| SMRH4D28-4R7 | 4.7 | | 100/0.25 | 0.070 | 1300 |
| SMRH4D28-5R6 | 5.6 | | 100/0.25 | 0.075 | 1200 |
| SMRH4D28-6R8 | 6.8 | | 100/0.25 | 0.080 | 1100 |
| SMRH4D28-8R2 | 8.2 | | 100/0.25 | 0.090 | 1000 |
| SMRH4D28-100 | 10 | | 100/0.25 | 0.100 | 900 |
| SMRH4D28-120 | 12 | | 100/0.25 | 0.130 | 800 |
| SMRH4D28-150 | 15 | | K、M | 100/0.25 | 0.160 |
| SMRH4D28-180 | 18 | 100/0.25 | | 0.190 | 700 |
| SMRH4D28-220 | 22 | 100/0.25 | | 0.210 | 650 |
| SMRH4D28-270 | 27 | 100/0.25 | | 0.250 | 600 |
| SMRH4D28-330 | 33 | 100/0.25 | | 0.260 | 500 |
| SMRH4D28-390 | 39 | 100/0.25 | | 0.320 | 500 |
| SMRH4D28-470 | 47 | 100/0.25 | | 0.450 | 450 |
| SMRH4D28-560 | 56 | 100/0.25 | | 0.500 | 400 |
| SMRH4D28-680 | 68 | 100/0.25 | | 0.650 | 350 |
| SMRH4D28-820 | 82 | 100/0.25 | | 0.750 | 300 |
| SMRH4D28-101 | 100 | 100/0.25 | | 0.850 | 280 |
| SMRH4D28-121 | 120 | 100/0.25 | | 1.200 | 260 |
| SMRH4D28-151 | 150 | 100/0.25 | | 1.400 | 230 |
| SMRH4D28-181 | 180 | 100/0.25 | 1.500 | 210 | |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;
 1. Operating temperature range -40 -125°C
 2. Isat for Inductance drop 30% from its value without current



● SMRH5D18 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH5D18-4R1 | 4.1 | K、M | 100/0.25 | 0.075 | 2000 |
| SMRH5D18-5R4 | 5.4 | | 100/0.25 | 0.085 | 1600 |
| SMRH5D18-6R2 | 6.2 | | 100/0.25 | 0.096 | 1400 |
| SMRH5D18-8R9 | 8.9 | | 100/0.25 | 0.130 | 1250 |
| SMRH5D18-100 | 10 | | 100/0.25 | 0.140 | 1200 |
| SMRH5D18-120 | 12 | | 100/0.25 | 0.180 | 1100 |
| SMRH5D18-150 | 15 | | 100/0.25 | 0.230 | 970 |
| SMRH5D18-180 | 18 | | 100/0.25 | 0.250 | 850 |
| SMRH5D18-220 | 22 | | 100/0.25 | 0.290 | 800 |
| SMRH5D18-270 | 27 | | 100/0.25 | 0.330 | 750 |
| SMRH5D18-330 | 33 | | 100/0.25 | 0.386 | 650 |
| SMRH5D18-390 | 39 | | 100/0.25 | 0.520 | 570 |
| SMRH5D18-470 | 47 | | 100/0.25 | 0.654 | 540 |
| SMRH5D18-560 | 56 | | 100/0.25 | 0.750 | 500 |
| SMRH5D18-680 | 68 | | 100/0.25 | 0.845 | 430 |
| SMRH5D18-820 | 82 | | 100/0.25 | 1.090 | 410 |
| SMRH5D18-101 | 100 | | 100/0.25 | 1.350 | 260 |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%、M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

● SMRH5D28 TYPE

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH5D28-2R6 | 2.6 | M | 100/0.25 | 0.025 | 2500 |
| SMRH5D28-3R0 | 3.0 | | 100/0.25 | 0.030 | 2400 |
| SMRH5D28-4R2 | 4.2 | | 100/0.25 | 0.040 | 2200 |
| SMRH5D28-5R3 | 5.3 | | 100/0.25 | 0.045 | 1800 |
| SMRH5D28-6R2 | 6.2 | | 100/0.25 | 0.055 | 1700 |
| SMRH5D28-8R2 | 8.2 | | 100/0.25 | 0.065 | 1500 |
| SMRH5D28-100 | 10 | | 100/0.25 | 0.075 | 1300 |



| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH5D28-120 | 12 | K、 M | 100/0.25 | 0.085 | 1200 |
| SMRH5D28-150 | 15 | | 100/0.25 | 0.120 | 1100 |
| SMRH5D28-180 | 18 | | 100/0.25 | 0.140 | 1000 |
| SMRH5D28-220 | 22 | | 100/0.25 | 0.180 | 900 |
| SMRH5D28-270 | 27 | | 100/0.25 | 0.200 | 800 |
| SMRH5D28-330 | 33 | | 100/0.25 | 0.210 | 700 |
| SMRH5D28-390 | 39 | | 100/0.25 | 0.250 | 600 |
| SMRH5D28-470 | 47 | | 100/0.25 | 0.280 | 550 |
| SMRH5D28-560 | 56 | | 100/0.25 | 0.320 | 500 |
| SMRH5D28-680 | 68 | | 100/0.25 | 0.380 | 450 |
| SMRH5D28-820 | 82 | | 100/0.25 | 0.500 | 400 |
| SMRH5D28-101 | 100 | | 100/0.25 | 0.600 | 350 |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

● **SMRH6D28 TYPE**

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH6D28-3R0 | 3.0 | M | 100/0.25 | 0.024 | 3000 |
| SMRH6D28-3R3 | 3.3 | | 100/0.25 | 0.025 | 2800 |
| SMRH6D28-3R9 | 3.9 | | 100/0.25 | 0.027 | 2600 |
| SMRH6D28-5R0 | 5.0 | | 100/0.25 | 0.031 | 2400 |
| SMRH6D28-6R0 | 6.0 | | 100/0.25 | 0.035 | 2250 |
| SMRH6D28-6R8 | 6.8 | | 100/0.25 | 0.055 | 2000 |
| SMRH6D28-7R3 | 7.3 | | 100/0.25 | 0.056 | 1900 |
| SMRH6D28-8R6 | 8.6 | K、 M | 100/0.25 | 0.058 | 1850 |
| SMRH6D28-100 | 10 | | 100/0.25 | 0.065 | 1700 |
| SMRH6D28-120 | 12 | | 100/0.25 | 0.070 | 1550 |
| SMRH6D28-150 | 15 | | 100/0.25 | 0.084 | 1400 |
| SMRH6D28-180 | 18 | | 100/0.25 | 0.095 | 1320 |
| SMRH6D28-220 | 22 | | 100/0.25 | 0.128 | 1200 |



| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH6D28-270 | 27 | K、M | 100/0.25 | 0.142 | 1050 |
| SMRH6D28-330 | 33 | | 100/0.25 | 0.165 | 970 |
| SMRH6D28-390 | 39 | | 100/0.25 | 0.210 | 860 |
| SMRH6D28-470 | 47 | | 100/0.25 | 0.238 | 8000 |
| SMRH6D28-560 | 56 | | 100/0.25 | 0.277 | 730 |
| SMRH6D28-680 | 68 | | 100/0.25 | 0.304 | 650 |
| SMRH6D28-820 | 82 | | 100/0.25 | 0.390 | 600 |

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

● **SMRH6D38 TYPE**

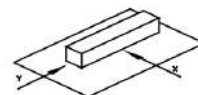
| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|--------------|-----------------|-----------|------------------------|------------|------------------------|
| SMRH6D38-3R3 | 3.3 | K、M | 100/0.25 | 0.030 | 3500 |
| SMRH6D38-5R0 | 5.0 | | 100/0.25 | 0.040 | 2900 |
| SMRH6D38-6R0 | 6.0 | | 100/0.25 | 0.050 | 2500 |
| SMRH6D38-7R3 | 7.3 | | 100/0.25 | 0.055 | 2300 |
| SMRH6D38-8R6 | 8.6 | | 100/0.25 | 0.060 | 2200 |
| SMRH6D38-100 | 10 | | 100/0.25 | 0.070 | 2000 |
| SMRH6D38-120 | 12 | | 100/0.25 | 0.075 | 1700 |
| SMRH6D38-150 | 15 | | 100/0.25 | 0.080 | 1600 |
| SMRH6D38-180 | 18 | | 100/0.25 | 0.110 | 1500 |
| SMRH6D38-220 | 22 | | 100/0.25 | 0.130 | 1300 |
| SMRH6D38-270 | 27 | | 100/0.25 | 0.160 | 1200 |
| SMRH6D38-330 | 33 | | 100/0.25 | 0.180 | 1100 |
| SMRH6D38-390 | 39 | | 100/0.25 | 0.190 | 1000 |
| SMRH6D38-470 | 47 | | 100/0.25 | 0.200 | 950 |
| SMRH6D38-560 | 56 | | 100/0.25 | 0.240 | 850 |
| SMRH6D38-680 | 68 | | 100/0.25 | 0.260 | 750 |
| SMRH6D38-820 | 82 | | 100/0.25 | 0.310 | 700 |
| SMRH6D38-101 | 100 | | 100/0.25 | 0.350 | 650 |



DETAIL ELECTRICAL CHARACTERISTICS

1. Operating temperature range: -40 to + 105°C(Includes temperature when the coil is heated) .
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y

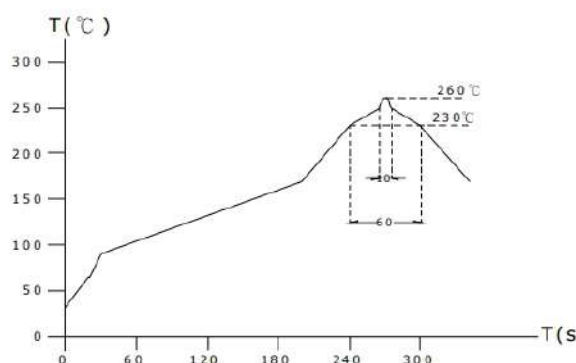
withstanding at below conditions.



Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.

4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C degree Celsius), inductance deviation within $\pm 5.0\%$, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow) .
11. Storage condition: Temperature Range: 0°C ~ 35°C; -40°C ~ 105°C (after PCB), Humidity Range: 50% ~ 70% RH.
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

