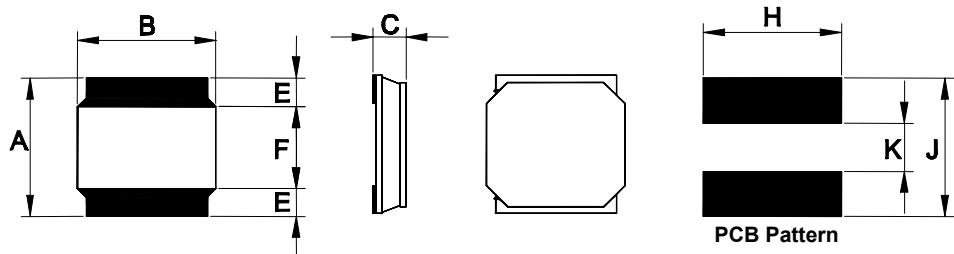


SMD Power Inductor—SDIA



Dimensions

Unit: mm

| Type | A | B | C max. | E | F | H | J | K |
|----------|---------|---------|-----------|---------|---------|-----|-----|-----|
| SDIA0312 | 3.0±0.2 | 3.0±0.2 | 1.25 | 0.9 | 2.0 | 3.7 | 3.7 | 1.2 |
| SDIA0412 | 4.0±0.2 | 4.0±0.2 | 1.2 | 1.0 | 2.0 | 4.6 | 4.6 | 1.6 |
| SDIA0612 | 6.0±0.2 | 6.0±0.2 | 1.2 | 0.9 | 4.2 | 6.7 | 6.7 | 3.5 |
| SDIA0840 | 8.0±0.2 | 8.0±0.2 | 4.0 | 1.6±0.3 | 4.8±0.3 | 8.7 | 8.7 | 4.3 |

Features

- Small and Low profile inductor
- It corresponds to high current
- Shield structure magnetically
- Strong structure against a shock-proof

Inductance and rated current ranges

- | | | |
|------------|-----------|-------------|
| – SDIA0312 | 1.0~100µH | 1.50~0.195A |
| – SDIA0412 | 1.0~820µH | 1.95~0.05A |
| – SDIA0612 | 10~100µH | 0.75~0.19A |
| – SDIA0840 | 2.2~100µH | 7.33~1.00A |
- Electrical specifications at 25°C

Applications

- LCD Display etc.
- For Small DC to DC Converters
- PDA

Characteristics

- Rated DC Current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature range: -40~85°C

Product Identification

| SDIA | 0312 | M | T | 101 |
|--------------|---|-----------------------|--------------------|---------------------------------------|
| Product Type | Dimensions (AxC) | Inductor Tolerance | Packaging Style | Inductance |
| | 0312: 3.0x1.25 0412: 4.0x1.2 0612: 6.0x1.2 0840: 8.0x4.0 | M: ±20% N: ±30% | T: Tape and Reel | 1R1: 1.1µH 470: 47µH 101: 100µH |

■ Electrical Characteristics

SDIA0312 / 0412 / 0612 / 0840 Type

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | | IDC (A) max. | | | |
|-------|-----------------|-----------|-------------------|--------------------------|-------|-------|-------|-----------------|------|------|------|
| | | | | 0312 | 0412 | 0612 | 0840 | 0312 | 0412 | 0612 | 0840 |
| 1R0 | 1.0 | N | 100KHz, 0.25V | 0.104 | 0.067 | - | - | 1.500 | 1.95 | - | - |
| 1R5 | 1.5 | N | 100KHz, 0.25V | 0.183 | 0.085 | - | - | 1.360 | 1.49 | - | - |
| 1R8 | 1.8 | N | 100KHz, 0.25V | 0.197 | - | - | - | 1.200 | - | - | - |
| 2R2 | 2.2 | N | 100KHz, 0.25V | 0.200 | 0.140 | - | 0.017 | 1.100 | 1.40 | - | 7.33 |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.320 | 0.210 | - | 0.022 | 0.910 | 1.15 | - | 5.93 |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.380 | 0.290 | - | 0.023 | 0.770 | 0.91 | - | 4.70 |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.640 | 0.440 | - | 0.033 | 0.670 | 0.77 | - | 4.00 |
| 100 | 10 | M, N | 1KHz, 0.25V | 0.950 | 0.620 | 0.288 | 0.044 | 0.540 | 0.66 | 0.75 | 3.40 |
| 120 | 12 | M, N | 1KHz, 0.25V | - | - | 0.360 | 0.055 | - | - | 0.60 | 3.05 |
| 150 | 15 | M, N | 1KHz, 0.25V | 1.068 | 0.930 | 0.396 | 0.065 | 0.440 | 0.54 | 0.58 | 2.70 |
| 220 | 22 | M, N | 1KHz, 0.25V | 1.730 | 1.250 | 0.660 | 0.086 | 0.375 | 0.46 | 0.48 | 2.20 |
| 330 | 33 | M, N | 1KHz, 0.25V | 2.570 | 1.840 | 0.952 | 0.130 | 0.310 | 0.36 | 0.39 | 1.90 |
| 470 | 47 | M, N | 1KHz, 0.25V | 3.720 | 2.660 | 1.356 | 0.200 | 0.250 | 0.31 | 0.32 | 1.50 |
| 680 | 68 | M, N | 1KHz, 0.25V | 4.470 | 3.700 | 1.620 | 0.300 | 0.240 | 0.24 | 0.22 | 1.20 |
| 101 | 100 | M, N | 1KHz, 0.25V | 5.070 | - | 2.626 | 0.380 | 0.195 | - | 0.19 | 1.00 |
| 221 | 220 | M, N | 1KHz, 0.25V | - | 12.35 | - | - | - | 0.16 | - | - |
| 821 | 820 | M, N | 1KHz, 0.25V | - | 60.00 | - | - | - | 0.05 | - | - |