

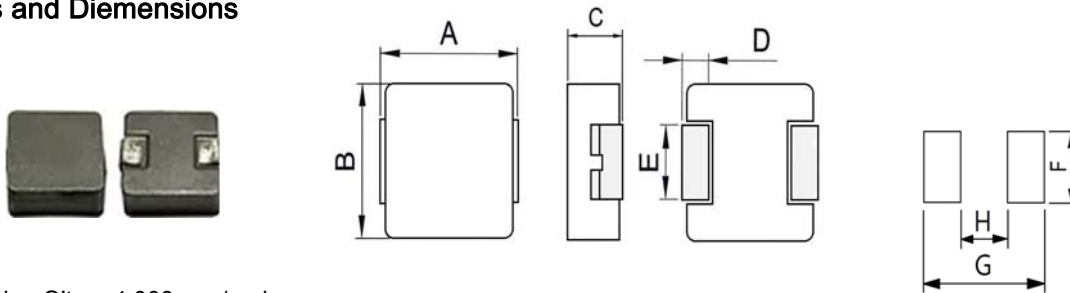
### Features

- Carbonyl powder inductor.
- High current, low DCR, high efficiency & high reliability.
- Very low acoustic noise and very low leakage flux noise.
- Lead-Free, Halogen-Free and RoHS compliant.

### Applications

- Notebook PC Power system, included IMVP-6 DC/DC converter.

### Shapes and Dimensions



Packing Q'ty : 4,000 pcs/reel

| Type     | A           | B          | C         | D          | E         | F   | G   | H   |
|----------|-------------|------------|-----------|------------|-----------|-----|-----|-----|
| SDMC4012 | 4.45 ± 0.25 | 4.0 ± 0.25 | 1.0 ± 0.2 | 0.76 ± 0.3 | 2.0 ± 0.2 | 2.3 | 5.2 | 2.2 |

### Electrical Characteristics

| Part No.       | Inductance (uH) | D.C.R (mΩ) typ. | D.C.R (mΩ) max. | I rms (A) typ. | I sat (A) typ. |
|----------------|-----------------|-----------------|-----------------|----------------|----------------|
| SDMC4012-R10NC | 0.10 ± 30%      | 4.3             | 5.5             | 11.50          | 25.00          |
| SDMC4012-R22MC | 0.22 ± 20%      | 6.6             | 8.0             | 8.50           | 20.00          |
| SDMC4012-R47MC | 0.47 ± 20%      | 18.0            | 20.0            | 6.00           | 6.50           |
| SDMC4012-R68MC | 0.68 ± 20%      | 32.0            | 37.0            | 5.00           | 6.00           |
| SDMC4012-1R0MC | 1.0 ± 20%       | 41.0            | 47.0            | 4.00           | 6.00           |
| SDMC4012-1R5MC | 1.5 ± 20%       | 55.0            | 63.3            | 3.00           | 4.00           |
| SDMC4012-2R2MC | 2.2 ± 20%       | 69.2            | 80.0            | 2.80           | 3.50           |
| SDMC4012-3R3MC | 3.3 ± 20%       | 84.0            | 97.0            | 2.30           | 3.00           |
| SDMC4012-4R7MC | 4.7 ± 20%       | 128             | 145             | 2.00           | 2.50           |
| SDMC4012-5R6MC | 5.6 ± 20%       | 180             | 208             | 1.70           | 2.30           |
| SDMC4012-6R8MC | 6.8 ± 20%       | 300             | 360             | 1.50           | 1.70           |
| SDMC4012-8R2MC | 8.2 ± 20%       | 313             | 376             | 1.40           | 1.60           |
| SDMC4012-100MC | 10.0 ± 20%      | 410             | 463             | 1.30           | 1.40           |

#### NOTES:

- All test data reference to 25°C ambient.
- Measuring frequency : L : 100KHz / 1.0V.
- Saturation Current (Isat) will cause L0 to drop 20% typical. (keep quickly).
- Heat Rated Current (Irms) will cause the coil temperature rise approximately Δ t of 40°C (keep 1min.).