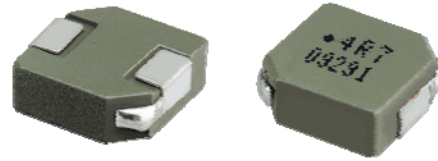


### ◆ Feature

1. Lowest height in this package footprint.
2. Shielded construction.
3. Handles high transient current spikes without saturation.
4. Lowest DCR/ $\mu$ H, in this package size.
5. Frequency range up to 5MHz.
6. Ultra low buzz noise, due to composite construction.
7. Lead Free and RoHS compliant.

RoHS



### ◆ Application

Excellent for power line DC-DC conversion applications used in power switching, personal computers and other handheld electronic equipment.

### ◆ How to Order

**SMP 0603 H 6R8 M V01**

(1) (2) (3) (4) (5) (6)

(1) Series Name

(2) Dimension

(3) Type: Material code

(4) Inductance: 6R8= 6.8  $\mu$ H

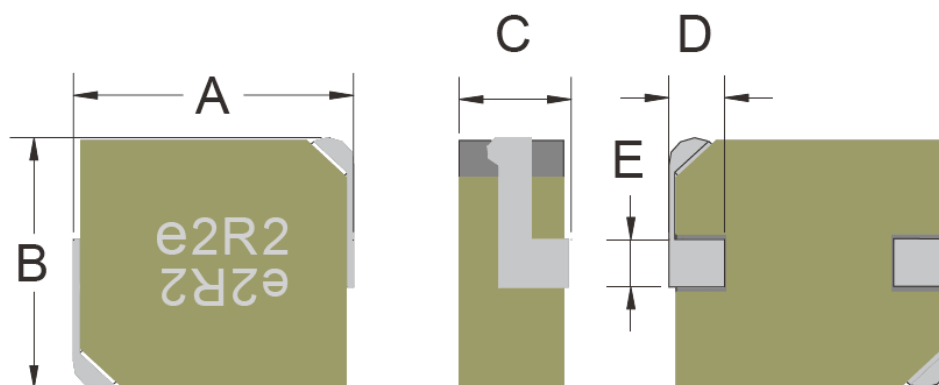
(5) Inductance Tolerance: M= $\pm$ 20%

(6) Control S/N

### ◆ Dimension

Unit: mm

| SMP 0603 H Series | A             | B             | C             | D              | E             |
|-------------------|---------------|---------------|---------------|----------------|---------------|
|                   | 7.3 $\pm$ 0.5 | 6.6 $\pm$ 0.5 | 2.8 $\pm$ 0.2 | 1.25 $\pm$ 0.2 | 3.0 $\pm$ 0.2 |



### ◆ Specification

| Part Number        | Inductance<br>L0(uH)<br>±20%@ 0 A | I rms<br>(A) Typ. | I sat<br>(A) Typ. | DCR (mΩ)<br>Typ. @25°C | DCR (mΩ)<br>Max. @25°C |
|--------------------|-----------------------------------|-------------------|-------------------|------------------------|------------------------|
| SMP 0603H-R25M-V01 | 0.25                              | 22                | 35                | 2                      | 3                      |
| SMP 0603H-R33M-V01 | 0.33                              | 20                | 30                | 2.1                    | 3.4                    |
| SMP 0603H-R36M-V01 | 0.36                              | 18                | 30                | 2.2                    | 3.4                    |
| SMP 0603H-R47M-V01 | 0.47                              | 17.5              | 26                | 3.3                    | 5.3                    |
| SMP 0603H-R68M-V01 | 0.68                              | 16                | 25                | 4                      | 6.4                    |
| SMP 0603H-R82M-V01 | 0.82                              | 13                | 24                | 4.9                    | 7.8                    |
| SMP 0603H-1R0M-V01 | 1.0                               | 12                | 22                | 5.9                    | 9.4                    |
| SMP 0603H-1R5M-V01 | 1.5                               | 10                | 18                | 8.6                    | 14                     |
| SMP 0603H-2R2M-V01 | 2.2                               | 8                 | 15                | 11.5                   | 18                     |
| SMP 0603H-3R3M-V01 | 3.3                               | 6                 | 13.5              | 17.6                   | 25                     |
| SMP 0603H-4R7M-V01 | 4.7                               | 5.5               | 11                | 23.3                   | 32                     |
| SMP 0603H-5R6M-V01 | 5.6                               | 5                 | 8.5               | 31                     | 40                     |
| SMP 0603H-6R8M-V01 | 6.8                               | 4.5               | 8                 | 37                     | 44                     |
| SMP 0603H-8R2M-V01 | 8.2                               | 4                 | 7.5               | 50                     | 60                     |
| SMP 0603H-100M-V01 | 10                                | 3.5               | 7                 | 56                     | 72                     |

### ◆ Package

| Type         | SMD                  |                      |          |
|--------------|----------------------|----------------------|----------|
| Size(mm)     | 0603                 | 1004                 | 1203     |
| Series       | SMP0603H<br>SMP0603B | SMP1004H<br>SMP1004B | SMP1203W |
| Package(PCS) |                      |                      |          |
| Size(mm)     | 0603                 | 1004                 | 1203     |
| Chip / Reel  | 1000                 | 500                  | 600      |
| Inner Box    | 2000                 | 1000                 | 1200     |
| Carton       | 8000                 | 4000                 | 4800     |