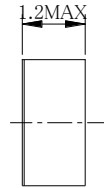
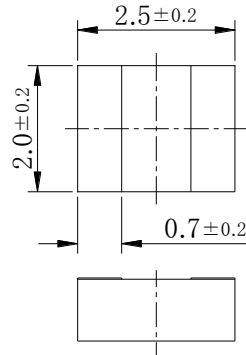
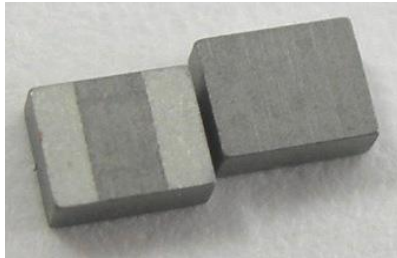


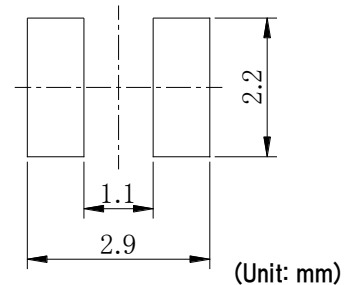
# Metal Composite Type Power Inductor

## MCP 252012 Series

### DIMENSIONS / 外形寸法



### Recommended patterns 推奨パターン図



(Unit: mm)

### FEATURES / 特長

- ・ Magnetic metal powder choke coil.
- ・ 2.5×2.0mm and 1.2mm MAX height compact original design.
- ・ Low acoustic noise and low leakage flux noise by shielded construction.
- ・ Ideal for Mobile PC, Smart phone, Game machine.
- ・ Halogen Free, 100% Lead(Pb) Free and RoHS compliant.
- ・ 磁性金属粉末のチョークコイル。
- ・ 2.5×2.0mm、高さ1.2mmの独自コンパクト設計。
- ・ 閉磁路構造による低コア鳴き、低漏れ磁束。
- ・ モバイルPC、スマートフォン、ゲーム機に最適。
- ・ ハロゲンフリー、鉛フリー、RoHS対応。

### SPECIFICATIONS / 仕様

| Parts No.<br>部品番号 | Inductance<br>*1<br>インダクタンス<br>[μH] | Tolerance<br>許容差<br>[%] | DC Resistance<br>*2<br>直流抵抗<br>[mΩ] | DC Resistance Max<br>*2<br>最大直流<br>抵抗[mΩ] | DC Superimposition<br>Current *3<br>直流重量<br>許容電流 [A] | Temperature<br>Rise Current *4<br>温度上昇<br>許容電流 [A] |
|-------------------|-------------------------------------|-------------------------|-------------------------------------|-------------------------------------------|------------------------------------------------------|----------------------------------------------------|
| MCP252012-R47S    | 0.47                                | ±30%                    | 30                                  | 40                                        | 6.7                                                  | 3.4                                                |
| MCP252012-R56S    | 0.56                                | ±30%                    | 37                                  | 49                                        | 6.4                                                  | 3.1                                                |
| MCP252012-R68S    | 0.68                                | ±30%                    | 45                                  | 59                                        | 6.1                                                  | 2.9                                                |
| MCP252012-1R0S    | 1.0                                 | ±20%                    | 49                                  | 60                                        | 5.7                                                  | 2.8                                                |
| MCP252012-1R2S    | 1.2                                 | ±20%                    | 67                                  | 80                                        | 5.3                                                  | 2.4                                                |
| MCP252012-1R5S    | 1.5                                 | ±20%                    | 82                                  | 99                                        | 4.2                                                  | 2.2                                                |
| MCP252012-2R2S    | 2.2                                 | ±20%                    | 123                                 | 141                                       | 3.4                                                  | 1.6                                                |
| MCP252012-3R3S    | 3.3                                 | ±20%                    | 226                                 | 260                                       | 3.0                                                  | 1.2                                                |
| MCP252012-4R7S    | 4.7                                 | ±20%                    | 300                                 | 345                                       | 2.1                                                  | 1.0                                                |
| MCP252012-5R6S    | 5.6                                 | ±20%                    | 405                                 | 465                                       | 1.9                                                  | 0.9                                                |
| MCP252012-6R8S    | 6.8                                 | ±20%                    | 560                                 | 640                                       | 1.8                                                  | 0.8                                                |
| MCP252012-8R2S    | 8.2                                 | ±20%                    | 630                                 | 720                                       | 1.7                                                  | 0.75                                               |
| MCP252012-100S    | 10.0                                | ±20%                    | 680                                 | 780                                       | 1.5                                                  | 0.7                                                |

\*1 Inductance is measured at 1MHz, 1V.

\*2 DC Resistance is measured at ambient temperature 20°C.

\*3 DC Current based upon 30% inductance reduction from the initial value.

\*4 DC Current based upon 40°C temperature rise.

\*5 Operating temperature is -40~120°C (includes coil heating).

\*6 AEC-Q200 Compliant.

インダクタンス測定、1MHz、1V。

直流抵抗は周囲温度20°Cにおいて測定。

インダクタンスが初期値より-30%になる直流電流値。

温度上昇ΔT=40°Cになる直流電流値。

動作温度、-40~125°C(コイルの発熱を含む)。

AEC-Q200準拠