



# CSMS0628D Series SMD WIRE WOUND POWER INDUCTORS (SHIELDED)

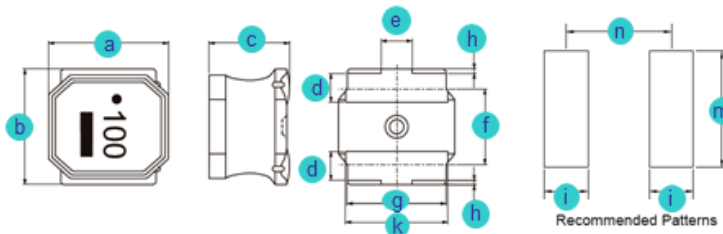
Rev. A

## A. Electrical Specifications:

| P/N            | Marking | Inductance<br>@100KHz (μH) | Inductance<br>Tolerance | DCR<br>±30%(Ω) | Rated Current (mA) |       | SRF Min.<br>(MHz) |
|----------------|---------|----------------------------|-------------------------|----------------|--------------------|-------|-------------------|
|                |         |                            |                         |                | I sat              | I rms |                   |
| CSMS0628D-R90N | 0R9     | 0.9                        | ± 30%                   | 0.013          | 6700               | 4600  | 90                |
| CSMS0628D-1R5N | 1R5     | 1.5                        | ± 30%                   | 0.016          | 5100               | 4200  | 78                |
| CSMS0628D-2R2N | 2R2     | 2.2                        | ± 30%                   | 0.020          | 4200               | 3700  | 68                |
| CSMS0628D-3R0N | 3R0     | 3.0                        | ± 30%                   | 0.023          | 3600               | 3400  | 55                |
| CSMS0628D-4R7M | 4R7     | 4.7                        | ± 20%                   | 0.031          | 2700               | 3000  | 39                |
| CSMS0628D-6R0M | 6R0     | 6.0                        | ± 20%                   | 0.040          | 2500               | 2500  | 30                |
| CSMS0628D-100M | 100     | 10                         | ± 20%                   | 0.065          | 1900               | 1900  | 20                |
| CSMS0628D-150M | 150     | 15                         | ± 20%                   | 0.095          | 1600               | 1800  | 17                |
| CSMS0628D-220M | 220     | 22                         | ± 20%                   | 0.135          | 1300               | 1400  | 12                |
| CSMS0628D-330M | 330     | 33                         | ± 20%                   | 0.220          | 1100               | 1100  | 10                |
| CSMS0628D-470M | 470     | 47                         | ± 20%                   | 0.300          | 1000               | 920   | 8                 |
| CSMS0628D-680M | 680     | 68                         | ± 20%                   | 0.420          | 800                | 770   | 5                 |
| CSMS0628D-101M | 101     | 100                        | ± 20%                   | 0.600          | 650                | 660   | 3                 |

## B. Dimensions: mm (Inch)

| Series    | a               | b               | c              | d               | e              | f               | g              | h              | i              | k              | m              | n              |
|-----------|-----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| CSMS0628D | 6.0<br>(0.236)  | 6.0<br>(0.236)  | 2.8<br>(0.110) | 1.35<br>(0.053) | 2.3<br>(0.091) | 4.0<br>(0.157)  | 4.8<br>(0.189) | 0.3<br>(0.012) | 1.6<br>(0.063) | 5.2<br>(0.205) | 5.7<br>(0.224) | 4.7<br>(0.185) |
| Tol.      | ±0.2<br>(0.008) | ±0.2<br>(0.008) | Max.           | ±0.2<br>(0.008) | Typ.           | ±0.2<br>(0.008) | Typ.           | Typ.           | Typ.           | Typ.           | Typ.           | Typ.           |



## C. General Information:

1. CSMS0628D-xxx, "CSMS0628D" = P/N, "xxx" = Inductance, "\_" = Tolerance.
2. Tolerance "\_": M: ± 20%, N: ± 30%
3. Magnetically shielded
4. High saturation current
5. Storage temperature: -40°C to +85°C.
6. Operating temperature range: -25°C to +125°C (Including self-heating).
7. Inductance measured using the HP4285A and Chroma1320 & 3302.
8. DCR measured using Chroma 16502.
9. SRF measured using the HP4291B.
10. Saturation Current Idc1: The value of current causes a 30% Inductance reduction from initial value. ( at : 20 °C ambient)
11. Temperature rise current Idc2: The value of current causes a 40°C temperature rise. ( at : 20 °C ambient)
12. Rated Current: Either Idc1 or Idc2 whichever is smaller.
13. MSL: Level 1.
14. Inductance and Current range: From 0.9 μH (4600mA) to 100.0 μH (660mA).

## D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.



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## E. Characteristics Curve:

