

# SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI-E TYPE

## FEATURES

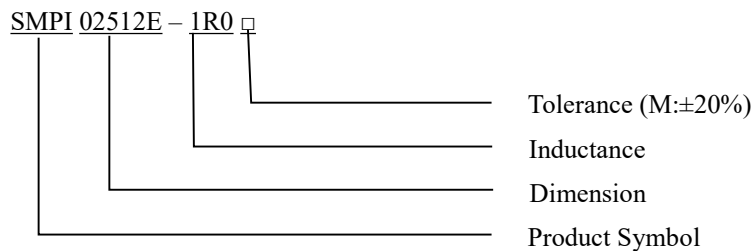
- ◆ Magnetic shielding structure: excellent resistance to electromagnetic interference (EMI).
- ◆ Die-casting by low loss alloy powder: low impedance.
- ◆ High efficiency, wide application frequency and application scope.



## APPLICATIONS

- ◆ Industrial Control Motherboards
- ◆ Graphics Cards
- ◆ Tablet PCs / Notebooks
- ◆ Power Distribution
- ◆ DC/DC Converters
- ◆ LED Lighting
- ◆ Communication Equipment
- ◆ Medical Devices

## ORDERING CODE



## DIMENSIONS UNIT: mm



|   |           |     |
|---|-----------|-----|
| A | 2.5± 0.3  | m/m |
| B | 2.0 ± 0.3 | m/m |
| C | 2.0 (REF) | m/m |
| D | 1.3 (MAX) | m/m |
| E | 0.7 (REF) | m/m |



CORE MASTER ENTERPRISE CO., LTD.

<http://www.coremaster.com.tw>

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### ELECTRICAL CHARACTERISTICS FOR SMPI 02512E

| Part No.        | Inductance (uH)<br>@(0A) | Test Frequency | Heat Rating<br>Current Irms(A) | Saturation<br>Current Isat ( A )<br>drop30% | RDC (mΩ)<br>MAX |
|-----------------|--------------------------|----------------|--------------------------------|---------------------------------------------|-----------------|
| SMPI02512E-R22M | 0.22                     | 100KHz/1V      | 9.0                            | 10.0                                        | 13              |
| SMPI02512E-R33M | 0.33                     | 100KHz/1V      | 6.5                            | 9.0                                         | 20              |
| SMPI02512E-R47M | 0.47                     | 100KHz/1V      | 5.5                            | 8.0                                         | 26              |
| SMPI02512E-R68M | 0.68                     | 100KHz/1V      | 5.2                            | 6.5                                         | 35              |
| SMPI02512E-1R0M | 1.00                     | 100KHz/1V      | 5.0                            | 5.5                                         | 37              |
| SMPI02512E-1R5M | 1.50                     | 100KHz/1V      | 3.2                            | 5.0                                         | 70              |
| SMPI02512E-2R2M | 2.20                     | 100KHz/1V      | 2.6                            | 3.5                                         | 92              |
| SMPI02512E-3R3M | 3.30                     | 100KHz/1V      | 2.0                            | 3.0                                         | 138             |
| SMPI02512E-4R7M | 4.70                     | 100KHz/1V      | 1.8                            | 2.5                                         | 190             |
| SMPI02512E-6R8M | 6.80                     | 100KHz/1V      | 1.6                            | 2.0                                         | 275             |
| SMPI02512E-100M | 10.0                     | 100KHz/1V      | 1.2                            | 1.5                                         | 405             |

Notes:

- 1) You require another part number please contact with us.
- 2) Inductance Tolerance  $\pm 20\%$  ; Frequency Test : 100KHz/1.0v
- 3) All test data is referenced to 25°C ambient.
- 4) Irms : DC current (A) that will cause an approximate  $\Delta T$  of 40°C
- 5) Isat : DC current (A) that will cause  $L_o$  to drop approximately 30%
- 6) We can design according to customer's request.



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