

## FEATURES

To be high saturation for surface mounting.  
 Low profile.  
 Low DC resistance and for large currents.

## APPLICATIONS

Ideal for a variety of DC/DC converter inductor applications.  
 Portable communication equipment.  
 LCD televisions.

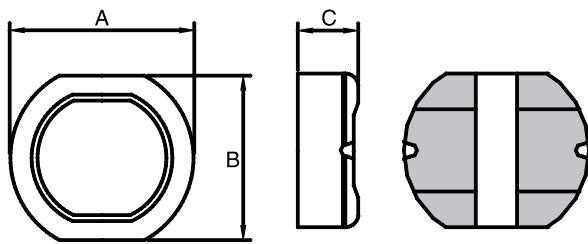
## PRODUCT IDENTIFICATION

①      ②      ③      ④      ⑤

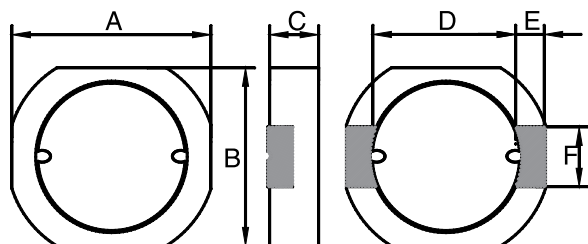
MSCDRI 63B 100 M □ □

- ① Product Code
- ② Dimensions
- ③ Inductance Code
- ④ Tolerance Code
- ⑤ Pattern Code

## PRODUCT SERIES



| Part No.    | Dimension in m/m |       |       |
|-------------|------------------|-------|-------|
|             | A±0.4            | B±0.4 | C±0.5 |
| MSCDRI-63B  | 6.5              | 5.5   | 3.2   |
| MSCDRI-74B  | 7.5              | 7.0   | 4.5   |
| MSCDRI-105B | 10.0             | 9.0   | 5.2   |



| Part No.     | Dimension in m/m |       |        |     |     |     |
|--------------|------------------|-------|--------|-----|-----|-----|
|              | A±0.3            | B±0.3 | C(Max) | D   | E   | F   |
| MSCDRI-6020B | 6.3              | 6.0   | 2.0    | 4.8 | 0.6 | 2.2 |
| MSCDRI-6025B | 6.3              | 6.0   | 2.5    | 4.8 | 0.6 | 2.2 |
| MSCDRI-6030B | 6.3              | 6.0   | 3.0    | 4.8 | 0.6 | 2.2 |

WIPE WOUND TYPE

■ **PRODUCT SPECIFICATIONS**

| Part No. | Inductance<br>( $\mu$ H) | DC Resistance( $\Omega$ )Max. |      |       |       |        |       | Permissible DC Current(A)Max. |      |      |       |       |       |
|----------|--------------------------|-------------------------------|------|-------|-------|--------|-------|-------------------------------|------|------|-------|-------|-------|
|          |                          | 63B                           | 74B  | 105B  | 6020B | 6025B  | 6030B | 63B                           | 74B  | 105B | 6020B | 6025B | 6030B |
| 1R0      | 1.0                      |                               |      |       | 0.016 | 0.015  | 0.015 |                               |      |      | 3.50  | 3.43  | 3.59  |
| 1R5      | 1.5                      |                               |      |       | 0.021 | 0.020  | 0.018 |                               |      |      | 2.94  | 2.83  | 2.93  |
| 2R0      | 2.0                      |                               |      |       | 0.028 | 0.024  |       |                               |      |      | 2.47  | 2.44  |       |
| 3R3      | 3.3                      |                               |      |       | 0.047 | 0.0134 |       |                               |      |      | 1.99  | 1.89  |       |
| 4R7      | 4.7                      |                               |      |       | 0.065 |        | 0.038 |                               |      |      | 1.59  |       | 1.66  |
| 6R8      | 6.8                      |                               |      |       | 0.098 |        |       |                               |      |      | 1.37  |       |       |
| 8R2      | 8.2                      |                               |      |       | 0.102 |        |       |                               |      |      | 1.25  |       |       |
| 100      | 10                       | 0.14                          | 0.07 | 0.060 | 0.118 | 0.090  | 0.069 | 1.00                          | 1.50 | 2.06 | 1.22  | 1.07  | 1.14  |
| 120      | 12                       | 0.16                          | 0.07 | 0.070 | 0.153 | 0.105  | 0.073 | 0.94                          | 1.30 | 1.94 | 0.99  | 0.97  | 1.04  |
| 150      | 15                       | 0.18                          | 0.08 | 0.070 | 0.179 | 0.122  | 0.087 | 0.86                          | 1.22 | 1.72 | 0.94  | 0.87  | 0.93  |
| 180      | 18                       | 0.25                          | 0.10 | 0.080 | 0.207 | 0.154  | 0.104 | 0.78                          | 1.13 | 1.58 | 0.83  | 0.79  | 0.85  |
| 220      | 22                       | 0.32                          | 0.12 | 0.080 | 0.253 | 0.182  | 0.133 | 0.76                          | 1.08 | 1.42 | 0.80  | 0.71  | 0.77  |
| 270      | 27                       | 0.36                          | 0.16 | 0.100 | 0.330 | 0.238  | 0.168 | 0.64                          | 0.84 | 1.32 | 0.65  | 0.64  | 0.70  |
| 330      | 33                       | 0.41                          | 0.18 | 0.110 | 0.368 | 0.273  | 0.196 | 0.61                          | 0.78 | 1.16 | 0.63  | 0.58  | 0.63  |
| 390      | 39                       | 0.47                          | 0.18 | 0.120 | 0.473 | 0.343  | 0.210 | 0.53                          | 0.74 | 1.10 | 0.55  | 0.53  | 0.58  |
| 470      | 47                       | 0.51                          | 0.27 | 0.140 | 0.542 | 0.406  | 0.259 | 0.50                          | 0.66 | 1.00 | 0.50  | 0.48  | 0.53  |
| 560      | 56                       | 0.72                          | 0.29 | 0.190 |       | 0.483  | 0.308 | 0.46                          | 0.64 | 0.93 |       | 0.44  | 0.48  |
| 680      | 68                       | 0.82                          | 0.33 | 0.210 |       | 0.560  | 0.378 | 0.42                          | 0.54 | 0.85 |       | 0.40  | 0.44  |
| 820      | 82                       |                               | 0.43 | 0.280 |       | 0.651  | 0.462 |                               | 0.52 | 0.79 |       | 0.36  | 0.40  |
| 101      | 100                      |                               | 0.49 | 0.340 |       | 0.910  | 0.581 |                               | 0.42 | 0.72 |       | 0.33  | 0.36  |
| 121      | 120                      |                               | 0.68 | 0.370 |       | 0.994  | 0.527 |                               | 0.40 | 0.63 |       | 0.30  | 0.32  |
| 151      | 150                      |                               | 0.94 | 0.510 |       | 1.251  | 0.627 |                               | 0.35 | 0.55 |       | 0.28  | 0.31  |
| 181      | 180                      |                               | 1.00 | 0.570 |       | 1.652  | 0.781 |                               | 0.33 | 0.50 |       | 0.26  | 0.29  |
| 221      | 220                      |                               | 1.18 | 0.780 |       | 2.126  | 1.043 |                               | 0.32 | 0.47 |       | 0.24  | 0.27  |
| 271      | 270                      |                               | 1.30 | 0.870 |       | 2.391  | 1.321 |                               | 0.28 | 0.41 |       | 0.22  | 0.25  |
| 331      | 330                      |                               |      | 1.200 |       | 3.183  | 1.789 |                               |      | 0.37 |       | 0.20  | 0.23  |
| 391      | 390                      |                               |      | 1.340 |       | 3.510  | 1.995 |                               |      | 0.35 |       | 0.19  | 0.21  |
| 471      | 470                      |                               |      | 1.500 |       | 3.950  | 2.286 |                               |      | 0.33 |       | 0.19  | 0.21  |

1. TEST FREQ. (L)MSCDRI-63B,74B,105B : 1~82  $\mu$  H@ 1KHz/250mV 100~470  $\mu$  H@ 100KHz /250mV MSCDRI-6020B,6025B,6030B : 1KHz/250mV
2. TOLERANCE OF INDUCTANCE: 1.0~8.2  $\mu$  H  $\pm$  30%(N) 10~4700  $\mu$  H  $\pm$  20%(M)
3. The max. permissible DC current is the DC current applied which causes 10% (70% for MSCDRI-6020B, 6025B, 6030B) reduction of its initial inductance value, or the coil temperature to rise by 40°C, whichever is lower.