

## MD Series

### SMD Low Profile High Current Molded Inductor Size 7024



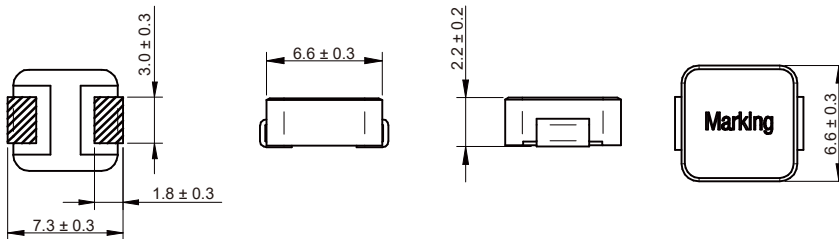
#### CHARACTERISTICS

- Molded type
- High saturation current due to CIP material
- Nature air gap and no acoustic noise
- Different sizes available
- Quantity: 1500pcs

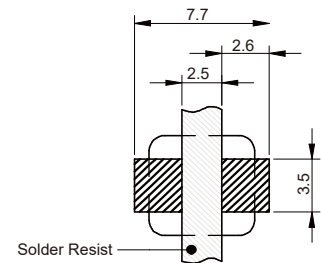
#### APPLICATION

- High current DC/DC converter
- LC filter

#### Dimensions: [mm]



#### Land Pattern: [mm]



#### Electrical Properties:

| Part No     | Inductance (μH) | Tolerance | Temperature Rise Current Typ. (A) | Saturation current Typ. (A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|-------------|-----------------|-----------|-----------------------------------|-----------------------------|---------------|---------------|
| MD7024-R10N | 0.10            | ±30%      | 30                                | 70                          | 1.4           | 1.7           |
| MD7024-R15N | 0.15            | ±30%      | 30                                | 45                          | 1.8           | 2.3           |
| MD7024-R20M | 0.20            | ±20%      | 23                                | 40                          | 1.9           | 2.8           |
| MD7024-R22M | 0.22            | ±20%      | 21                                | 34                          | 2.0           | 3.2           |
| MD7024-R33M | 0.33            | ±20%      | 18                                | 30                          | 3.6           | 4.4           |
| MD7024-R36M | 0.36            | ±20%      | 17                                | 29                          | 3.8           | 4.6           |
| MD7024-R47M | 0.47            | ±20%      | 15                                | 26                          | 4.8           | 5.1           |
| MD7024-R56M | 0.56            | ±20%      | 13                                | 24                          | 5.5           | 6.5           |
| MD7024-R60M | 0.60            | ±20%      | 13                                | 22                          | 5.7           | 6.9           |
| MD7024-R68M | 0.68            | ±20%      | 13                                | 21                          | 6.4           | 7.2           |
| MD7024-R82M | 0.82            | ±20%      | 11                                | 17                          | 8.0           | 9.5           |
| MD7024-1R0M | 1.00            | ±20%      | 11                                | 16                          | 10.5          | 13.5          |
| MD7024-1R5M | 1.50            | ±20%      | 9.0                               | 15                          | 17            | 20            |
| MD7024-2R2M | 2.20            | ±20%      | 7.0                               | 14                          | 23            | 28            |
| MD7024-3R3M | 3.30            | ±20%      | 6.0                               | 10                          | 34            | 39            |
| MD7024-4R7M | 4.70            | ±20%      | 5.5                               | 9.0                         | 41            | 50            |
| MD7024-5R6M | 5.60            | ±20%      | 5.0                               | 8.0                         | 56            | 62            |
| MD7024-6R8M | 6.80            | ±20%      | 4.0                               | 7.0                         | 65            | 72            |

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|-------------|-----------------|-----------|-----------------------------------|-----------------------------|---------------|---------------|
| MD7024-8R2M | 8.20            | ±20%      | 3.6                               | 6.0                         | 81            | 95            |
| MD7024-100M | 10.0            | ±20%      | 3.2                               | 5.0                         | 92            | 101           |
| MD7024-220M | 22.0            | ±20%      | 1.8                               | 3.0                         | 185           | 215           |

Operating temperature : -40 °C ~ +125 °C

Temperature rise current : The actual value of DC current when the temperature rise is ΔT40 °C

Saturation Current that will cause initial inductance to drop 20% approximately .

## Typical Electrical Characteristics:

