

## Molding Power Inductor: HMD Series

HMD series is designed for low profile type with low RDC and ultra large current. Its molded magnetic shielded type is suitable for high-density mounting and ultralow buzz noise. Soldering conditions can be easily confirmed when mounting onto the board. This series also provides customers with embossed carrier type packaging for automatic mounting machine.

### Applications

High density DC/DC converters

POL converters POL

High current VRM/VRD for notebook / Server / desktop CPUs

High speed charger

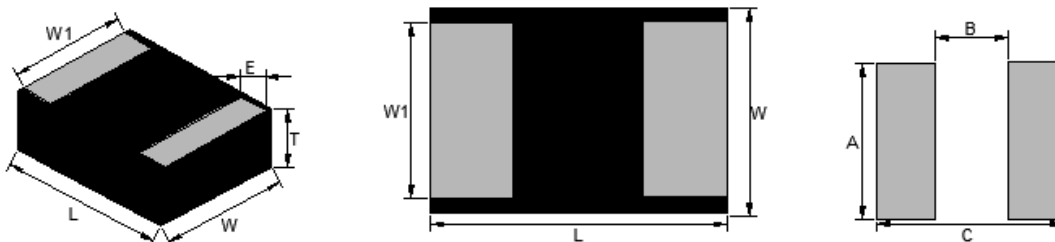
For thickness less than 1.2mm, suitable for low profile applications e.g., for Ultra-thin NB/Monitor/TV/Tablet

### Part number

|            |             |          |            |          |           |           |
|------------|-------------|----------|------------|----------|-----------|-----------|
| <u>HMD</u> | <u>XXXX</u> | <u>R</u> | <u>XXX</u> | <u>M</u> | <u>XX</u> | <u>XX</u> |
| 1          | 2           | 3        | 4          | 5        | 6         | 7         |

|                     |                                                                                                                                                               |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Product Code    | HMD                                                                                                                                                           |
| (2) Size Code       | 1412=1.4x1.2mm, 2012=2.0x1.2mm, 2016=2.0x1.6mm 2520=2.5x2.0mm<br>3225=3.2x2.5mm 4040=4.0x4.0mm, 5050=5.0x5.0mm,<br>6060=6.0x6.0mm, 1010=10x10mm, 1212=12x12mm |
| (3) Packing         | R= Tape and reel                                                                                                                                              |
| (4) Inductance Code | 101=100nH 102=1.0uH 103=10uH 104=100uH                                                                                                                        |
| (5) Tolerance       | J=5% K=10% M=20%                                                                                                                                              |
| (6) Series          | XX                                                                                                                                                            |
| (7) Thickness       | A=0mm, B=1.0mm, C=2.0mm, D=3.0mm, E=4.0mm, F=5.0mm,<br>G=6.0mm, A7=0.7mm, B2=1.2mm, B5=1.5mm                                                                  |

### Dimension and Terminal Configuration- Size:1412/3225



### Appearance and dimensions:1412/3225

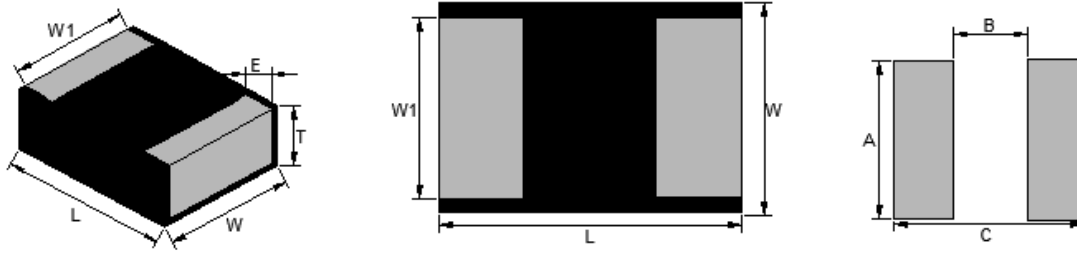
| Size    | L(mm)   | W(mm)   | W1(mm)  | T(mm)    | E(mm)   |
|---------|---------|---------|---------|----------|---------|
| 1412-JG | 1.4±0.2 | 1.2±0.2 | 1.0±0.2 | 0.65 max | 0.5±0.2 |
| 3225    | 3.2±0.2 | 2.5±0.2 | 2.5±0.2 | 1.2 max  | 1.1±0.2 |

### Recommended Land Pattern:1412/3225

| Size | A(mm)    | B(mm)     | C(mm)    |
|------|----------|-----------|----------|
| 1412 | 1.4 typ. | 0.43 typ. | 1.6 typ. |
| 3225 | 2.8 typ. | 1.1 typ.  | 3.5 typ. |

## Molding Power Inductor: HMD Series

### Dimension and Terminal Configuration:2012/2016/2520



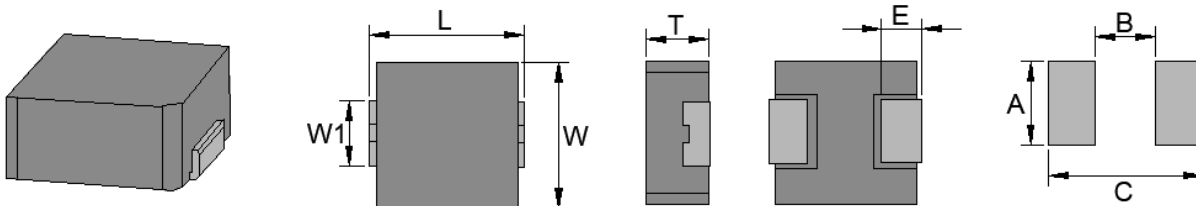
### Appearance and dimensions: 2012/2016/2520

| Size    | L(mm)   | W(mm)   | W1(mm)  | T(mm)    | E(mm)   |
|---------|---------|---------|---------|----------|---------|
| 1412-JP | 1.4±0.2 | 1.2±0.2 | 1.0±0.2 | 0.65 max | 0.5±0.2 |
| 2012    | 2.0±0.2 | 1.2±0.2 | 1.0±0.2 | 0.9±0.1  | 0.5±0.2 |
| 2016    | 2.0±0.2 | 1.6±0.2 | 1.4±0.2 | 1.0 max  | 0.5±0.3 |
| 2520    | 2.5±0.2 | 2.0±0.2 | 1.8±0.2 | 1.2 max  | 0.6±0.3 |

### Recommended Land Pattern :2012/2016/2520

| Size    | A(mm)    | B(mm)     | C(mm)    |
|---------|----------|-----------|----------|
| 1412-JP | 1.4 typ. | 0.43 typ. | 1.6 typ. |
| 2012    | 1.2 typ. | 0.9 typ.  | 2.0 typ. |
| 2016    | 1.6 typ. | 0.9 typ.  | 2.0 typ. |
| 2520    | 2.0 typ. | 1.2 typ.  | 2.8 typ. |

### Dimension and Terminal Configuration:4040~1212



### Appearance and dimensions

| Size  | L (mm)   | W (mm)   | W1 (mm) | T (mm)  | E (mm)  |
|-------|----------|----------|---------|---------|---------|
| 4040  | 4.4±0.3  | 4.2±0.3  | 2.0±0.2 | 1.8±0.2 | 1.0±0.5 |
| 5050C | 5.7±0.3  | 5.2±0.3  | 2.0±0.5 | 1.8±0.2 | 1.0±0.5 |
| 5050D | 5.7±0.3  | 5.2±0.3  | 2.0±0.5 | 2.8±0.2 | 1.0±0.5 |
| 6060C | 7.1±0.3  | 6.6±0.2  | 3.0±0.3 | 1.8±0.2 | 1.5±0.5 |
| 6060D | 7.1±0.3  | 6.6±0.2  | 3.0±0.3 | 2.8±0.2 | 1.5±0.5 |
| 6060F | 7.1±0.3  | 6.6±0.2  | 3.0±0.3 | 4.8±0.2 | 1.5±0.5 |
| 8080E | 8.5±0.5  | 8.0±0.3  | 3.0±0.3 | 3.8±0.2 | 1.8±0.3 |
| 8080F | 8.5±0.5  | 8.0±0.3  | 3.0±0.3 | 4.8±0.2 | 1.8±0.3 |
| 1010E | 11.0±0.5 | 10.2±0.3 | 3.0±0.3 | 3.8±0.2 | 2.0±0.5 |
| 1010F | 11.0±0.5 | 10.2±0.3 | 3.0±0.3 | 4.8±0.2 | 2.0±0.5 |
| 1212F | 13.5±0.5 | 12.7±0.3 | 3.5±0.5 | 4.8±0.2 | 2.5±0.5 |
| 1212G | 13.5±0.5 | 12.7±0.3 | 3.5±0.5 | 6.1±0.2 | 2.5±0.5 |

# Molding Power Inductor: HMD Series

## Recommended Land Pattern:4040~1212

| Size | A(mm) | B(mm) | C(mm) |
|------|-------|-------|-------|
| 4040 | 2.5   | 1.75  | 4.75  |
| 5050 | 2.5   | 2.0   | 5.2   |
| 6060 | 3.5   | 3.6   | 8.4   |
| 8080 | 3.5   | 3.6   | 8.4   |
| 1010 | 4.0   | 6.0   | 12.5  |
| 1212 | 4.5   | 8.0   | 14.5  |

## HMD 1412 JG Series

| Part number      | Inductance<br>(uH) | Percent<br>Tolerance ±% | DCR (mΩ)<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A) Max<br>Heat Rating Current |
|------------------|--------------------|-------------------------|---------------------------|------------------------------------|-------------------------------------|
| HMD1412R241MJGA7 | 0.24               | 20                      | 24                        | 6.5                                | 4.0                                 |
| HMD1412R331MJGA7 | 0.33               | 20                      | 32                        | 5.0                                | 3.0                                 |
| HMD1412R471MJGA7 | 0.47               | 20                      | 42                        | 3.3                                | 2.7                                 |

## HMD 1412 JP Series

| Part number      | Inductance<br>(uH) | Percent<br>Tolerance ±% | DCR (mΩ)<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A) Max<br>Heat Rating Current |
|------------------|--------------------|-------------------------|---------------------------|------------------------------------|-------------------------------------|
| HMD1412R471MJPA7 | 0.47               | 20                      | 38                        | 3.6                                | 2.7                                 |

## HMD 2012 JP Series

| Part number      | Inductance<br>(uH) | Percent<br>Tolerance ±% | DCR (mΩ)<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A) Max<br>Heat Rating Current |
|------------------|--------------------|-------------------------|---------------------------|------------------------------------|-------------------------------------|
| HMD2012R241MJPB0 | 0.24               | 20                      | 22                        | 5.5                                | 4.8                                 |
| HMD2012R331MJPB0 | 0.33               | 20                      | 28                        | 5.0                                | 4.3                                 |
| HMD2012R471MJPB0 | 0.47               | 20                      | 34                        | 4.5                                | 3.8                                 |
| HMD2012R102MJPB0 | 1.00               | 20                      | 67                        | 3.1                                | 2.7                                 |
| HMD2012R222MJPB0 | 2.2                | 20                      | 193                       | 2.0                                | 1.5                                 |

## HMD 2016 JP Series

| Part number      | Inductance<br>(uH) | Percent<br>Tolerance ±% | DCR (mΩ)<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A) Max<br>Heat Rating Current |
|------------------|--------------------|-------------------------|---------------------------|------------------------------------|-------------------------------------|
| HMD2016R241MJPB0 | 0.24               | 20                      | 20                        | 6.3                                | 5.3                                 |
| HMD2016R331MJPB0 | 0.33               | 20                      | 26                        | 6.1                                | 4.0                                 |
| HMD2016R471MJPB0 | 0.47               | 20                      | 30                        | 5.3                                | 4.05                                |
| HMD2016R102MJPB0 | 1.00               | 20                      | 60                        | 3.3                                | 3.0                                 |
| HMD2016R152MJPB0 | 1.50               | 20                      | 99                        | 3.1                                | 2.2                                 |
| HMD2016R222MJPB0 | 2.20               | 20                      | 140                       | 2.45                               | 2.0                                 |
| HMD2016R472MJPB0 | 4.70               | 20                      | 288                       | 1.6                                | 1.1                                 |

## HMD 2520 JP Series

| Part number      | Inductance<br>(uH) | Percent<br>Tolerance ±% | DCR (mΩ)<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A) Max<br>Heat Rating Current |
|------------------|--------------------|-------------------------|---------------------------|------------------------------------|-------------------------------------|
| HMD2520R102MJPB2 | 1.00               | 20                      | 44                        | 4.3                                | 3.3                                 |
| HMD2520R152MJPB2 | 1.50               | 20                      | 63                        | 3.5                                | 2.5                                 |
| HMD2520R222MJPB2 | 2.20               | 20                      | 89                        | 3.2                                | 2.2                                 |
| HMD2520R472MJPB2 | 4.70               | 20                      | 180                       | 2.0                                | 1.5                                 |

## Molding Power Inductor: HMD Series

### HMD 3225B JG Series

| Part number      | Inductance<br>( $\mu$ H) | Percent<br>Tolerance $\pm\%$ | DCR (m $\Omega$ )<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A)<br>Heat Rating Current |
|------------------|--------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------|
| HMD3225R102MJGB2 | 1.00                     | 20                           | 35                                 | 7.0                                | 4.0                             |
| HMD3225R152MJGB2 | 1.50                     | 20                           | 62                                 | 6.0                                | 3.5                             |
| HMD3225R222MJGB2 | 2.20                     | 20                           | 75                                 | 4.0                                | 3.0                             |
| HMD3225R332MJGB2 | 3.30                     | 20                           | 127                                | 3.5                                | 2.5                             |
| HMD3225R472MJGB2 | 4.70                     | 20                           | 192                                | 3.0                                | 2.0                             |
| HMD3225R103MJGB2 | 10.00                    | 20                           | 322                                | 2.5                                | 1.8                             |

### HMD 4040 JC Series

| Part number      | Inductance<br>( $\mu$ H) | Percent<br>Tolerance $\pm\%$ | DCR (m $\Omega$ )<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A)<br>Heat Rating Current |
|------------------|--------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------|
| HMD4040R102MJCC0 | 1                        | 20                           | 27                                 | 7.0                                | 6.0                             |
| HMD4040R152MJCC0 | 1.5                      | 20                           | 45                                 | 6.0                                | 5.0                             |
| HMD4040R222MJCC0 | 2.2                      | 20                           | 58                                 | 5.0                                | 4.5                             |
| HMD4040R332MJCC0 | 3.3                      | 20                           | 87                                 | 4.0                                | 3.5                             |
| HMD4040R472MJCC0 | 4.7                      | 20                           | 105                                | 3.5                                | 3.0                             |
| HMD4040R682MJCC0 | 6.8                      | 20                           | 150                                | 3.0                                | 2.5                             |
| HMD4040R103MJCC0 | 10.0                     | 20                           | 200                                | 2.5                                | 2.0                             |

### HMD 5050 JC Series

| Part number      | Inductance<br>( $\mu$ H) | Percent<br>Tolerance $\pm\%$ | DCR (m $\Omega$ )<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A)<br>Heat Rating Current |
|------------------|--------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------|
| HMD5050R102MJCC0 | 1.0                      | 20                           | 17                                 | 9.00                               | 8.00                            |
| HMD5050R152MJCC0 | 1.5                      | 20                           | 27                                 | 8.00                               | 7.00                            |
| HMD5050R222MJCC0 | 2.2                      | 20                           | 34                                 | 7.00                               | 5.00                            |
| HMD5050R332MJCC0 | 3.3                      | 20                           | 58                                 | 5.50                               | 4.50                            |
| HMD5050R472MJCC0 | 4.7                      | 20                           | 85                                 | 4.50                               | 3.50                            |
| HMD5050R562MJCC0 | 5.6                      | 20                           | 92                                 | 4.20                               | 3.00                            |
| HMD5050R682MJCC0 | 6.8                      | 20                           | 120                                | 3.50                               | 2.80                            |
| HMD5050R103MJCC0 | 10.0                     | 20                           | 155                                | 3.00                               | 2.50                            |
| HMD5050R102MJCD0 | 1.0                      | 20                           | 14                                 | 13.0                               | 9.0                             |
| HMD5050R152MJCD0 | 1.5                      | 20                           | 25                                 | 9.5                                | 8.0                             |
| HMD5050R222MJCD0 | 2.2                      | 20                           | 29                                 | 9.0                                | 7.0                             |
| HMD5050R332MJCD0 | 3.3                      | 20                           | 38                                 | 7.5                                | 5.5                             |
| HMD5050R472MJCD0 | 4.7                      | 20                           | 55                                 | 6.0                                | 4.5                             |
| HMD5050R682MJCD0 | 6.8                      | 20                           | 70                                 | 5.0                                | 3.5                             |
| HMD5050R103MJCD0 | 10.0                     | 20                           | 115                                | 4.0                                | 3.2                             |
| HMD5050R153MJCD0 | 15.0                     | 20                           | 160                                | 3.0                                | 2.5                             |
| HMD5050R223MJCD0 | 22.0                     | 20                           | 250                                | 2.5                                | 1.5                             |
| HMD5050R333MJCD0 | 33.0                     | 20                           | 380                                | 2.0                                | 1.2                             |
| HMD5050R473MJCD0 | 47.0                     | 20                           | 435                                | 1.5                                | 1.0                             |

## Molding Power Inductor: HMD Series

### HMD 6060 JC Series

| Part number      | Inductance<br>( $\mu$ H) | Percent<br>Tolerance $\pm\%$ | DCR (m $\Omega$ )<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A)<br>Heat Rating Current |
|------------------|--------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------|
| HMD6060R102MJCC0 | 1.0                      | 20                           | 16                                 | 12.5                               | 8.5                             |
| HMD6060R152MJCC0 | 1.5                      | 20                           | 26                                 | 10.5                               | 8.0                             |
| HMD6060R222MJCC0 | 2.2                      | 20                           | 35                                 | 8.5                                | 7.0                             |
| HMD6060R332MJCC0 | 3.3                      | 20                           | 50                                 | 7.0                                | 4.5                             |
| HMD6060R472MJCC0 | 4.7                      | 20                           | 60                                 | 5.5                                | 4.0                             |
| HMD6060R682MJCC0 | 6.8                      | 20                           | 95                                 | 5.0                                | 3.0                             |
| HMD6060R103MJCC0 | 10                       | 20                           | 120                                | 4.0                                | 2.5                             |
| HMD6060R102MJCD0 | 1.0                      | 20                           | 9.2                                | 15.0                               | 12.0                            |
| HMD6060R152MJCD0 | 1.5                      | 20                           | 12.1                               | 13.0                               | 11.0                            |
| HMD6060R222MJCD0 | 2.2                      | 20                           | 17.5                               | 10.0                               | 9.0                             |
| HMD6060R332MJCD0 | 3.3                      | 20                           | 26                                 | 9.5                                | 8.5                             |
| HMD6060R472MJCD0 | 4.7                      | 20                           | 38                                 | 8.0                                | 6.5                             |
| HMD6060R682MJCD0 | 6.8                      | 20                           | 50                                 | 6.5                                | 5.0                             |
| HMD6060R103MJCD0 | 10                       | 20                           | 68                                 | 5.5                                | 4.5                             |
| HMD6060R153MJCD0 | 15                       | 20                           | 115                                | 4.5                                | 3.5                             |
| HMD6060R223MJCD0 | 22                       | 20                           | 145                                | 3.1                                | 2.5                             |
| HMD6060R333MJCD0 | 33                       | 20                           | 240                                | 2.5                                | 2.0                             |
| HMD6060R473MJCD0 | 47                       | 20                           | 380                                | 2.0                                | 1.5                             |
| HMD6060R102MJCF0 | 1.0                      | 20                           | 6.5                                | 16.00                              | 12.00                           |
| HMD6060R152MJCF0 | 1.5                      | 20                           | 10.0                               | 13.00                              | 9.50                            |
| HMD6060R222MJCF0 | 2.2                      | 20                           | 12.5                               | 12.00                              | 9.00                            |
| HMD6060R332MJCF0 | 3.3                      | 20                           | 22.0                               | 10.00                              | 8.50                            |
| HMD6060R472MJCF0 | 4.7                      | 20                           | 25.0                               | 9.00                               | 7.00                            |
| HMD6060R682MJCF0 | 6.8                      | 20                           | 34.0                               | 8.00                               | 6.00                            |
| HMD6060R103MJCF0 | 10                       | 20                           | 50.0                               | 7.00                               | 5.00                            |
| HMD6060R153MJCF0 | 15                       | 20                           | 65.0                               | 5.50                               | 4.00                            |
| HMD6060R223MJCF0 | 22                       | 20                           | 98.0                               | 5.00                               | 3.00                            |
| HMD6060R333MJCF0 | 33                       | 20                           | 186.0                              | 3.50                               | 2.50                            |
| HMD6060R473MJCF0 | 47                       | 20                           | 246.0                              | 2.50                               | 2.00                            |
| HMD6060R683MJCF0 | 68                       | 20                           | 320.0                              | 2.20                               | 1.50                            |
| HMD6060R104MJCF0 | 100                      | 20                           | 380.0                              | 1.80                               | 1.20                            |

### HMD 8080 JC Series

| Part number      | Inductance<br>( $\mu$ H) | Percent<br>Tolerance $\pm\%$ | DCR (m $\Omega$ )<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A)<br>Heat Rating Current |
|------------------|--------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------|
| HMD8080R102MJCE0 | 1.0                      | 20                           | 4.5                                | 18.0                               | 15.0                            |
| HMD8080R152MJCE0 | 1.5                      | 20                           | 6.5                                | 17.0                               | 12.0                            |
| HMD8080R222MJCE0 | 2.2                      | 20                           | 7.5                                | 15.0                               | 12.0                            |
| HMD8080R332MJCE0 | 3.3                      | 20                           | 12                                 | 12.0                               | 10.0                            |
| HMD8080R472MJCE0 | 4.7                      | 20                           | 18                                 | 11.0                               | 8.0                             |
| HMD8080R103MJCE0 | 10.0                     | 20                           | 35                                 | 9.0                                | 6.0                             |
| HMD8080R153MJCE0 | 15.0                     | 20                           | 48                                 | 7.5                                | 5.0                             |
| HMD8080R223MJCE0 | 22.0                     | 20                           | 82                                 | 6.5                                | 4.5                             |
| HMD8080R333MJCE0 | 33.0                     | 20                           | 120                                | 4.5                                | 3.5                             |
| HMD8080R473MJCE0 | 47.0                     | 20                           | 156                                | 4.0                                | 2.5                             |
| HMD8080R683MJCE0 | 68.0                     | 20                           | 235                                | 3.5                                | 2.0                             |
| HMD8080R104MJCE0 | 100.0                    | 20                           | 365                                | 2.5                                | 1.8                             |
| HMD8080R102MJCF0 | 1.0                      | 20                           | 5.5                                | 19.0                               | 15.0                            |
| HMD8080R152MJCF0 | 1.5                      | 20                           | 6                                  | 18.0                               | 14.0                            |

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|                  |       |    |     |      |      |
|------------------|-------|----|-----|------|------|
| HMD8080R222MJCF0 | 2.2   | 20 | 7.5 | 16.0 | 13.0 |
| HMD8080R332MJCF0 | 3.3   | 20 | 13  | 14.0 | 11.0 |
| HMD8080R472MJCF0 | 4.7   | 20 | 17  | 13.0 | 8.5  |
| HMD8080R682MJCF0 | 6.8   | 20 | 25  | 10.0 | 7.5  |
| HMD8080R103MJCF0 | 10.0  | 20 | 32  | 8.0  | 6.5  |
| HMD8080R153MJCF0 | 15.0  | 20 | 48  | 6.2  | 5.5  |
| HMD8080R223MJCF0 | 22.0  | 20 | 80  | 5.0  | 4.5  |
| HMD8080R333MJCF0 | 33.0  | 20 | 120 | 5.0  | 3.5  |
| HMD8080R473MJCF0 | 47.0  | 20 | 155 | 3.5  | 3.0  |
| HMD8080R683MJCF0 | 68.0  | 20 | 240 | 2.8  | 2.5  |
| HMD8080R104MJCF0 | 100.0 | 20 | 300 | 2.5  | 2.0  |

## HMD 1010 JC Series

| Part number      | Inductance<br>( $\mu$ H) | Percent<br>Tolerance $\pm\%$ | DCR (m $\Omega$ )<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A)<br>Heat Rating Current |
|------------------|--------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------|
| HMD1010R102MJCE0 | 1.0                      | 20                           | 3.5                                | 28.0                               | 19.0                            |
| HMD1010R152MJCE0 | 1.5                      | 20                           | 5                                  | 24.0                               | 16.0                            |
| HMD1010R222MJCE0 | 2.2                      | 20                           | 7                                  | 18.0                               | 12.0                            |
| HMD1010R332MJCE0 | 3.3                      | 20                           | 12                                 | 16.0                               | 11.0                            |
| HMD1010R472MJCE0 | 4.7                      | 20                           | 16                                 | 14.0                               | 9.0                             |
| HMD1010R682MJCE0 | 6.8                      | 20                           | 25                                 | 12.0                               | 8.5                             |
| HMD1010R103MJCE0 | 10                       | 20                           | 32                                 | 9.0                                | 7.5                             |
| HMD1010R223MJCE0 | 22                       | 20                           | 66                                 | 6.0                                | 5.0                             |
| HMD1010R333MJCE0 | 33                       | 20                           | 92                                 | 5.0                                | 4.5                             |
| HMD1010R473MJCE0 | 47                       | 20                           | 145                                | 4.0                                | 3.5                             |
| HMD1010R683MJCE0 | 68                       | 20                           | 195                                | 3.5                                | 2.5                             |
| HMD1010R104MJCE0 | 100                      | 20                           | 320                                | 3.0                                | 1.8                             |
| HMD1010R102MJCF0 | 1.0                      | 20                           | 2.6                                | 30.0                               | 19.5                            |
| HMD1010R152MJCF0 | 1.5                      | 20                           | 3.8                                | 26.0                               | 16.0                            |
| HMD1010R222MJCF0 | 2.2                      | 20                           | 6.                                 | 20.0                               | 14.0                            |
| HMD1010R332MJCF0 | 3.3                      | 20                           | 7.5                                | 17.0                               | 12.0                            |
| HMD1010R472MJCF0 | 4.7                      | 20                           | 15                                 | 15.0                               | 10.0                            |
| HMD1010R682MJCF0 | 6.8                      | 20                           | 18.5                               | 13.0                               | 9.0                             |
| HMD1010R103MJCF0 | 10                       | 20                           | 28                                 | 10.0                               | 8.0                             |
| HMD1010R223MJCF0 | 22                       | 20                           | 48                                 | 8.0                                | 5.5                             |
| HMD1010R333MJCF0 | 33                       | 20                           | 87                                 | 6.0                                | 5.0                             |
| HMD1010R473MJCF0 | 47                       | 20                           | 120                                | 5.0                                | 4.0                             |
| HMD1010R683MJCF0 | 68                       | 20                           | 170                                | 4.5                                | 3.5                             |
| HMD1010R104MJCF0 | 100                      | 20                           | 250                                | 3.5                                | 2.5                             |

## HMD 1212 JC Series

| Part number      | Inductance<br>( $\mu$ H) | Percent<br>Tolerance $\pm\%$ | DCR (m $\Omega$ )<br>DC Resistance | Isat (A) Max<br>Saturation Current | Irms (A)<br>Heat Rating Current |
|------------------|--------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------|
| HMD1212R102MJCF0 | 1.0                      | 20                           | 2.2                                | 35                                 | 26                              |
| HMD1212R122MJCF0 | 1.2                      | 20                           | 3                                  | 34                                 | 26                              |
| HMD1212R152MJCF0 | 1.5                      | 20                           | 4                                  | 33                                 | 23                              |
| HMD1212R222MJCF0 | 2.2                      | 20                           | 5                                  | 26                                 | 15                              |
| HMD1212R332MJCF0 | 3.3                      | 20                           | 7.5                                | 24                                 | 14                              |
| HMD1212R472MJCF0 | 4.7                      | 20                           | 9                                  | 20                                 | 13                              |
| HMD1212R562MJCF0 | 5.6                      | 20                           | 10.5                               | 18                                 | 13                              |
| HMD1212R682MJCF0 | 6.8                      | 20                           | 14.5                               | 16                                 | 12                              |

## Molding Power Inductor: HMD Series

|                  |       |    |      |      |      |
|------------------|-------|----|------|------|------|
| HMD1212R822MJCF0 | 8.2   | 20 | 22   | 12.5 | 9    |
| HMD1212R103MJCF0 | 10.0  | 20 | 24   | 12   | 9    |
| HMD1212R153MJCF0 | 15.0  | 20 | 31   | 11   | 8    |
| HMD1212R223MJCF0 | 22.0  | 20 | 45   | 8    | 6    |
| HMD1212R333MJCF0 | 33.0  | 20 | 66   | 6    | 5    |
| HMD1212R102MJCG5 | 1.0   | 20 | 1    | 40   | 24   |
| HMD1212R152MJCG5 | 1.5   | 20 | 1.5  | 30   | 23   |
| HMD1212R222MJCG5 | 2.2   | 20 | 2.7  | 27   | 21   |
| HMD1212R332MJCG5 | 3.3   | 20 | 6.5  | 25   | 18   |
| HMD1212R472MJCG5 | 4.7   | 20 | 7.5  | 24   | 15   |
| HMD1212R562MJCG5 | 5.6   | 20 | 11   | 22.5 | 13   |
| HMD1212R682MJCG5 | 6.8   | 20 | 13.5 | 19   | 12   |
| HMD1212R822MJCG5 | 8.2   | 20 | 16   | 15.5 | 11   |
| HMD1212R103MJCG5 | 10.0  | 20 | 18   | 15   | 10   |
| HMD1212R153MJCG5 | 15.0  | 20 | 26   | 13.5 | 8.5  |
| HMD1212R223MJCG5 | 22.0  | 20 | 39.5 | 10   | 7    |
| HMD1212R333MJCG5 | 33.0  | 20 | 53   | 8    | 6    |
| HMD1212R473MJCG5 | 47.0  | 20 | 75   | 6.50 | 5.50 |
| HMD1212R683MJCG5 | 68.0  | 20 | 115  | 5.50 | 4.50 |
| HMD1212R104MJCG5 | 100.0 | 20 | 135  | 4.00 | 3.50 |
| HMD1212R124MJCG5 | 120.0 | 20 | 235  | 3.20 | 2.30 |
| HMD1212R154MJCG5 | 150.0 | 20 | 350  | 2.70 | 2.00 |

## Molding Power Inductor: HMD Series

### Electrical characteristics:

Note 1: Customized design is available, please contact us.

Note 2 : All test referenced to 26 ° C ambient.

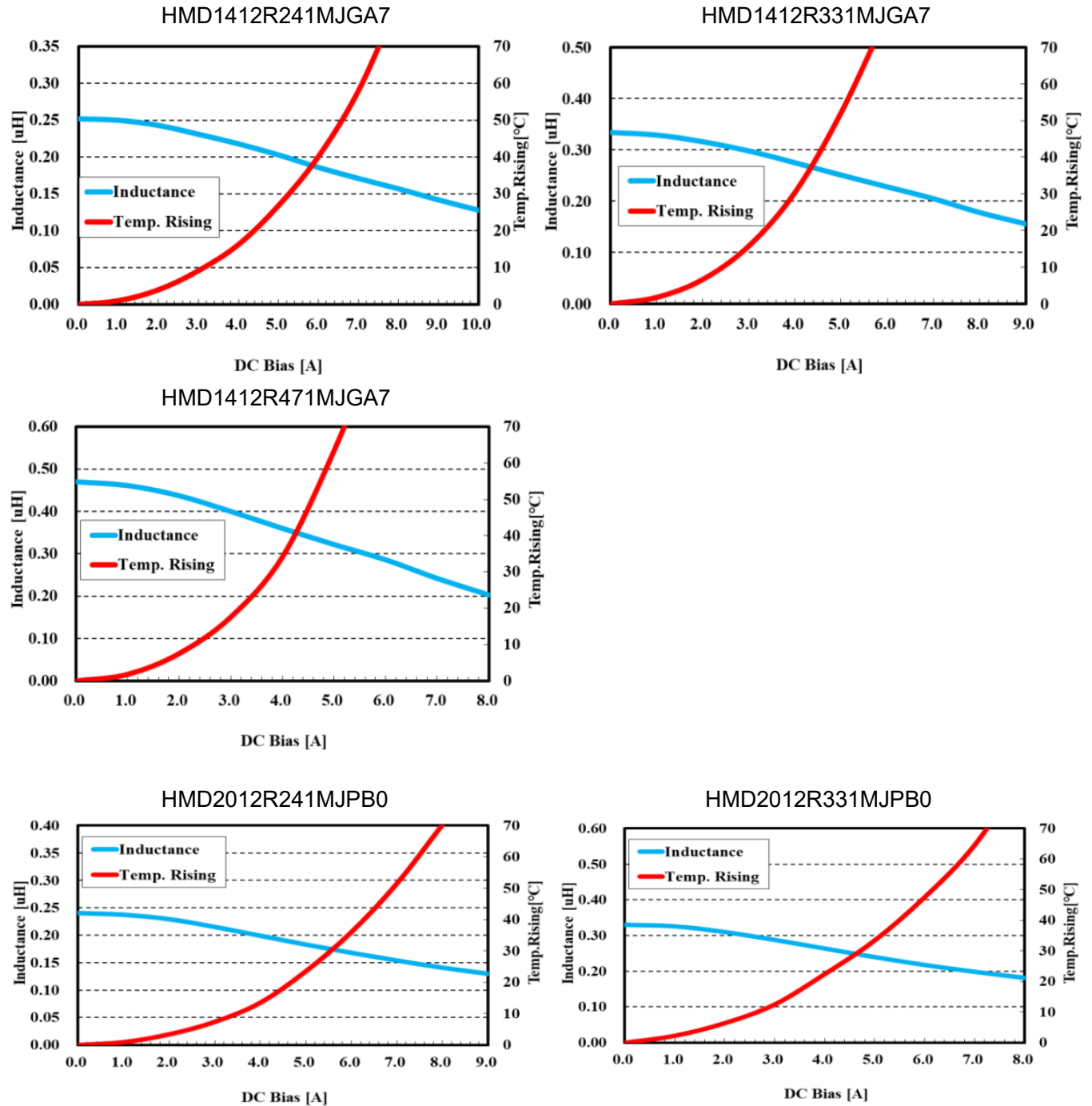
Note 3: Inductance tolerance+/-20%.

Note 4: Inductance is measured with Agilent LCR meter 4285A. Test frequency at 1MHz.

Note 5: DC resistance is measured with HIOKI micro-ohm meter RM3542-01.

Note 6: Isat means that DC current will cause a 30% inductance reduction form initial value.

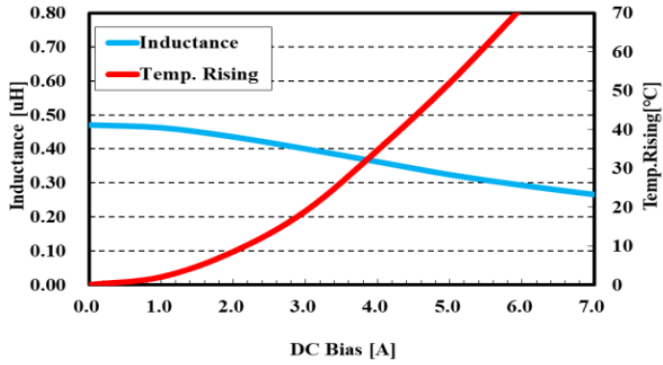
Note 7: Irms means that DC current will cause coil temp. rising to 40C whichever is smaller.



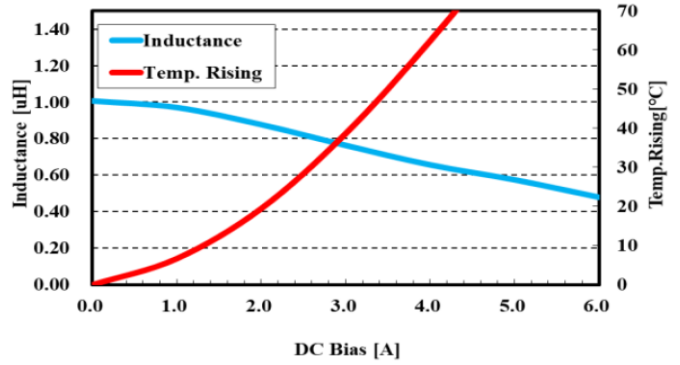


# Molding Power Inductor: HMD Series

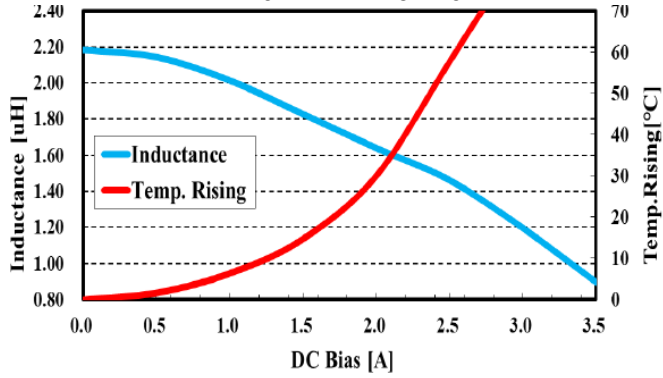
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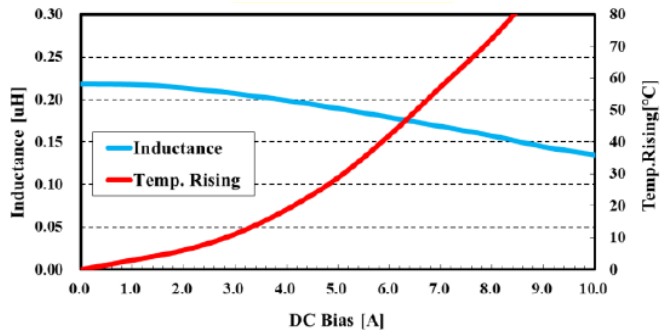
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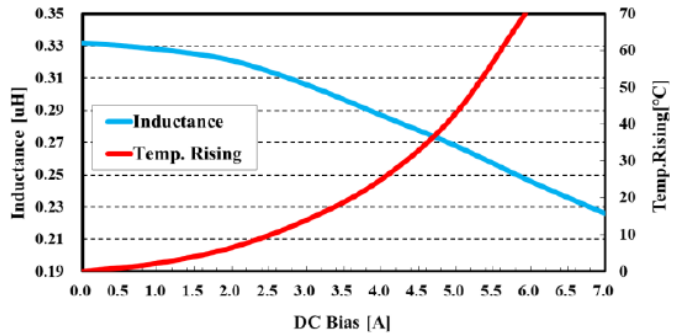
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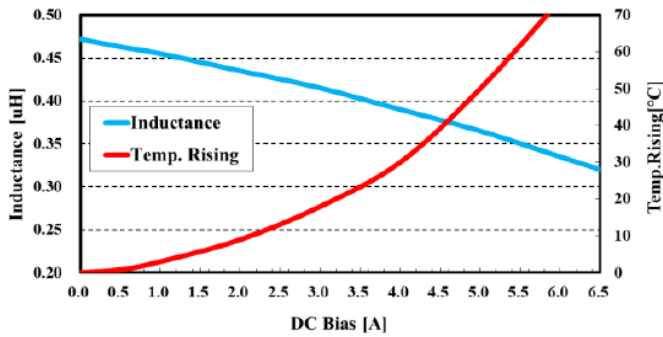
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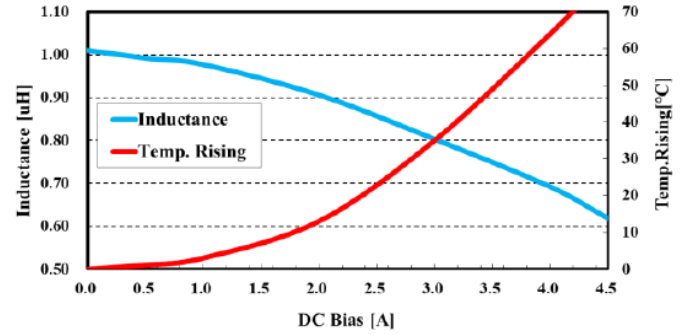
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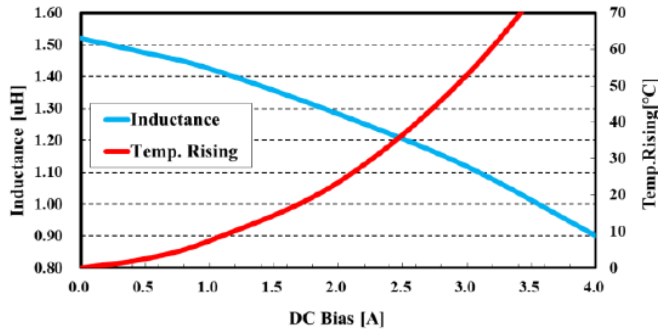


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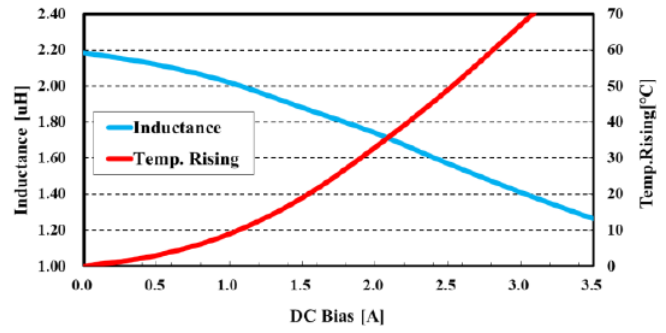


# Molding Power Inductor: HMD Series

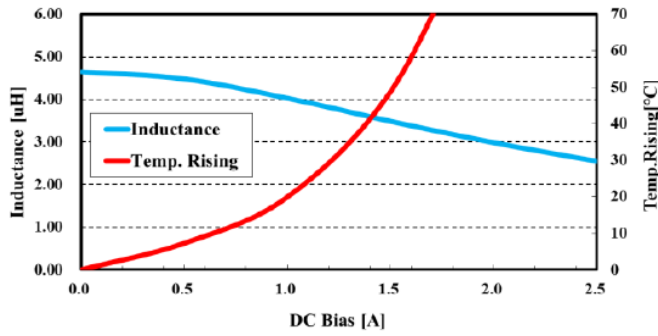
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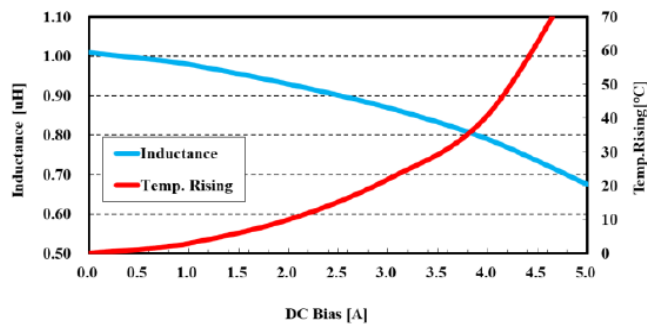
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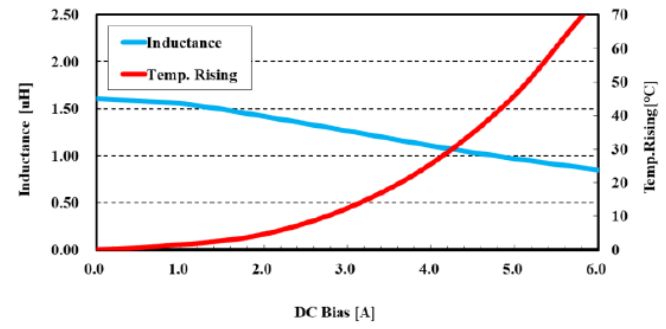
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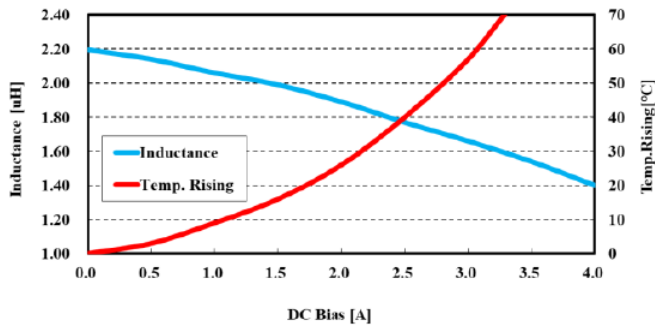
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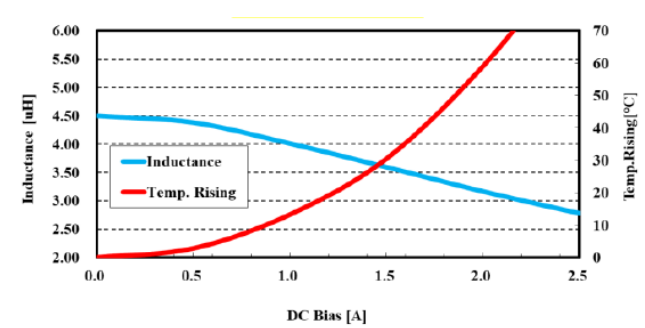
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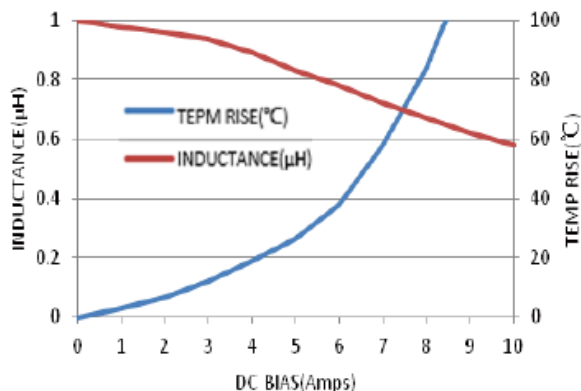


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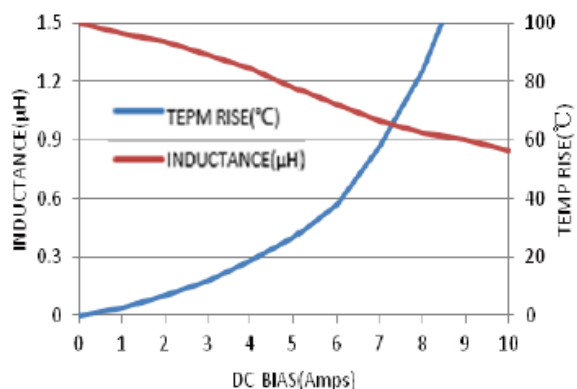


# Molding Power Inductor: HMD Series

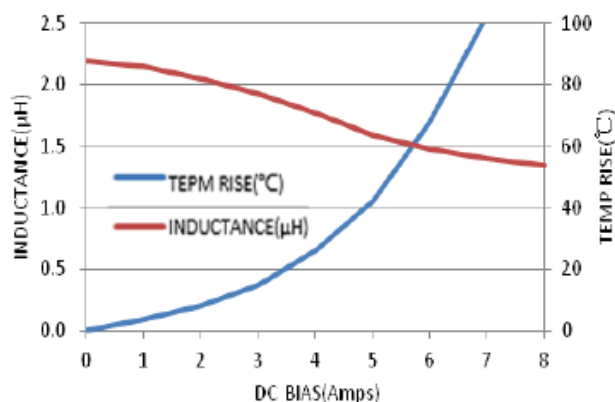
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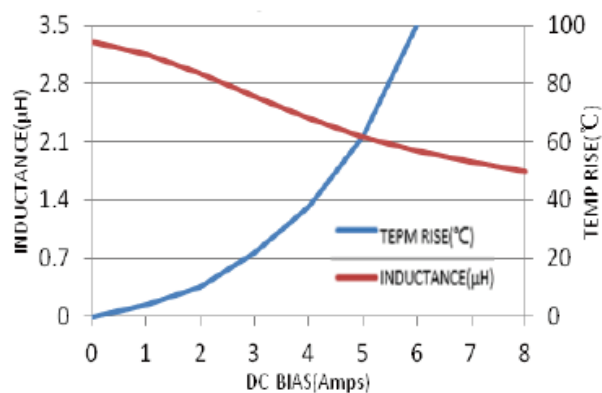
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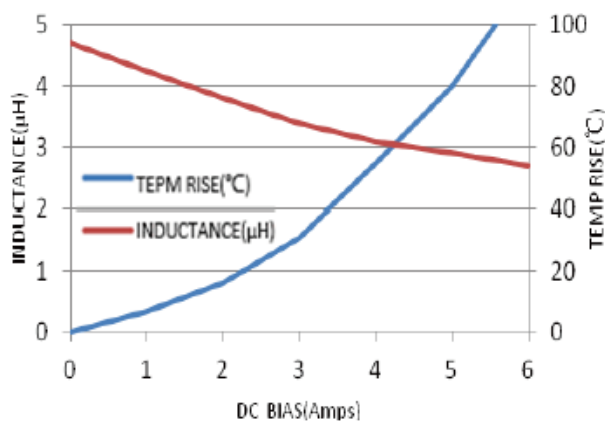
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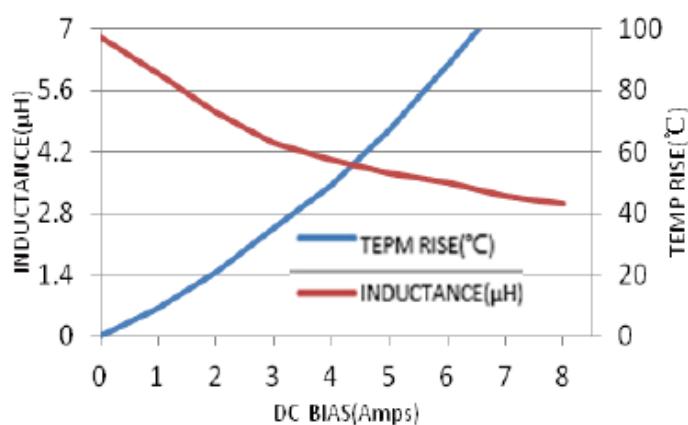
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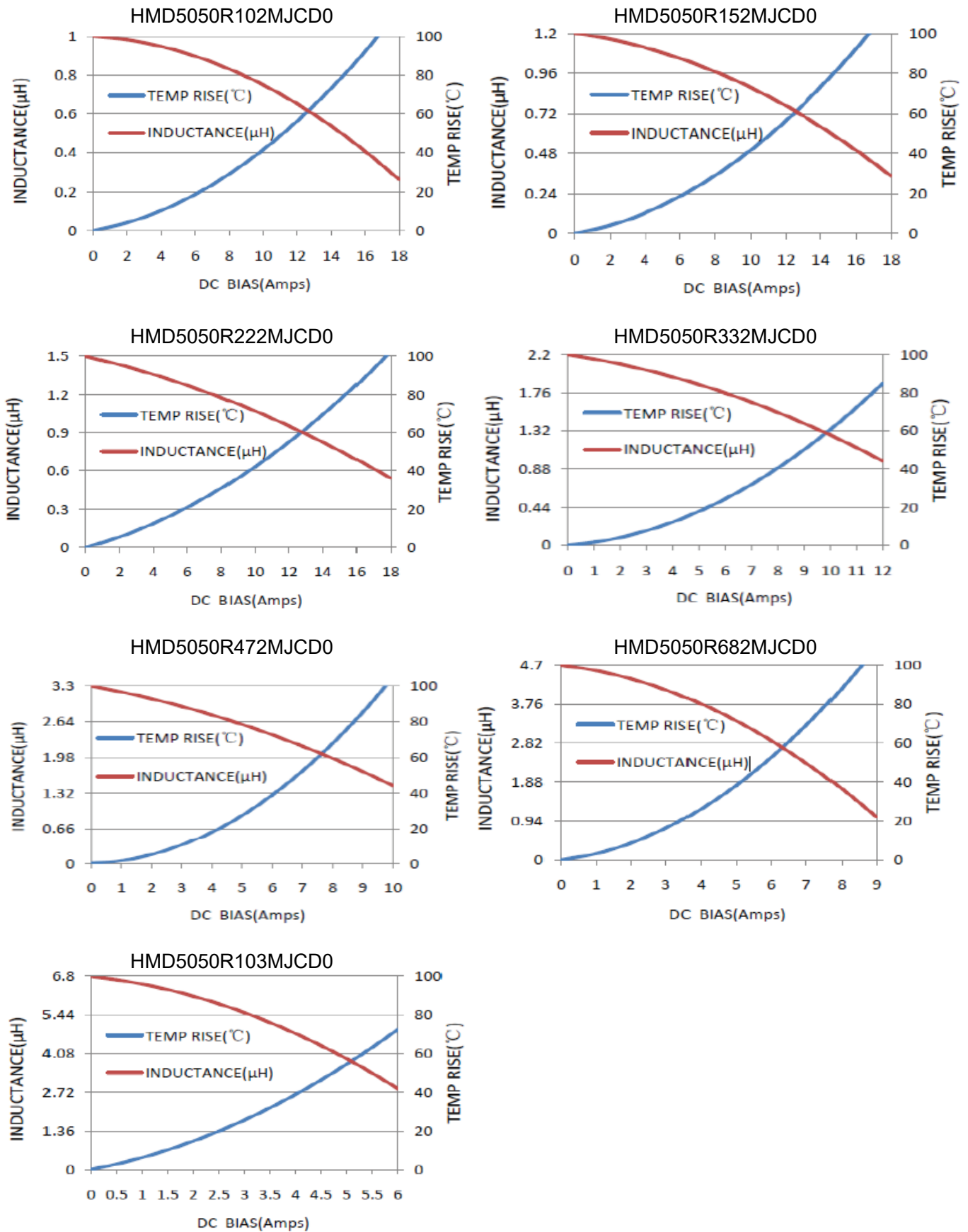
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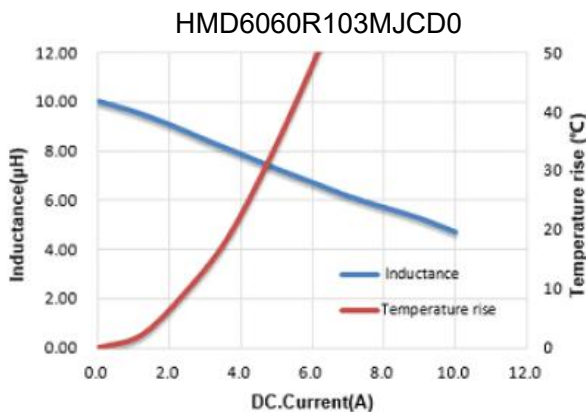
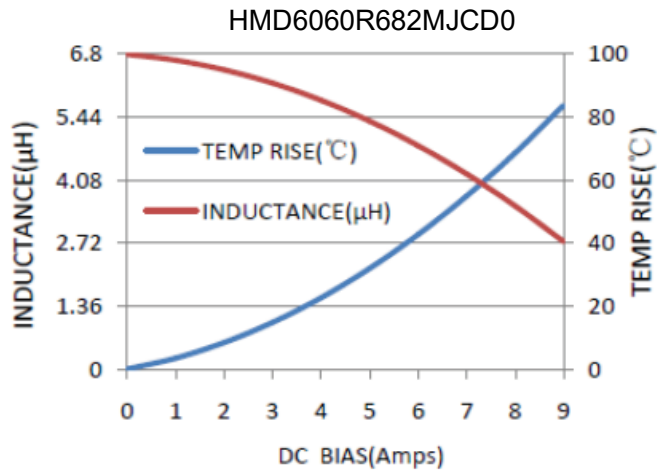
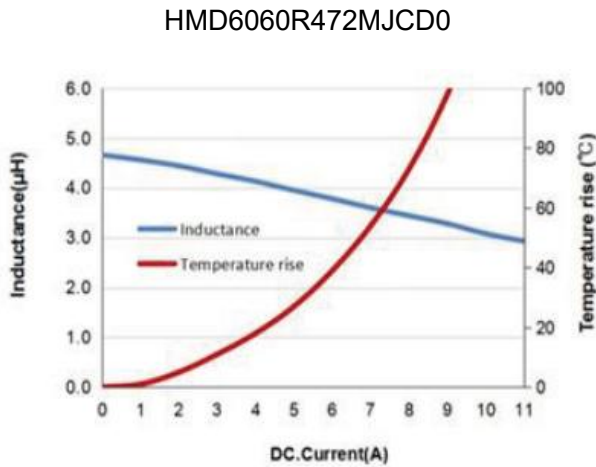
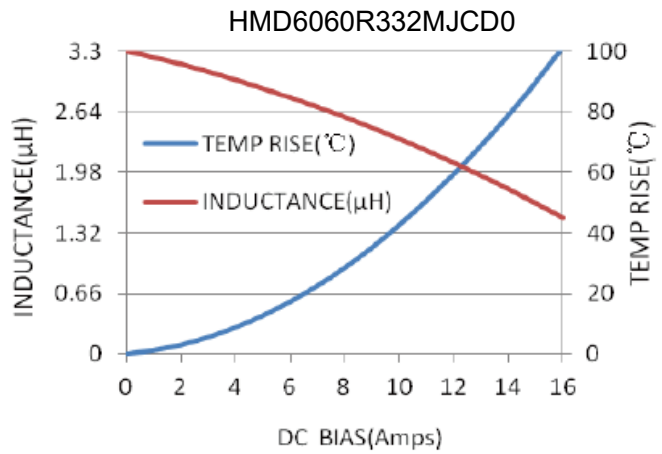
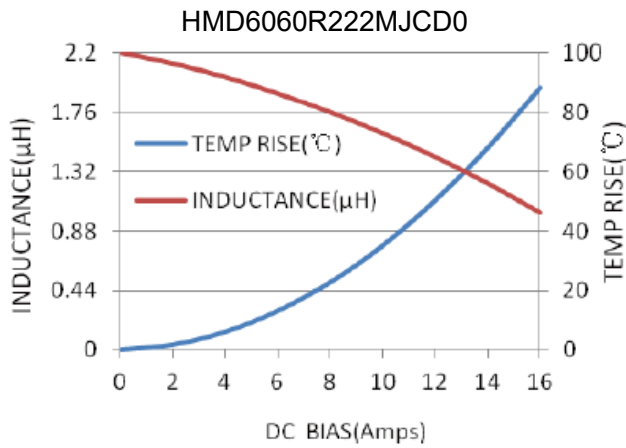
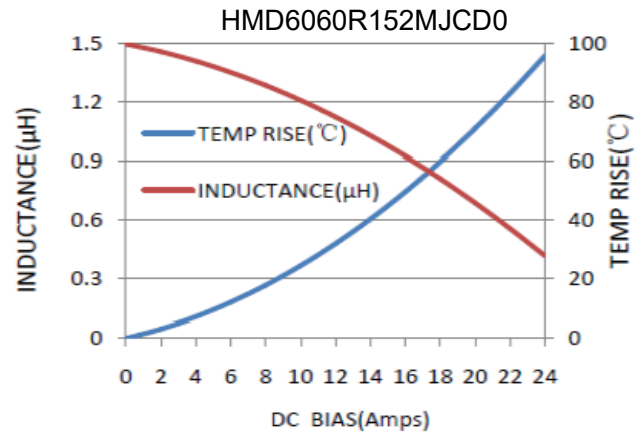
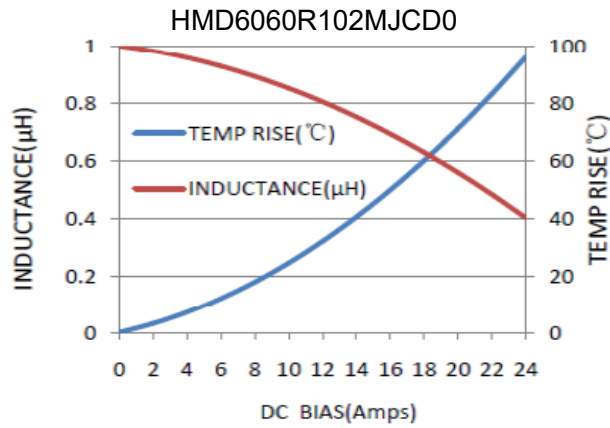
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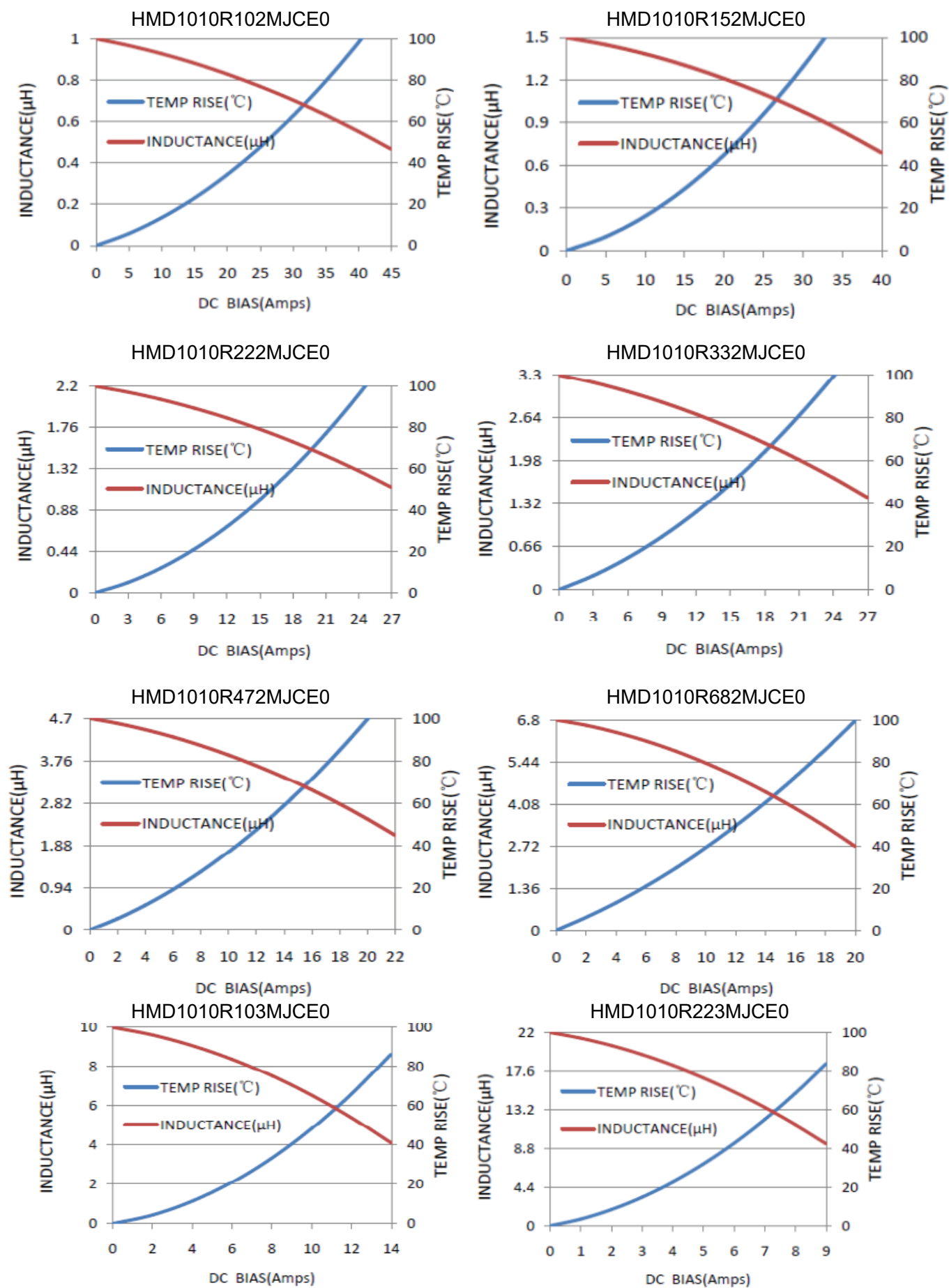
## Molding Power Inductor: HMD Series



## Molding Power Inductor: HMD Series



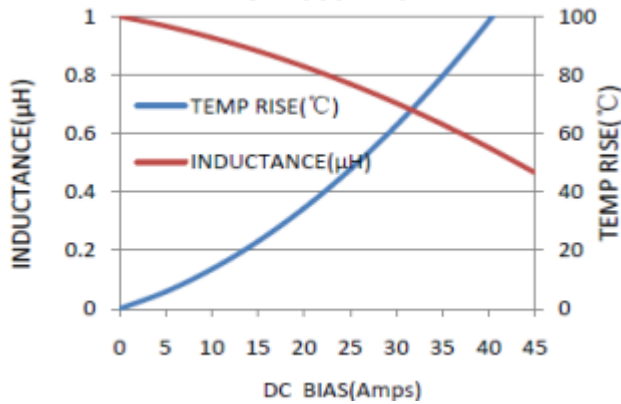
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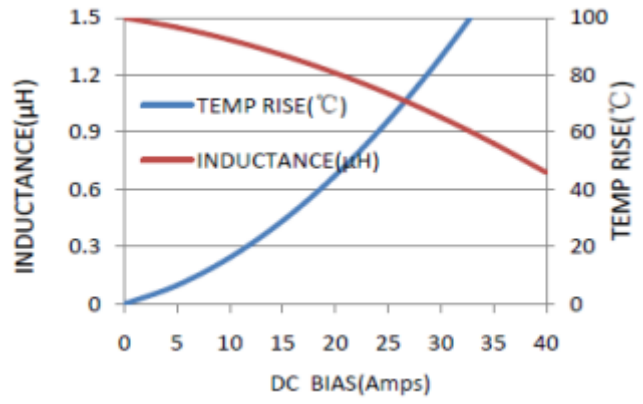


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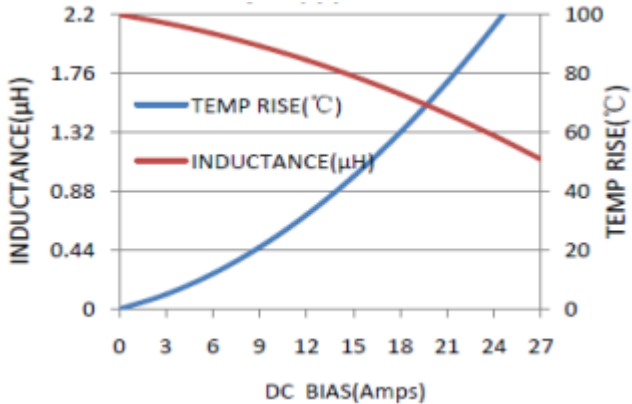
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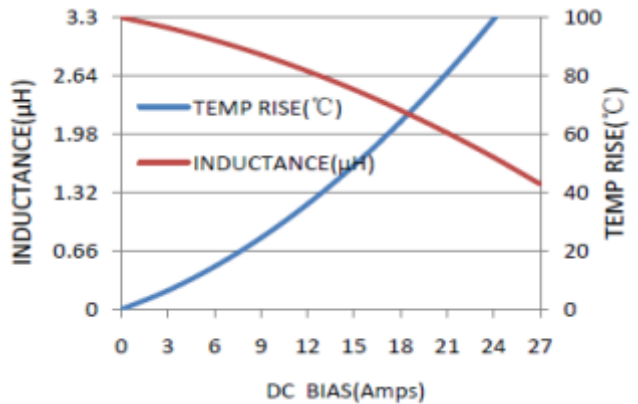
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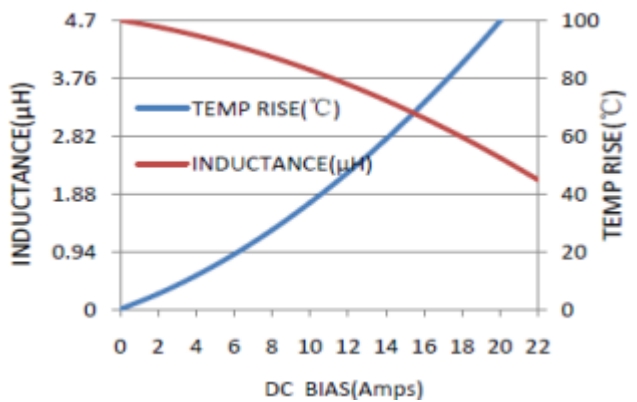
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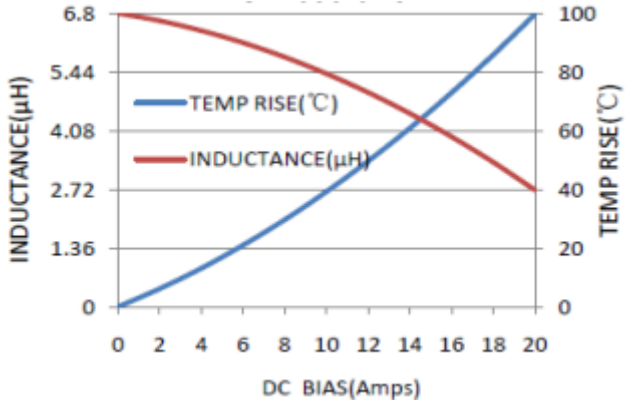
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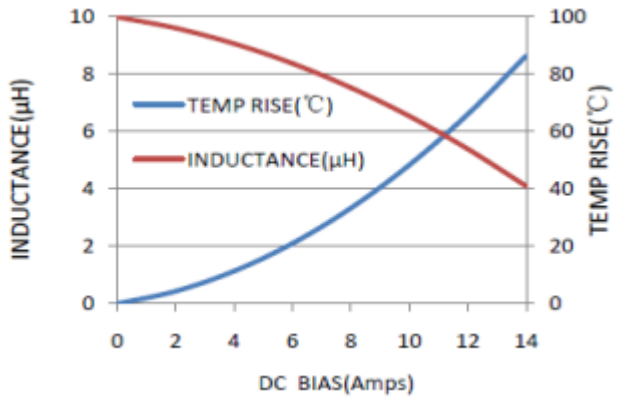
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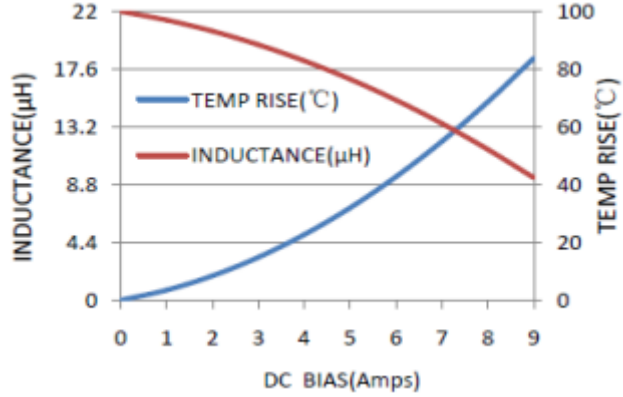
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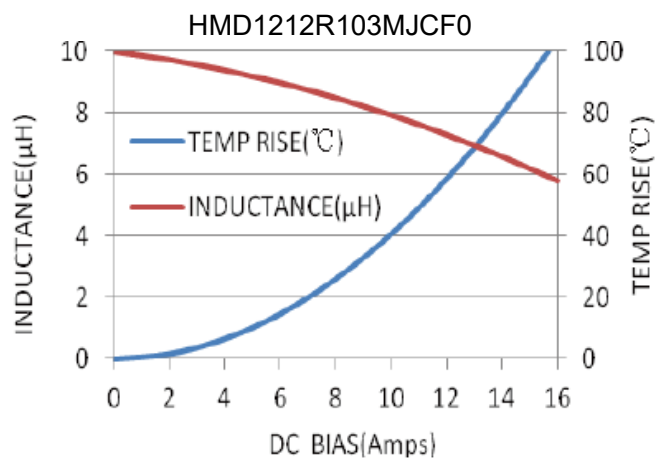
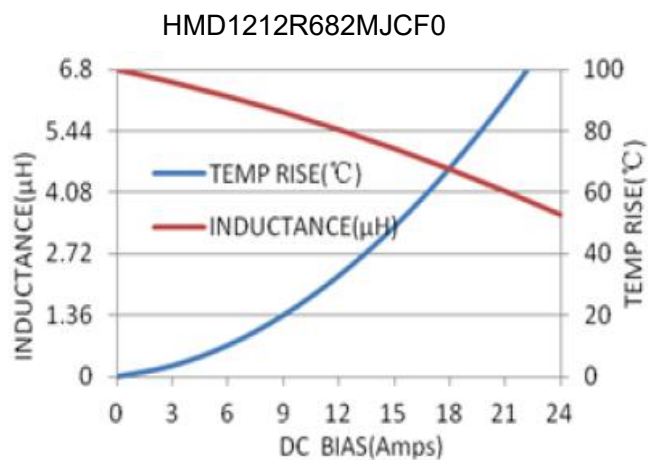
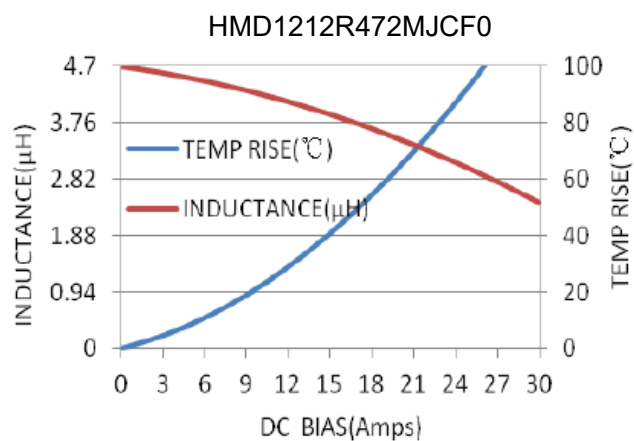
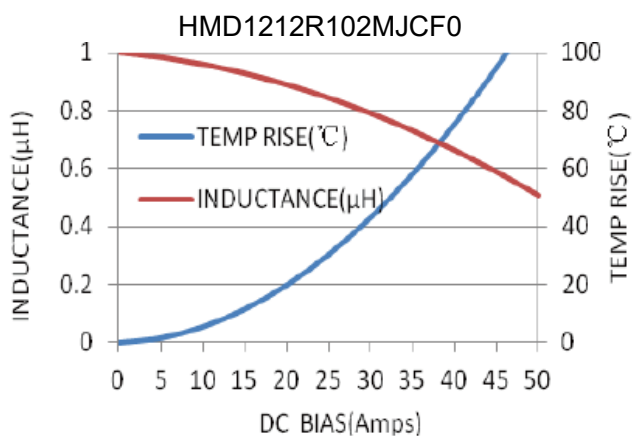
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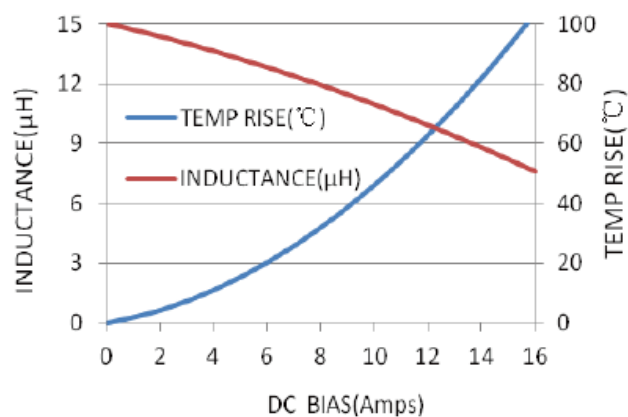
## Molding Power Inductor: HMD Series



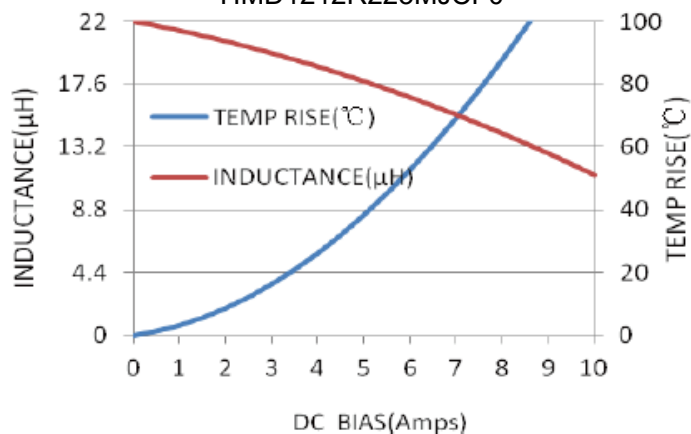


## Molding Power Inductor: HMD Series

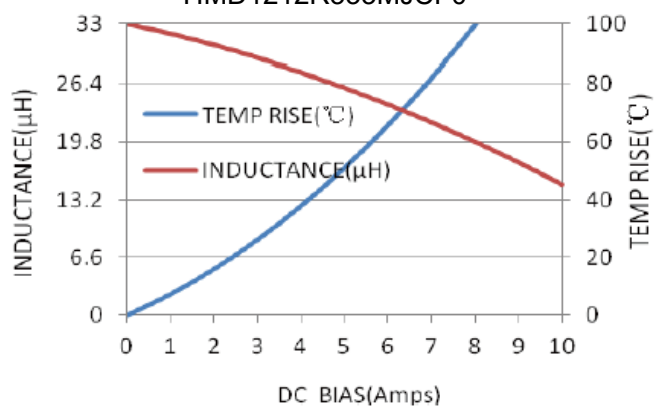
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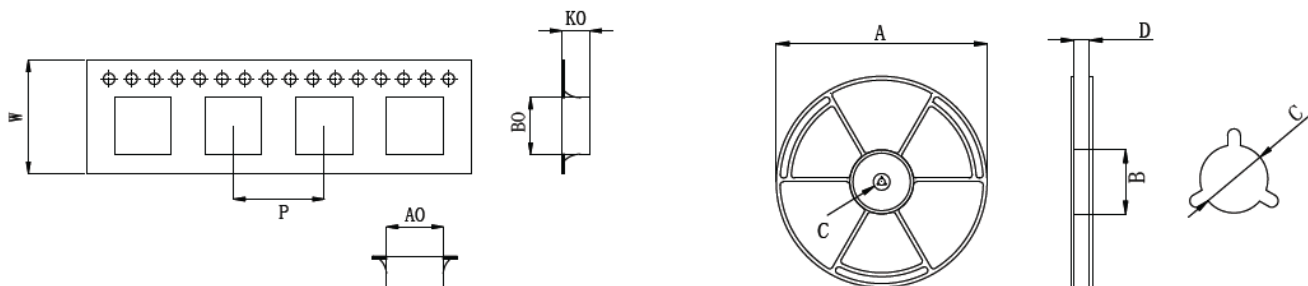
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# Molding Power Inductor: HMD Series

## Taping and Reel Specifications

### Reel and Taping Specification

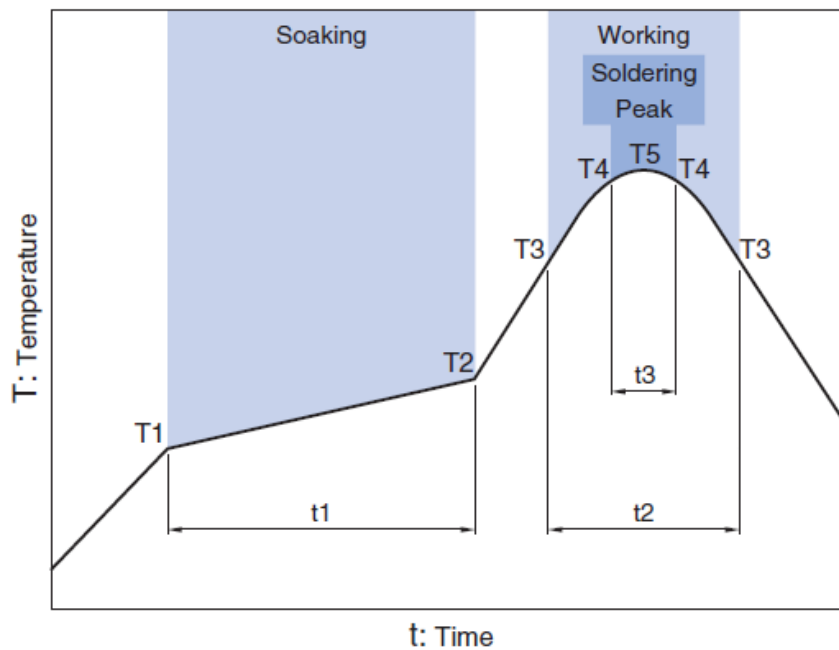


| Series | Taping Size(mm) |      |     |    |    | Reel Size(mm) |     |    |    | Packing quantity per plate(pcs) |
|--------|-----------------|------|-----|----|----|---------------|-----|----|----|---------------------------------|
|        | A0              | B0   | K0  | W  | P  | A             | B   | C  | D  |                                 |
| 1412   | 2.0             | 1.5  | 1.3 | 12 | 8  | 330           | 100 | 12 | 12 | 3000                            |
| 2012   | 2.5             | 1.5  | 1.3 | 12 | 8  | 330           | 100 | 12 | 12 | 3000                            |
| 2016   | 2.5             | 2.1  | 1.3 | 12 | 8  | 330           | 100 | 12 | 12 | 3000                            |
| 2520   | 3.0             | 2.5  | 1.3 | 12 | 8  | 330           | 100 | 12 | 12 | 3000                            |
| 3225   | 3.7             | 3.0  | 1.5 | 12 | 8  | 330           | 100 | 12 | 12 | 3000                            |
| 4040   | 4.5             | 5.1  | 2.3 | 12 | 8  | 330           | 100 | 12 | 12 | 3000                            |
| 5050   | 5.9             | 6.2  | 3.3 | 12 | 8  | 330           | 100 | 12 | 12 | 2000                            |
| 6060   | 6.9             | 7.6  | 3.3 | 16 | 12 | 330           | 100 | 12 | 16 | 1000                            |
| 1010E0 | 10.6            | 11.8 | 4.3 | 24 | 16 | 330           | 100 | 12 | 24 | 1000                            |
| 1010F0 | 10.3            | 10.3 | 5.2 | 24 | 16 | 330           | 100 | 12 | 24 | 800                             |
| 1212   | 13.2            | 13.8 | 6.8 | 24 | 16 | 330           | 100 | 12 | 24 | 500                             |

## Molding Power Inductor: HMD Series

### Recommended Reflow Profile

Pb free solder



| Soaking |       |              | Working |                 | Soldering    |              | Peak       |
|---------|-------|--------------|---------|-----------------|--------------|--------------|------------|
| Temp.   |       | Time         | Temp.   | Time            | Temp.        | Time         | Temp.      |
| T1      | T2    | t1           | T3      | t2              | T4           | t3           | T5         |
| 150°C   | 180°C | 60 to 120sec | 230°C   | more than 30sec | 247 to 253°C | within 10sec | 260°C Max. |

### Revision History

| Version | Date       | Description                                 |
|---------|------------|---------------------------------------------|
| Ver.01  | June .2023 | New issue.                                  |
| Ver.02  | NOV.2023   | Change the Promote product                  |
| Ver.03  | NOV.2023   | Modify internal coding and large mold ICONS |
| Ver.04  | AUG.2024   | Update issue.                               |
| Ver.05  | May.2025   | Update issue.                               |

May.2025 Ver.05