

深圳市丰辉旺科技有限公司

DATA SHEET

Product Name Mini Molding Power Inductors

Part Name PIM Series

| DESIGNED | CHECKED | APPROVED |
|----------|---------|----------|
| | | |

深圳市丰辉旺科技有限公司

咨询电话 086+18503051681

网址 www.fenghuiwang.cn

Mini Molding Power Inductors

1. Scope

Features

- 1.1 Metal material for large current and low loss.
- 1.2 High performance (Isat) realized by metal dust core.
- 1.3 Low loss realized with low Rdc.
- 1.4 Closed magnetic circuit design reduces leakage flux.
- 1.5 Vinyl thermal spray, better surface compactness.
- 1.6 100% lead (Pb) free meet RoHS standard.

Application

- 2.1 DC/DC converters.
- 2.2 Pad, Smartphone.
- 2.3 Portable gaming devices, Smart wear, Wi-Fi module.
- 2.4 Notebooks, VR, AR.
- 2.5 LCD displays, HDDs, DVCs, DSCs, etc.
- 2.6 Baseband power supply, Amplifier, Power management, Module power supply, Camera power management.

2. Ordering Procedure

PIM ① 2016 ② 10 ③ S ④ 1R0 ⑤ M ⑥ B ⑦ C ⑧ * ⑨

① Series Name: Mini Molding Power Inductors

② External Dimensions(L×W):2016=2.0*1.6 mm

③ External Dimensions(H):10=1.0 mm

④ Size Tolerance:S=±0.2mm D=±0.1mm

⑤ Inductance value:1R0=1.0uH

⑥ Tolerance:K=±10% M=±20% * =±30%

⑦ Coating color:B=Black G=Gray

⑧ Product type:C=Common

⑨ Special define:A=Routine B/Z=Special

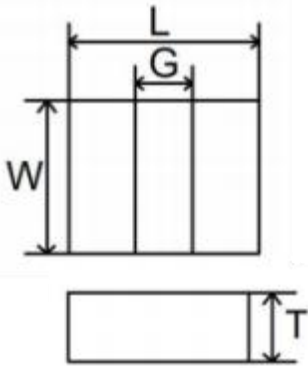
For special characteristics, please refer to the specific values in Item 5 "Specifications".

咨询电话: 18503051687

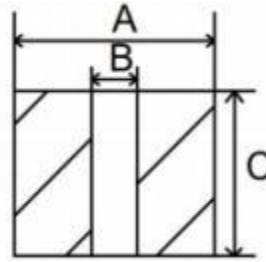
Mini Molding Power Inductors

3. SHAPE AND DIMENSIONS

Outline Dimensions



Recommend Land Pattern Dimensions



Units:mm

| Series | L | G | W | T | A | B | C |
|--------------|---------|---------|---------|----------|------|------|------|
| FHWPI100765D | 1.0±0.1 | 0.3±0.2 | 0.7±0.1 | 0.65Max. | 1.00 | 0.20 | 0.70 |
| FHWPI121065S | 1.2±0.2 | 0.4±0.2 | 1.0±0.2 | 0.65Max. | 1.30 | 0.30 | 1.10 |
| FHWPI160865D | 1.6±0.1 | 0.5±0.2 | 0.8±0.1 | 0.65Max. | 1.70 | 0.40 | 0.90 |
| FHWPI160865S | 1.6±0.2 | 0.5±0.2 | 0.8±0.2 | 0.65Max. | 1.60 | 0.40 | 0.80 |
| FHWPI160808S | 1.6±0.2 | 0.5±0.2 | 0.8±0.2 | 0.80Max. | 1.70 | 0.40 | 0.90 |
| FHWPI141265S | 1.4±0.2 | 0.5±0.2 | 1.2±0.2 | 0.65Max. | 1.50 | 0.45 | 1.30 |
| FHWPI141208S | 1.4±0.2 | 0.5±0.2 | 1.2±0.2 | 0.80Max. | 1.50 | 0.45 | 1.30 |
| FHWPI201265S | 2.0±0.2 | 0.5±0.2 | 1.2±0.2 | 0.65Max. | 2.10 | 0.50 | 1.30 |
| FHWPI201208S | 2.0±0.2 | 0.5±0.2 | 1.2±0.2 | 0.80Max. | 2.10 | 0.50 | 1.30 |
| FHWPI201210S | 2.0±0.2 | 0.5±0.2 | 1.2±0.2 | 1.00Max. | 2.10 | 0.50 | 1.30 |
| FHWPI201608S | 2.0±0.2 | 0.6±0.2 | 1.6±0.2 | 0.80Max. | 2.10 | 0.50 | 1.70 |
| FHWPI201610S | 2.0±0.2 | 0.6±0.2 | 1.6±0.2 | 1.00Max. | 2.10 | 0.50 | 1.70 |
| FHWPI201610D | 2.0±0.1 | 0.6±0.2 | 1.6±0.1 | 1.00Max. | 2.00 | 0.50 | 1.60 |
| FHWPI201612S | 2.0±0.2 | 0.6±0.2 | 1.6±0.2 | 1.20Max. | 2.10 | 0.50 | 1.70 |
| FHWPI252008S | 2.5±0.2 | 0.7±0.2 | 2.0±0.2 | 0.80Max. | 2.60 | 0.70 | 2.10 |
| FHWPI252010S | 2.5±0.2 | 0.7±0.2 | 2.0±0.2 | 1.00Max. | 2.60 | 0.70 | 2.10 |
| FHWPI252012S | 2.5±0.2 | 0.7±0.2 | 2.0±0.2 | 1.20Max. | 2.60 | 0.70 | 2.10 |
| FHWPI322510S | 3.2±0.2 | 0.9±0.2 | 2.5±0.2 | 1.00Max. | 3.25 | 0.90 | 2.55 |
| FHWPI322512S | 3.2±0.2 | 0.9±0.2 | 2.5±0.2 | 1.20Max. | 3.25 | 0.90 | 2.55 |
| FHWPI322520S | 3.2±0.2 | 0.9±0.2 | 2.5±0.2 | 2.00Max. | 3.25 | 0.90 | 2.55 |
| FHWPI303012D | 3.0±0.1 | 1.0±0.2 | 3.0±0.1 | 1.2Max. | 2.90 | 0.90 | 2.90 |
| FHWPI303018D | 3.0±0.1 | 1.0±0.2 | 3.0±0.1 | 1.8Max. | 2.90 | 0.90 | 2.90 |
| FHWPI303020D | 3.0±0.1 | 1.0±0.2 | 3.0±0.1 | 2.00Max. | 2.90 | 0.90 | 2.90 |
| FHWPI404010S | 4.1±0.2 | 1.2±0.2 | 4.1±0.2 | 1.00Max. | 3.90 | 1.30 | 3.90 |
| FHWPI404012S | 4.1±0.2 | 1.2±0.2 | 4.1±0.2 | 1.20Max. | 3.90 | 1.30 | 3.90 |
| FHWPI404020S | 4.1±0.2 | 1.2±0.2 | 4.1±0.2 | 2.00Max. | 3.90 | 1.30 | 3.90 |

Mini Molding Power Inductors

| | | | | | | | |
|----------------|---------|---------|---------|----------|------|------|------|
| FHWPIIM404030S | 4.1±0.2 | 1.2±0.2 | 4.1±0.2 | 3.00Max. | 3.90 | 1.30 | 3.90 |
|----------------|---------|---------|---------|----------|------|------|------|

4. Marking

No Marking

5. Specifications

1>1007 Series
HPIM100765(1.0*0.7*0.65mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM100765D1R5MBCA | 1.5 | 400 | 500 | 0.4 | 0.3 | 1.1 | 0.9 |
| FHWPIIM100765D2R6MGCA | 2.6 | 750 | 900 | 0.55 | 0.4 | 1.1 | 0.8 |

2>1210 Series
HPIM121065(1.2*1.0*0.65mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM121065S2R2MBCA | 2.2 | 280 | 340 | 1.0 | 0.9 | 1.3 | 1.2 |

3>1608 Series
HPIM160865(1.6*0.8*0.65mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM160865DR22MGCA | 0.22 | 35 | 43 | 3.8 | 3.5 | 4.7 | 4.3 |
| FHWPIIM160865SR47MGCA | 0.47 | 66 | 82 | 2.3 | 2.0 | 3.3 | 3.0 |

FHWPIIM160808(1.6*0.8*0.8mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|------------------------------|----------------------|------------|------------|--------------------------------|------------|-------------------------------|------------|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM160808SR22MBCA | 0.22 | 33 | 40 | 3.4 | 3.0 | 5.5 | 5.0 |
| FHWPIIM160808SR24MBCA | 0.24 | 34 | 41 | 3.3 | 2.9 | 5.3 | 4.8 |
| FHWPIIM160808SR24MBCD | 0.24 | 22 | 26 | 3.9 | 3.5 | 4.9 | 4.4 |
| FHWPIIM160808SR47MBCA | 0.47 | 80 | 100 | 2.6 | 2.3 | 4.1 | 3.7 |
| FHWPIIM160808SR47MBCD | 0.47 | 38 | 45 | 3.8 | 3.4 | 4.0 | 3.5 |
| FHWPIIM160808SR56MBCA | 0.56 | 85 | 110 | 2.2 | 1.9 | 4.0 | 3.5 |
| FHWPIIM160808SR68MBCA | 0.68 | 110 | 130 | 2.1 | 1.9 | 3.3 | 3.0 |
| FHWPIIM160808S1R0MBCA | 1.0 | 180 | 200 | 2.1 | 1.8 | 3.0 | 2.6 |
| FHWPIIM160808S1R0MGCD | 1.0 | 105 | 115 | 2.1 | 1.8 | 2.3 | 2.1 |
| FHWPIIM160808S2R2MGCA | 2.2 | 220 | 260 | 1.4 | 1.2 | 1.5 | 1.3 |
| FHWPIIM160808S4R7MBCA | 4.7 | 585 | 700 | 1.0 | 0.8 | 1.2 | 1.0 |

Mini Molding Power Inductors

4>1412 Series
 FHWPIIM141265(1.4*1.2*0.65mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|-----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM141265SR33MBCA | 0.33 | 26 | 32 | 4.4 | 4.2 | 4.4 | 4.0 |
| FHWPIIM141265SR33MGCA | 0.33 | 26 | 32 | 4.4 | 4.2 | 4.4 | 4.0 |
| FHWPIIM141265SR47MBCA | 0.47 | 37 | 45 | 3.0 | 2.7 | 3.4 | 3.0 |
| FHWPIIM141265SR47MGCA | 0.47 | 37 | 45 | 3.0 | 2.7 | 3.4 | 3.0 |
| FHWPIIM141265SR47MGCB | 0.47 | 35 | 38 | 2.9 | 2.6 | 3.9 | 3.6 |

FHWPIIM141207(1.4*1.2*0.7mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|-----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM141207SR24MBCA | 0.24 | 22 | 28 | 4.0 | 3.6 | 4.6 | 4.3 |
| FHWPIIM141207SR47MBCA | 0.47 | 34 | 38 | 3.8 | 3.3 | 3.8 | 3.5 |

FHWPIIM141208(1.4*1.2*0.8mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|-----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM141208SR24MBCA | 0.24 | 22 | 27 | 4.1 | 3.7 | 6.0 | 5.7 |
| FHWPIIM141208SR24MBCD | 0.24 | 21 | 24 | 6.6 | 6.0 | 7.2 | 6.5 |
| FHWPIIM141208SR33MBCA | 0.33 | 23 | 28 | 4.0 | 3.5 | 5.3 | 5.0 |
| FHWPIIM141208SR33MGCA | 0.33 | 23 | 28 | 4.0 | 3.5 | 5.3 | 5.0 |
| FHWPIIM141208SR47MBCA | 0.47 | 29 | 35 | 3.8 | 3.3 | 4.6 | 4.2 |
| FHWPIIM141208SR47MGCA | 0.47 | 29 | 35 | 3.8 | 3.3 | 4.6 | 4.2 |

5>2012 Series
 FHWPIIM201265(2.0*1.2*0.65mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|-----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM201265S1R0MBCA | 1.0 | 78 | 86 | 2.6 | 2.3 | 2.8 | 2.5 |
| FHWPIIM201265D1R0MGCA | 1.0 | 95 | 110 | 2.5 | 2.2 | 2.7 | 2.4 |
| FHWPIIM201265S2R2MBCA | 2.2 | 215 | 230 | 1.7 | 1.4 | 1.8 | 1.5 |

FHWPIIM201208(2.0*1.2*0.8mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|-----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM201208SR24MBCA | 0.24 | 18 | 23 | 6.5 | 5.9 | 6.5 | 6.0 |
| FHWPIIM201208SR24MGCA | 0.24 | 18 | 23 | 6.5 | 5.9 | 6.5 | 6.0 |

Mini Molding Power Inductors

| | | | | | | | |
|----------------------|------|-----|-----|-----|-----|-----|-----|
| FHWPIM201208SR24MGCB | 0.24 | 17 | 20 | 6.0 | 5.5 | 7.0 | 6.6 |
| FHWPIM201208SR33MBCA | 0.33 | 33 | 45 | 4.3 | 4.0 | 5.2 | 4.8 |
| FHWPIM201208SR47MBCA | 0.47 | 34 | 50 | 3.5 | 3.3 | 5.0 | 4.6 |
| FHWPIM201208SR47MGCA | 0.47 | 34 | 50 | 3.5 | 3.3 | 5.0 | 4.6 |
| FHWPIM201208SR47MBCD | 0.47 | 24 | 28 | 4.7 | 4.5 | 5.2 | 4.8 |
| FHWPIM201208DR47MGCA | 0.47 | 34 | 42 | 4.3 | 3.9 | 5.2 | 4.8 |
| FHWPIM201208SR68MBCA | 0.68 | 50 | 60 | 3.7 | 3.3 | 4.2 | 3.7 |
| FHWPIM201208S1R0MBCA | 1.0 | 55 | 70 | 3.3 | 2.9 | 4.0 | 3.5 |
| FHWPIM201208S1R0MBCD | 1.0 | 48 | 55 | 3.2 | 2.8 | 3.2 | 2.8 |
| FHWPIM201208S1R0MGCD | 1.0 | 48 | 55 | 3.2 | 2.8 | 3.2 | 2.8 |
| FHWPIM201208S1R5MBCA | 1.5 | 118 | 135 | 2.2 | 1.9 | 2.6 | 2.5 |
| FHWPIM201208S2R2MBCA | 2.2 | 160 | 185 | 2.2 | 1.8 | 2.6 | 2.3 |
| FHWPIM201208S3R3MBCA | 3.3 | 253 | 300 | 1.8 | 1.5 | 1.9 | 1.6 |
| FHWPIM201208S4R7MBCA | 4.7 | 285 | 325 | 1.7 | 1.5 | 1.6 | 1.4 |

FHWPIM201210(2.0*1.2*1.0mm)

| P/N | L0(μ H) @(0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|----------------------------|------------------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM201210SR10MBCA | 0.1 | 8.0 | 13 | 7.5 | 7.0 | 8.5 | 8.0 |
| FHWPIM201210SR22MBCA | 0.22 | 16 | 22 | 7.1 | 6.5 | 7.3 | 6.8 |
| FHWPIM201210SR24MBCA | 0.24 | 17 | 23 | 7.0 | 6.4 | 7.2 | 6.7 |
| FHWPIM201210SR24MGCD | 0.24 | 18 | 17 | 7.0 | 6.4 | 7.2 | 6.7 |
| FHWPIM201210SR33MBCA | 0.33 | 24 | 32 | 5.5 | 5.0 | 6.5 | 6.0 |
| FHWPIM201210SR33MGCB | 0.33 | 18 | 22 | 5.7 | 5.2 | 6.7 | 6.3 |
| FHWPIM201210SR47MBCA | 0.47 | 29 | 36 | 4.7 | 4.3 | 5.5 | 5.0 |
| FHWPIM201210SR47MGCB | 0.47 | 22 | 26 | 5.0 | 4.5 | 6.0 | 5.5 |
| FHWPIM201210SR68MBCA | 0.68 | 37 | 43 | 4.3 | 4.0 | 5.0 | 4.5 |
| FHWPIM201210S1R0MBCA | 1.0 | 55 | 63 | 3.9 | 3.5 | 4.0 | 3.5 |
| FHWPIM201210S1R5MBCA | 1.5 | 76 | 85 | 3.1 | 2.6 | 3.2 | 2.7 |
| FHWPIM201210S2R2MBCA | 2.2 | 135 | 150 | 2.0 | 1.7 | 2.7 | 2.4 |
| FHWPIM201210S6R8MBCA | 6.8 | 440 | 520 | 1.5 | 1.3 | 1.45 | 1.2 |
| FHWPIM201210S100MBCA | 10.0 | 600 | 660 | 1.1 | 1.0 | 1.2 | 1.0 |

6>2016 Series
FHWPIM201608(2.0*1.6*0.8mm)

| P/N | L0(μ H) @(0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----|----------------------------|------------------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |

Mini Molding Power Inductors

| | | | | | | | |
|----------------------|------|-----|-----|-----|-----|-----|-----|
| FHWPIM201608SR22MBCA | 0.22 | 14 | 19 | 6.6 | 5.9 | 6.1 | 5.6 |
| FHWPIM201608SR24MBCA | 0.24 | 14 | 20 | 6.5 | 5.8 | 6.0 | 5.5 |
| FHWPIM201608SR33MBCA | 0.33 | 18 | 24 | 5.5 | 4.8 | 5.8 | 5.3 |
| FHWPIM201608SR47MBCA | 0.47 | 24 | 27 | 4.6 | 4.4 | 5.5 | 5.0 |
| FHWPIM201608SR47MGCA | 0.47 | 24 | 27 | 4.6 | 4.4 | 5.5 | 5.0 |
| FHWPIM201608SR68MBCA | 0.68 | 39 | 44 | 3.8 | 3.5 | 4.6 | 4.2 |
| FHWPIM201608S1R0MBCA | 1.0 | 53 | 60 | 3.6 | 3.3 | 3.3 | 3.1 |
| FHWPIM201608S1R0MGCD | 1.0 | 45 | 52 | 3.6 | 3.3 | 3.8 | 3.5 |
| FHWPIM201608S1R5MBCA | 1.5 | 73 | 85 | 3.1 | 2.8 | 3.0 | 2.8 |
| FHWPIM201608S2R2MBCA | 2.2 | 123 | 140 | 2.2 | 2.0 | 2.5 | 2.3 |
| FHWPIM201608S3R3MBCA | 3.3 | 200 | 220 | 1.8 | 1.5 | 2.1 | 1.8 |
| FHWPIM201608S4R7MBCA | 4.7 | 260 | 290 | 1.6 | 1.4 | 1.7 | 1.5 |
| FHWPIM201608S100MBCA | 10.0 | 690 | 800 | 1.0 | 0.9 | 1.0 | 0.9 |

FHWPIM201610(2.0*1.6*1.0mm)

| P/N | L0(μ H) @ (0A) 1MHz | Rdc(m Ω) | | Heat rating current I _{rms} (A) | | Saturation current I _{sat} (A) | |
|-----------------------|-----------------------------|------------------|-----|---|-----|--|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM201610SR10MBCA | 0.1 | 7.0 | 14 | 8.5 | 8.0 | 9.0 | 8.4 |
| FHWPIM201610SR15MBCA | 0.15 | 8.0 | 14 | 7.6 | 7.0 | 8.7 | 8.0 |
| FHWPIM201610SR22MBCAF | 0.22 | 11 | 18 | 6.9 | 6.3 | 8.2 | 7.5 |
| FHWPIM201610SR24MBCA | 0.24 | 12 | 19 | 6.8 | 6.2 | 8.0 | 7.4 |
| FHWPIM201610SR33MBCA | 0.33 | 17 | 22 | 5.7 | 5.3 | 7.0 | 6.5 |
| FHWPIM201610SR33MGCA | 0.33 | 17 | 22 | 5.7 | 5.3 | 7.0 | 6.5 |
| FHWPIM201610SR47MBCA | 0.47 | 22 | 25 | 5.5 | 5.0 | 6.3 | 5.5 |
| FHWPIM201610SR47MGCA | 0.47 | 22 | 25 | 5.5 | 5.0 | 6.3 | 5.5 |
| FHWPIM201610SR68MBCA | 0.68 | 25 | 32 | 4.6 | 4.3 | 5.2 | 4.7 |
| FHWPIM201610S1R0MBCA | 1.0 | 35 | 43 | 4.5 | 4.1 | 4.6 | 4.2 |
| FHWPIM201610S1R0MGCA | 1.0 | 35 | 43 | 4.5 | 4.1 | 4.6 | 4.2 |
| FHWPIM201610S1R0MBCD | 1.0 | 31 | 36 | 4.6 | 4.2 | 4.7 | 4.2 |
| FHWPIM201610S1R0MGCD | 1.0 | 31 | 36 | 4.6 | 4.2 | 4.7 | 4.2 |
| FHWPIM201610S1R5MBCA | 1.5 | 80 | 100 | 2.6 | 2.3 | 3.2 | 2.9 |
| FHWPIM201610S2R2MBCA | 2.2 | 120 | 130 | 2.5 | 2.1 | 3.0 | 2.8 |
| FHWPIM201610S2R2MGCA | 2.2 | 120 | 130 | 2.5 | 2.1 | 3.0 | 2.8 |
| FHWPIM201610D2R2MBCA | 2.2 | 115 | 125 | 2.5 | 2.2 | 3.3 | 3.0 |
| FHWPIM201610S3R3MBCA | 3.3 | 140 | 170 | 1.7 | 1.5 | 2.3 | 2.0 |
| FHWPIM201610S4R7MBCA | 4.7 | 190 | 220 | 1.6 | 1.4 | 2.0 | 1.8 |
| FHWPIM201610S4R7MGCA | 4.7 | 190 | 220 | 1.6 | 1.4 | 2.0 | 1.8 |

Mini Molding Power Inductors

| | | | | | | | |
|-----------------------|------|-----|-----|-----|-----|-----|-----|
| FHWPIIM201610S100MBCA | 10.0 | 483 | 580 | 1.0 | 0.7 | 1.4 | 1.1 |
|-----------------------|------|-----|-----|-----|-----|-----|-----|

HPIM201612(2.0*1.6*1.2mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|----------------------|---------|-----|--------------------------------|-----|-------------------------------|------|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM201612SR10MBCA | 0.1 | 4.0 | 6.0 | 12 | 10 | 13 | 11.5 |
| FHWPIIM201612SR15MBCA | 0.15 | 7.5 | 10 | 10 | 9.0 | 12 | 10.5 |
| FHWPIIM201612SR24MBCA | 0.24 | 9.0 | 11 | 9.1 | 8.6 | 9.2 | 8.7 |
| FHWPIIM201612SR33MBCA | 0.33 | 10 | 15 | 7.7 | 7.2 | 7.8 | 7.3 |
| FHWPIIM201612SR47MBCA | 0.47 | 13 | 17 | 6.7 | 6.0 | 6.7 | 6.0 |
| FHWPIIM201612SR68MBCA | 0.68 | 19 | 23 | 6.0 | 5.3 | 6.0 | 5.3 |
| FHWPIIM201612S1R0MBCA | 1.0 | 30 | 36 | 5.0 | 4.4 | 5.0 | 4.5 |
| FHWPIIM201612S1R5MBCA | 1.5 | 40 | 50 | 4.0 | 3.5 | 4.0 | 3.5 |
| FHWPIIM201612S2R2MBCA | 2.2 | 77 | 90 | 3.3 | 2.9 | 3.1 | 2.7 |
| FHWPIIM201612S3R3MBCA | 3.3 | 135 | 165 | 2.4 | 2.0 | 2.7 | 2.3 |

7>2520 Series
FHWPIIM252075S(2.5*2.0*0.75mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM252075S2R2MGCA | 2.2 | 78 | 90 | 2.3 | 2.0 | 2.6 | 2.4 |
| FHWPIIM252075S100MGCA | 10.0 | 487 | 530 | 1.1 | 0.9 | 1.1 | 0.9 |

FHWPIIM252008S(2.5*2.0*0.8mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|------------------------------|----------------------|------------|------------|--------------------------------|------------|-------------------------------|------------|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM252008SR47MBCA | 0.47 | 22 | 27 | 6.5 | 6.0 | 6.0 | 5.3 |
| FHWPIIM252008S1R0MBCA | 1.0 | 34 | 40 | 4.3 | 4.0 | 4.5 | 4.0 |
| FHWPIIM252008SR5MBCA | 1.5 | 64 | 75 | 3.4 | 3.0 | 3.5 | 3.0 |
| FHWPIIM252008SR2MBCA | 2.2 | 69 | 77 | 3.0 | 2.6 | 3.0 | 2.6 |
| FHWPIIM252008S3R3MBCA | 3.3 | 150 | 180 | 2.5 | 2.1 | 2.5 | 2.1 |
| FHWPIIM252008S100MBCA | 10 | 500 | 600 | 1.4 | 1.2 | 1.1 | 0.9 |

FHWPIIM252010S(2.5*2.0*1.0mm)

| P/N | L0(μH) @(0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM252010SR22MBCA | 0.22 | 12 | 17 | 6.8 | 6.5 | 8.6 | 7.9 |
| FHWPIIM252010SR22MGCA | 0.22 | 12 | 17 | 6.8 | 6.5 | 8.6 | 7.9 |

Mini Molding Power Inductors

| | | | | | | | |
|------------------------------|------------|-----------|-----------|------------|------------|------------|------------|
| FHWPIIM252010SR24MBCA | 0.24 | 12 | 17.5 | 6.7 | 6.4 | 8.5 | 7.8 |
| FHWPIIM252010SR33MBCA | 0.33 | 13 | 19 | 6.5 | 6.2 | 7.6 | 7.2 |
| FHWPIIM252010SR33MGCA | 0.33 | 13 | 19 | 6.5 | 6.2 | 7.6 | 7.2 |
| FHWPIIM252010SR47MBCA | 0.47 | 15 | 22 | 6.1 | 5.6 | 6.9 | 6.5 |
| FHWPIIM252010SR47MGCA | 0.47 | 15 | 22 | 6.1 | 5.6 | 6.9 | 6.5 |
| FHWPIIM252010SR47MBCD | 0.47 | 13 | 15 | 6.5 | 6.0 | 6.6 | 6.0 |
| FHWPIIM252010SR68MBCA | 0.68 | 23 | 27 | 5.6 | 5.0 | 5.9 | 5.5 |
| FHWPIIM252010S1R0MBCA | 1.0 | 25 | 30 | 4.5 | 4.1 | 5.3 | 4.8 |
| FHWPIIM252010S1R0MGCA | 1.0 | 25 | 30 | 4.5 | 4.1 | 5.3 | 4.8 |
| FHWPIIM252010S1R5MBCA | 1.5 | 45 | 55 | 3.4 | 3.0 | 3.8 | 3.9 |
| FHWPIIM252010S1R5MGCA | 1.5 | 45 | 55 | 3.4 | 3.0 | 3.8 | 3.9 |
| FHWPIIM252010S2R2MBCA | 2.2 | 62 | 70 | 2.4 | 2.1 | 3.3 | 3.0 |
| FHWPIIM252010S2R2MGCA | 2.2 | 62 | 70 | 2.4 | 2.1 | 3.3 | 3.0 |
| FHWPIIM252010S2R2MBCD | 2.2 | 62 | 70 | 2.4 | 2.1 | 3.4 | 3.1 |
| FHWPIIM252010S3R3MBCA | 3.3 | 86 | 100 | 2.5 | 2.1 | 2.8 | 2.5 |
| FHWPIIM252010S3R3MGCA | 3.3 | 86 | 100 | 2.5 | 2.1 | 2.8 | 2.5 |
| FHWPIIM252010S4R7MBCA | 4.7 | 160 | 180 | 2.0 | 1.6 | 2.6 | 2.0 |
| FHWPIIM252010S4R7MGCA | 4.7 | 160 | 180 | 2.0 | 1.6 | 2.6 | 2.0 |
| FHWPIIM252010S4R7MBCD | 4.7 | 145 | 160 | 2.0 | 1.6 | 2.6 | 2.0 |
| FHWPIIM252010S6R8MBCA | 6.8 | 270 | 320 | 1.6 | 1.4 | 2.4 | 1.9 |
| FHWPIIM252010S100MBCA | 10.0 | 500 | 560 | 1.05 | 0.95 | 1.55 | 1.4 |
| FHWPIIM252010S100MGCA | 10.0 | 500 | 560 | 1.05 | 0.95 | 1.55 | 1.4 |
| FHWPIIM252010S220MGCA | 22.0 | 1100 | 1300 | 0.85 | 0.6 | 1.1 | 0.9 |

FHWPIIM252012S(2.5*2.5*1.2mm)

| P/N | L(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|-----------------------|----------------------|---------|-----|--------------------------------|------|-------------------------------|------|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIIM252012SR10MBCA | 0.1 | 6 | 10 | 12 | 10.5 | 13.5 | 12.5 |
| FHWPIIM252012SR15MBCA | 0.15 | 7 | 11 | 11.5 | 10 | 13.0 | 12.0 |
| FHWPIIM252012SR22MBCA | 0.22 | 9 | 14 | 8.2 | 7.6 | 9.6 | 9.0 |
| FHWPIIM252012SR24MBCA | 0.24 | 10 | 15 | 8.0 | 7.5 | 9.3 | 8.8 |
| FHWPIIM252012SR24MGCA | 0.24 | 10 | 15 | 8.0 | 7.5 | 9.3 | 8.8 |
| FHWPIIM252012SR33MBCA | 0.33 | 11 | 17 | 6.8 | 6.4 | 8.3 | 7.8 |
| FHWPIIM252012SR47MBCA | 0.47 | 13 | 19 | 6.5 | 6.0 | 7.5 | 7.0 |
| FHWPIIM252012SR47MBCD | 0.47 | 11 | 13 | 8.0 | 7.5 | 8.5 | 8.0 |
| FHWPIIM252012SR47MGCD | 0.47 | 11 | 13 | 8.0 | 7.5 | 8.5 | 8.0 |
| FHWPIIM252012SR68MBCA | 0.68 | 17 | 23 | 6.3 | 5.5 | 6.5 | 6.0 |

Mini Molding Power Inductors

| | | | | | | | |
|----------------------|------|-----|-----|-----|------|-----|------|
| FHWPIM252012SR68MBCD | 0.68 | 15 | 18 | 7.5 | 7.0 | 6.7 | 6.0 |
| FHWPIM252012SR82MBCA | 0.82 | 19 | 24 | 5.8 | 5.3 | 6.5 | 5.8 |
| FHWPIM252012S1R0MBCA | 1.0 | 35 | 42 | 4.0 | 3.6 | 5.6 | 5.0 |
| FHWPIM252012S1R0MBCD | 1.0 | 16 | 22 | 5.2 | 4.5 | 6.5 | 6.0 |
| FHWPIM252012S1R0MGCD | 1.0 | 16 | 22 | 5.2 | 4.5 | 6.5 | 6.0 |
| FHWPIM252012S1R5MBCA | 1.5 | 44 | 50 | 3.7 | 3.2 | 4.5 | 4.1 |
| FHWPIM252012S1R5MBCD | 1.5 | 27 | 32 | 4.6 | 4.2 | 4.7 | 4.4 |
| FHWPIM252012S1R5MGCA | 1.5 | 44 | 50 | 3.7 | 3.2 | 4.5 | 4.1 |
| FHWPIM252012S2R2MBCA | 2.2 | 55 | 65 | 3.0 | 2.7 | 3.8 | 3.3 |
| FHWPIM252012S2R2MGCA | 2.2 | 55 | 65 | 3.0 | 2.7 | 3.8 | 3.3 |
| FHWPIM252012S3R3MBCA | 3.3 | 80 | 97 | 2.3 | 1.9 | 3.0 | 2.7 |
| FHWPIM252012S4R7MBCA | 4.7 | 150 | 170 | 1.8 | 1.5 | 2.4 | 2.1 |
| FHWPIM252012S4R7MGCA | 4.7 | 150 | 170 | 1.8 | 1.5 | 2.4 | 2.1 |
| FHWPIM252012S6R8MBCA | 6.8 | 245 | 270 | 1.6 | 1.4 | 2.0 | 1.7 |
| FHWPIM252012S100MBCA | 10.0 | 330 | 400 | 1.2 | 1.05 | 1.6 | 1.45 |
| FHWPIM252012S100MGCA | 10.0 | 330 | 400 | 1.2 | 1.05 | 1.6 | 1.45 |

8>3225 Series
FHWPIM322510S(3.2*2.5*1.0mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|-----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM322510SR33MBCA | 0.33 | 11 | 15 | 8.3 | 7.8 | 8.3 | 7.8 |
| FHWPIM322510SR47MBCA | 0.47 | 17 | 22 | 6.4 | 5.9 | 8.3 | 7.6 |
| FHWPIM322510SR68MBCA | 0.68 | 22 | 28 | 6.2 | 5.7 | 7.5 | 7.0 |
| FHWPIM322510S1R0MBCA | 1.0 | 25 | 30 | 5.4 | 4.9 | 6.0 | 5.3 |
| FHWPIM322510S1R5MBCA | 1.5 | 34 | 42 | 4.0 | 3.6 | 5.0 | 4.4 |
| FHWPIM322510S2R2MBCA | 2.2 | 55 | 66 | 3.7 | 3.4 | 4.0 | 3.5 |
| FHWPIM322510S3R3MBCA | 3.3 | 105 | 120 | 2.7 | 2.3 | 3.7 | 3.3 |
| FHWPIM322510S4R7MBCA | 4.7 | 125 | 140 | 2.3 | 1.9 | 2.8 | 2.5 |
| FHWPIM322510S6R8MBCA | 6.8 | 290 | 320 | 1.9 | 1.6 | 2.4 | 2.0 |
| FHWPIM322510S100MBCA | 10.0 | 325 | 365 | 2.2 | 1.8 | 2.2 | 1.8 |

FHWPIM322512S(3.2*2.5*1.2mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|-----------------------|---------|-----|--------------------------------|------|-------------------------------|------|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM322512SR10MBCA | 0.10 | 5.2 | 7.0 | 12.0 | 11.0 | 18.0 | 16.5 |
| FHWPIM322512SR22MBCA | 0.22 | 6.6 | 10 | 9.2 | 8.7 | 11.5 | 11.0 |

Mini Molding Power Inductors

| | | | | | | | |
|---------------------|------|-----|-----|-----|-----|------|------|
| FHWPI322512SR22MGCA | 0.22 | 6.6 | 10 | 9.2 | 8.7 | 11.5 | 11.0 |
| FHWPI322512SR24MBCA | 0.24 | 7.0 | 12 | 9.0 | 8.5 | 11 | 10.5 |
| FHWPI322512SR33MBCA | 0.33 | 9.0 | 14 | 8.4 | 8.1 | 10 | 9.5 |
| FHWPI322512SR47MBCA | 0.47 | 14 | 19 | 7.5 | 7.2 | 8.6 | 8.2 |
| FHWPI322512SR47MGCA | 0.47 | 14 | 19 | 7.5 | 7.2 | 8.6 | 8.2 |
| FHWPI322512SR47MBCD | 0.47 | 11 | 14 | 7.5 | 7.2 | 8.6 | 8.2 |
| FHWPI322512SR68MBCA | 0.68 | 18 | 23 | 7.3 | 6.8 | 8.1 | 7.7 |
| FHWPI322512SR68MBCD | 0.68 | 12 | 15 | 7.0 | 6.5 | 8.0 | 7.5 |
| FHWPI322512S1R0MBCA | 1.0 | 26 | 30 | 5.3 | 4.8 | 6.6 | 5.8 |
| FHWPI322512S1R0MGCA | 1.0 | 26 | 30 | 5.3 | 4.8 | 6.6 | 5.8 |
| FHWPI322512S1R0MBCD | 1.0 | 18 | 21 | 5.5 | 5.0 | 6.7 | 7.0 |
| FHWPI322512S1R5MBCA | 1.5 | 37 | 44 | 4.7 | 4.3 | 5.1 | 4.7 |
| FHWPI322512S2R2MBCA | 2.2 | 58 | 70 | 3.6 | 3.0 | 4.6 | 4.2 |
| FHWPI322512S2R2MBCD | 2.2 | 42 | 50 | 3.8 | 3.5 | 5.0 | 4.5 |
| FHWPI322512S2R2MGCD | 2.2 | 42 | 50 | 3.8 | 3.5 | 5.0 | 4.5 |
| FHWPI322512S3R3MBCA | 3.3 | 75 | 95 | 2.9 | 2.5 | 3.7 | 3.2 |
| FHWPI322512S3R3MGCA | 3.3 | 75 | 95 | 2.9 | 2.5 | 3.7 | 3.2 |
| FHWPI322512S4R7MBCA | 4.7 | 115 | 135 | 2.3 | 2.0 | 2.9 | 2.6 |
| FHWPI322512S6R8MBCA | 6.8 | 177 | 210 | 2.1 | 1.9 | 2.8 | 2.4 |
| FHWPI322512S100MBCA | 10.0 | 210 | 230 | 2.2 | 1.8 | 2.3 | 1.9 |

FHWPI322520S(3.2*2.5*2.0mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|---------------------|-----------------------|---------|------|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPI322520SR33MBCA | 0.33 | 7.5 | 9 | 9.5 | 9 | 15.5 | 14 |
| FHWPI322520SR47MBCA | 0.47 | 9 | 10.5 | 9.5 | 8.5 | 15 | 13 |
| FHWPI322520SR68MBCA | 0.68 | 12.5 | 14.5 | 9.0 | 8.0 | 13 | 11 |
| FHWPI322520S1R0MBCA | 1.0 | 15 | 17.5 | 8.2 | 7.5 | 9.0 | 8.3 |
| FHWPI322520S2R2MBCA | 2.2 | 36 | 43 | 5.4 | 4.8 | 6.5 | 5.5 |
| FHWPI322520S3R3MBCA | 3.3 | 55 | 60 | 4.5 | 4.0 | 4.5 | 3.5 |
| FHWPI322520S4R7MBCA | 4.7 | 81 | 94 | 3.5 | 3.0 | 4.0 | 3.0 |

9>3030 Series

FHWPI303012(3.0*3.0*1.2mm)

| P/N | L0(μH) @ (0A) 1MHz | Rdc(mΩ) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|---------------------|-----------------------|---------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPI303012D100MBCA | 10.0 | 192 | 220 | 2.3 | 1.9 | 2.3 | 2.0 |

Mini Molding Power Inductors

FHWPIM303015(3.0*3.0*1.5mm)

| P/N | L0(μ H) @(0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|----------------------------|------------------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM303015D220MBCA | 22.0 | 580 | 700 | 1.2 | 1.0 | 1.6 | 1.2 |

PIM303018(3.0*3.0*1.8mm)

| P/N | L0(μ H) @(0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|----------------------------|------------------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM303018DR22MBCA | 0.22 | 5.5 | 7.0 | 10.0 | 9.0 | 17 | 16 |
| FHWPIM303018D1R5MBCA | 1.5 | 20 | 26 | 6.8 | 6.4 | 8.5 | 7.0 |
| FHWPIM303018D4R7MBCA | 4.7 | 72 | 87 | 3.4 | 3.0 | 4.7 | 4.2 |

HPIM303020(3.0*3.0*2.0mm)

| P/N | L0(μ H) @(0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|----------------------------|------------------|----------|--------------------------------|------------|-------------------------------|-----------|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM303020DR33MBCA | 0.33 | 7.5 | 9 | 10 | 9.0 | 17 | 15 |
| FHWPIM303020DR50MBCA | 0.5 | 9.0 | 12 | 9.0 | 8.0 | 15 | 13 |
| FHWPIM303020DR68MBCA | 0.68 | 13 | 17 | 8.5 | 7.8 | 13 | 11 |
| FHWPIM303020D1R0MBCA | 1.0 | 14 | 20 | 6.5 | 6.0 | 8.0 | 7.3 |
| FHWPIM303020D1R5MBCA | 1.5 | 19 | 25 | 6.3 | 5.8 | 7.0 | 6.5 |
| FHWPIM303020D2R2MBCA | 2.2 | 37 | 45 | 4.7 | 4.3 | 6.0 | 5.5 |
| FHWPIM303020D3R3MBCA | 3.3 | 52 | 63 | 4.5 | 4.0 | 5.9 | 5.4 |
| FHWPIM303020D4R7MBCA | 4.7 | 60 | 73 | 4.2 | 3.8 | 4.8 | 4.0 |
| FHWPIM303020D6R8MBCA | 6 | 107 | 135 | 3.2 | 3.0 | 4.5 | 3.8 |
| FHWPIM303020D100MBCA | 10.0 | 135 | 160 | 2.5 | 2.2 | 3.8 | 3.3 |

10>4040 Series
FHWPIM404010(4.0*4.0*1.0mm)

| P/N | L0(μ H) @(0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|----------------------------|------------------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM404010S100MBCA | 10 | 220 | 280 | 2.5 | 2.0 | 2.2 | 2.0 |

FHWPIM404012(4.0*4.0*1.2mm)

| P/N | L0(μ H) @(0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|----------------------------|------------------|-------------|--------------------------------|------------|-------------------------------|------------|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM404012S1R0MBCA | 1.0 | 21 | 25 | 6.3 | 5.5 | 11 | 10 |
| FHWPIM404012S1R5MBCA | 1.5 | 29 | 34.5 | 6.0 | 5.0 | 8.0 | 7.0 |

Mini Molding Power Inductors

FHWPIM404020(4.0*4.0*2.0mm)

| P/N | L0(μ H) @ (0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|-----------------------------|------------------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM404020S2R2MGCA | 2.2 | 30 | 36 | 6.5 | 6.0 | 9.5 | 8.5 |
| FHWPIM404020S4R7MGCA | 4.7 | 47 | 58 | 5.0 | 4.0 | 6.3 | 5.5 |
| FHWPIM404020S100GCA | 10 | 113 | 135 | 3.7 | 3.0 | 4.9 | 4.0 |
| FHWPIM404020S150MGCA | 15 | 210 | 250 | 2.3 | 1.7 | 3.5 | 3.0 |
| FHWPIM404020S220MGCA | 22 | 275 | 330 | 1.8 | 1.3 | 2.9 | 2.3 |

FHWPIM404030(4.0*4.0*3.0mm)

| P/N | L0(μ H) @ (0A) 1MHz | Rdc(m Ω) | | Heat rating current Irms(A) | | Saturation current Isat(A) | |
|----------------------|-----------------------------|------------------|-----|--------------------------------|-----|-------------------------------|-----|
| | | Typical | Max | Typical | Max | Typical | Max |
| FHWPIM404030SR68MBCA | 0.68 | 8.3 | 10 | 9.5 | 8.0 | 17 | 15 |
| FHWPIM404030S1R5MGCA | 1.5 | 15 | 18 | 6.5 | 6.0 | 12.5 | 11 |
| FHWPIM404030S4R7MGCA | 4.7 | 41 | 46 | 4.3 | 4.0 | 7.0 | 6.0 |
| FHWPIM404030S6R8MBCA | 6.8 | 51 | 62 | 4.2 | 3.8 | 6.3 | 5.1 |

咨询电话: 18503051681

Mini Molding Power Inductors

Test remarks

Note 1.: All test data is referenced to 25 °C ambient.

Note 2.: Test Condition: 1MHz, 1.0Vrms.

Note 3.: Irms:DC current (A) that will cause an approximate ΔT of 40 °C .

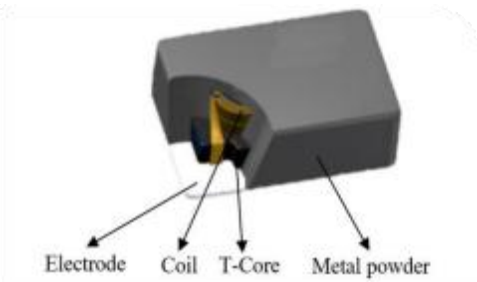
Note 4.: Isat:DC current (A) that will cause L0 to drop approximately 30%.

Note 5.: Operating Temperature Range -55°C to + 125°C .

Note 6.: The part temperature (ambient + temp rise) should not exceed 125 under °C the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

Note 7.: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

6. Structure



7. Current Characteristic

1>1007 Series



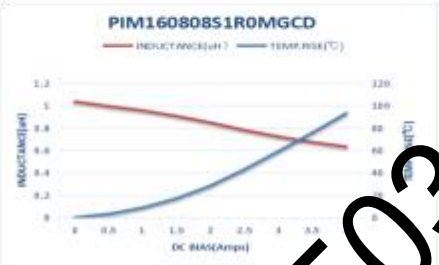
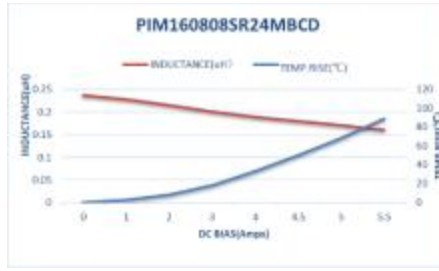
2>1210 Series



3>1608 Series



Mini Molding Power Inductors

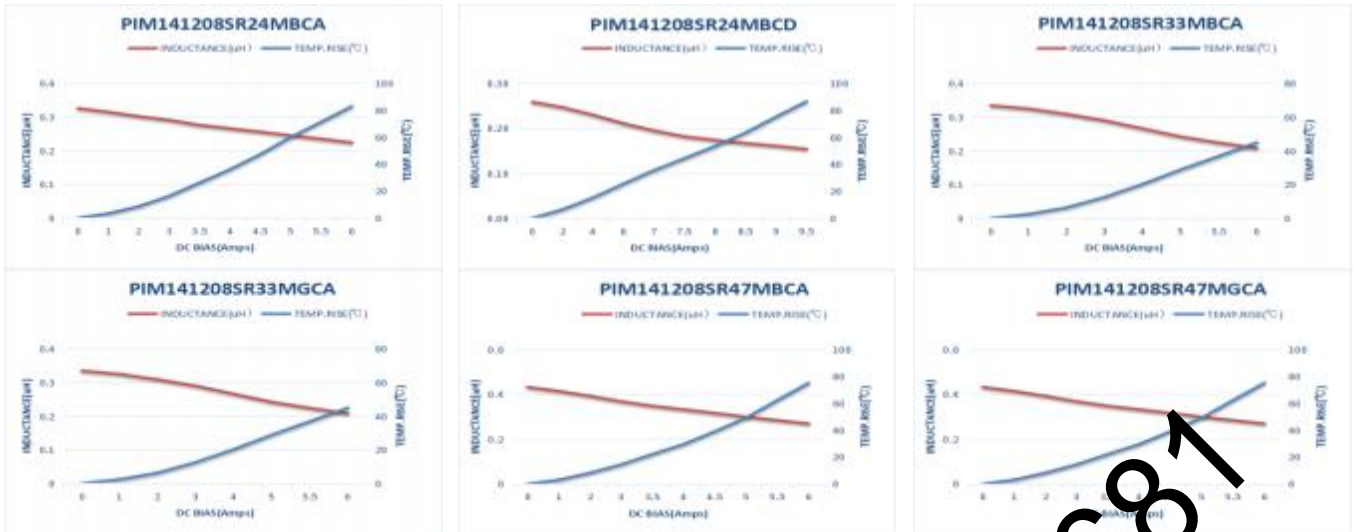


41412 Series

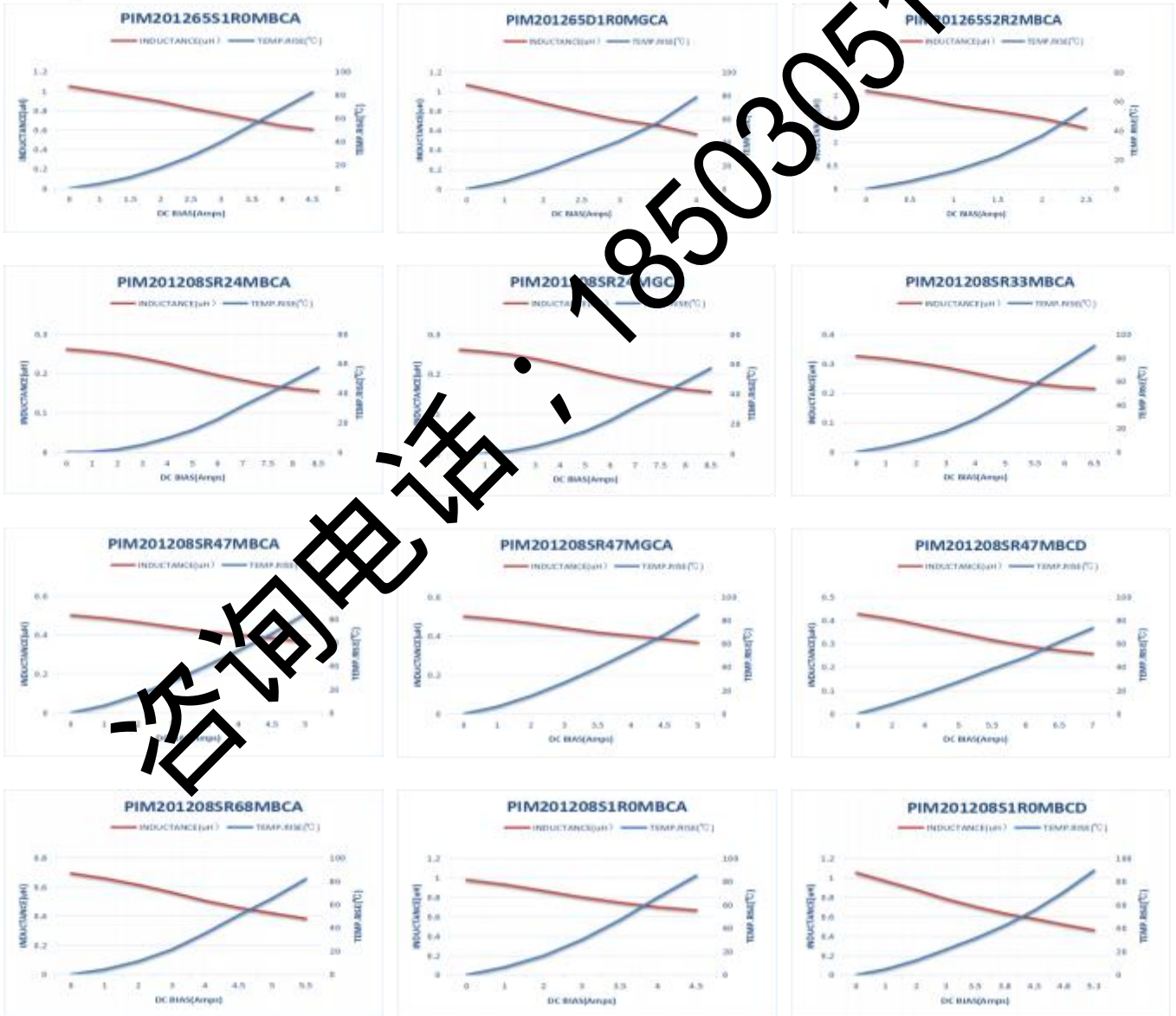


咨询电话: 18503051687

Mini Molding Power Inductors

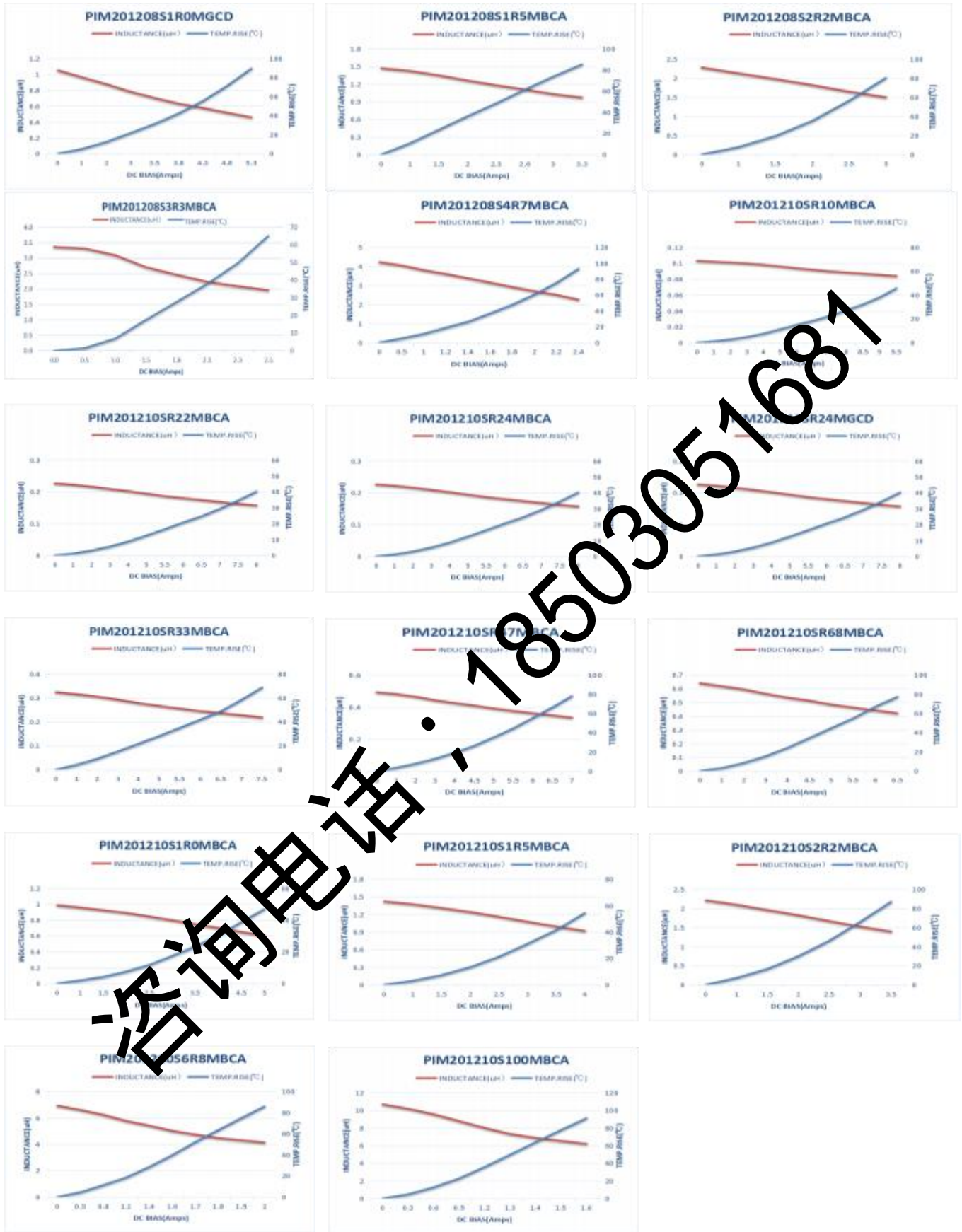


5>2012 Series

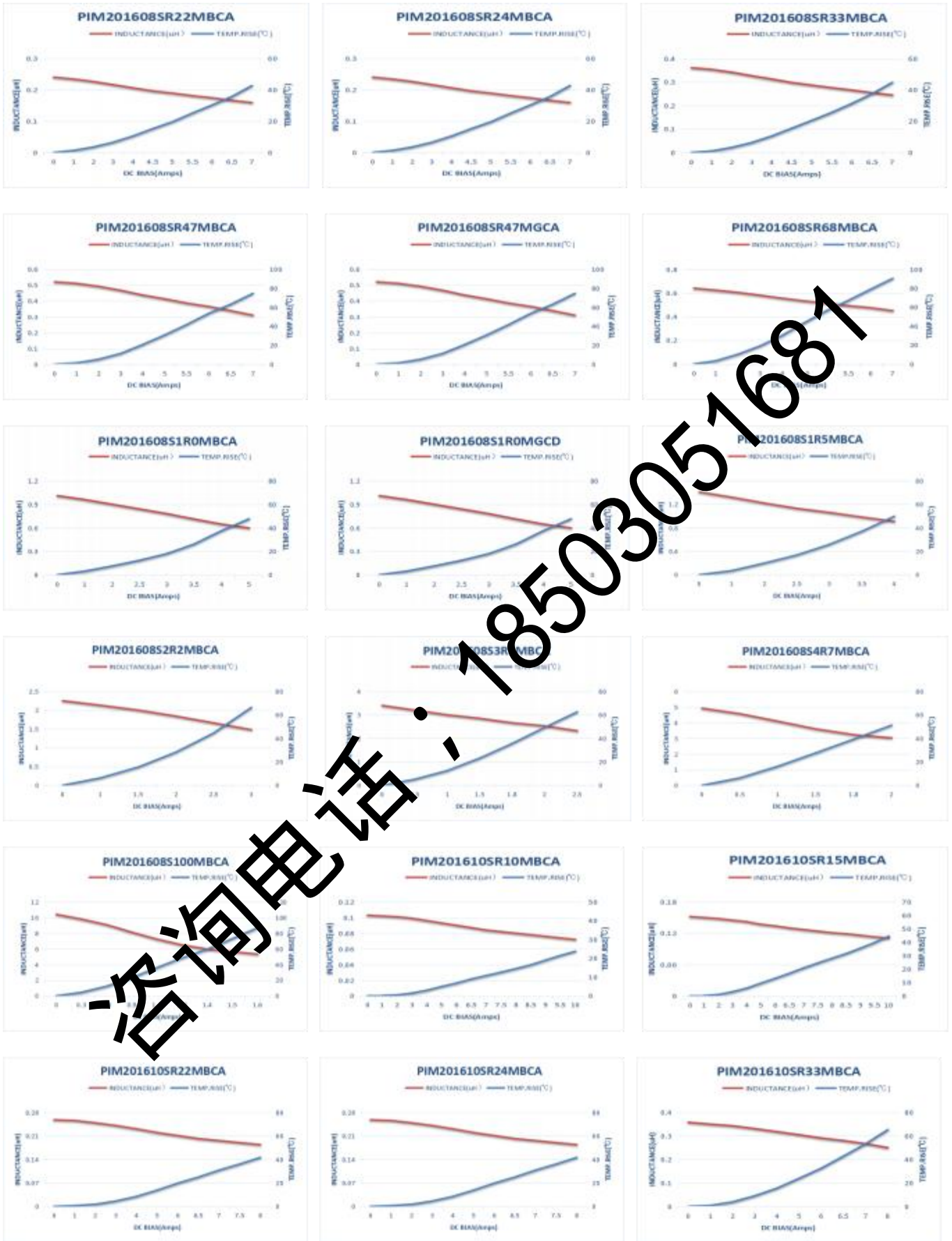


咨询电话: 18503051681

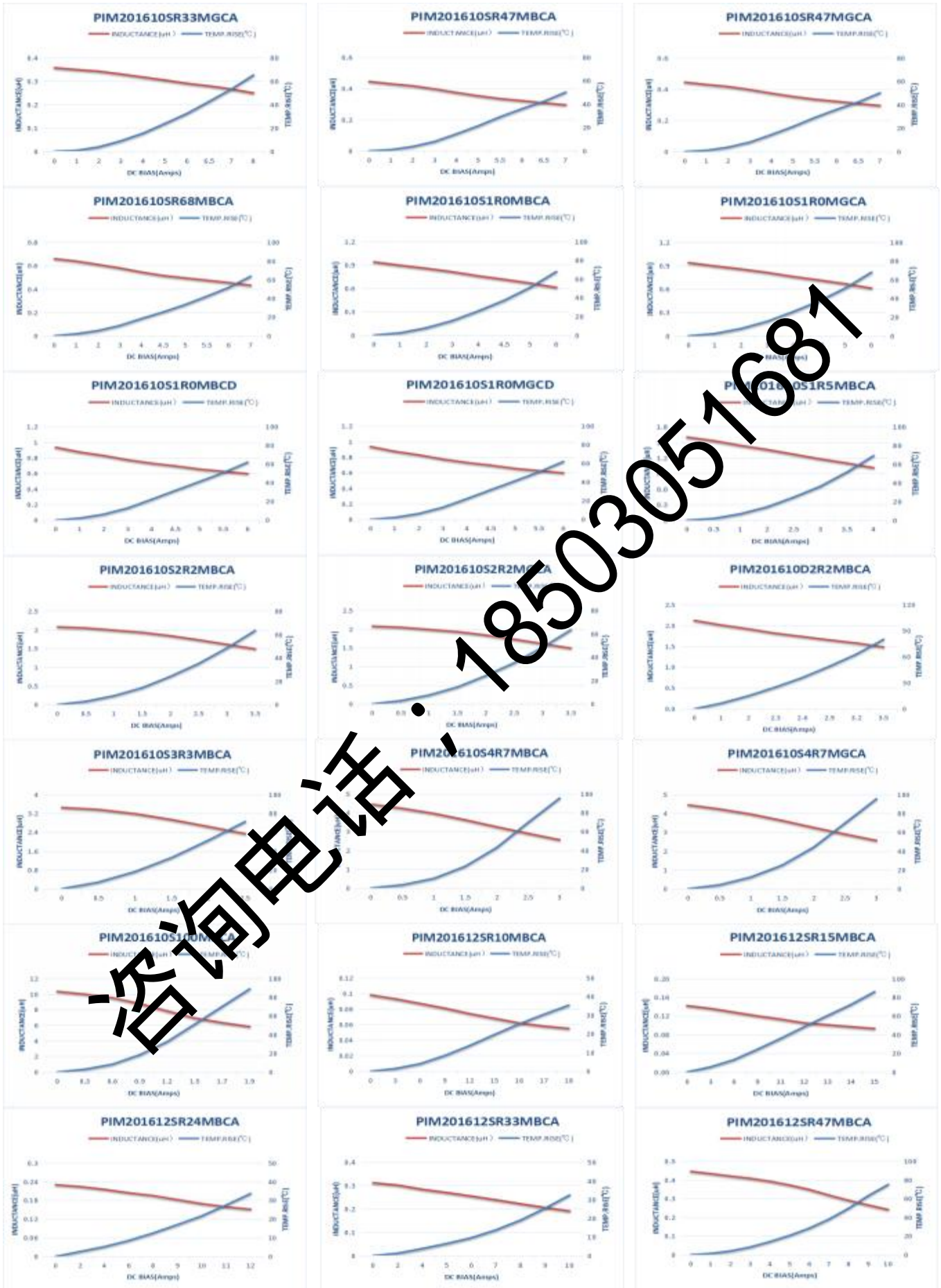
Mini Molding Power Inductors



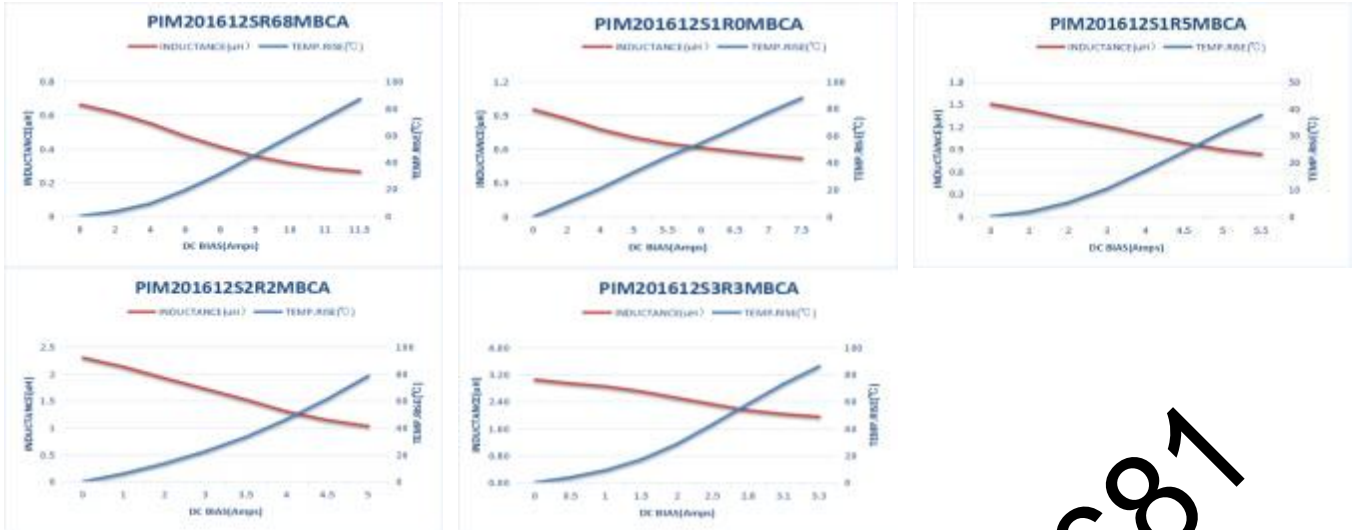
Mini Molding Power Inductors



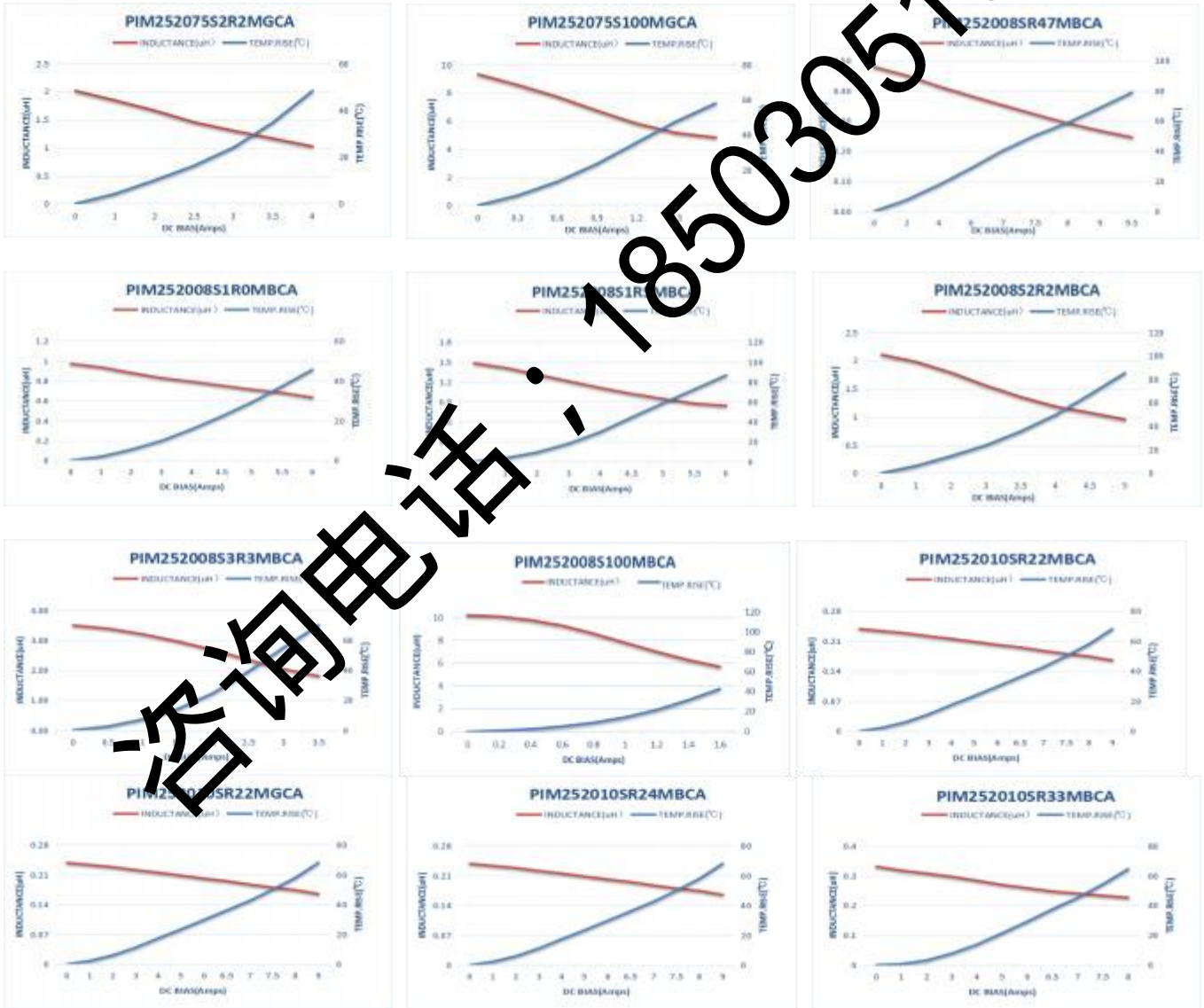
Mini Molding Power Inductors



Mini Molding Power Inductors

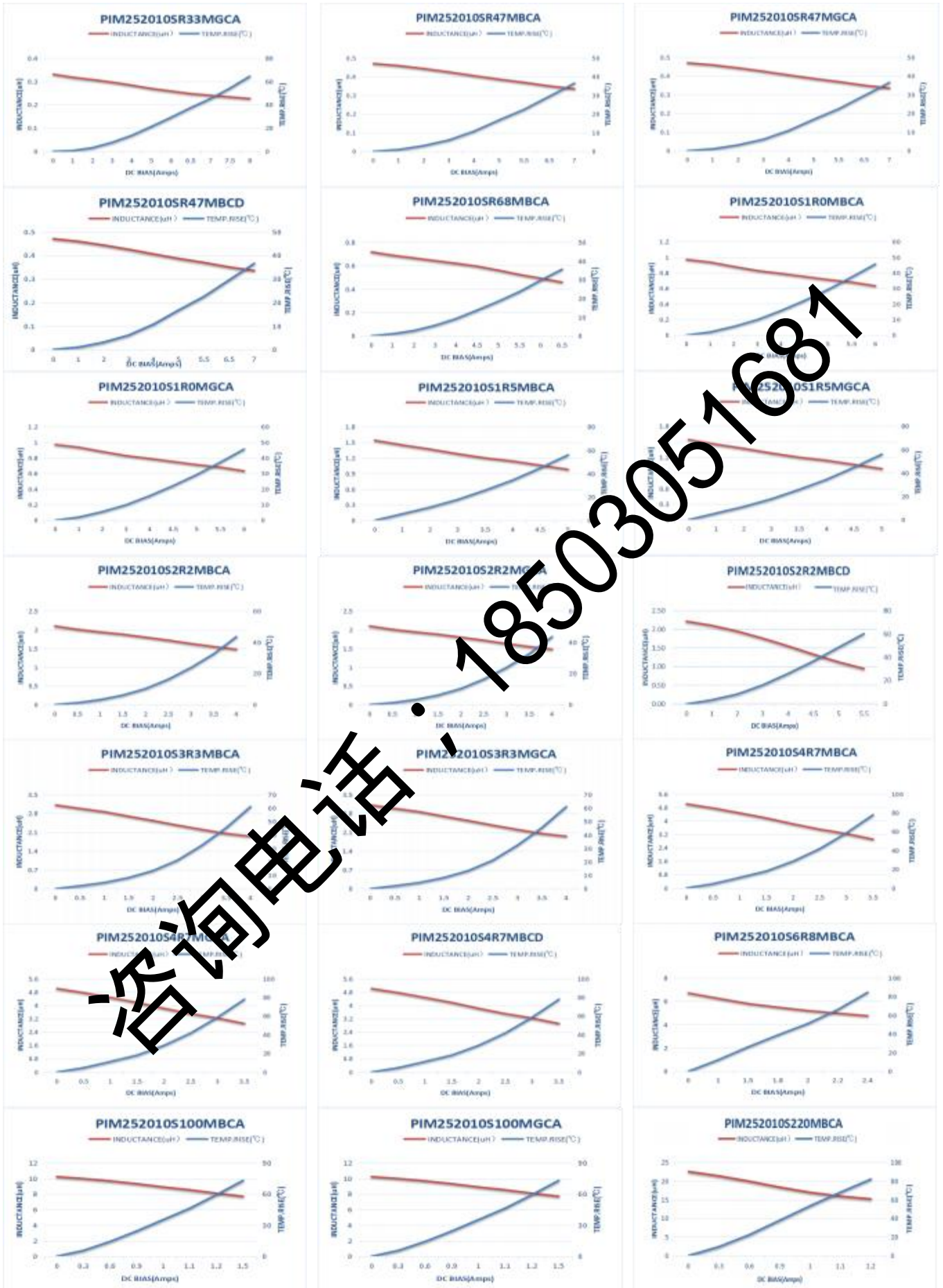


72520 Series



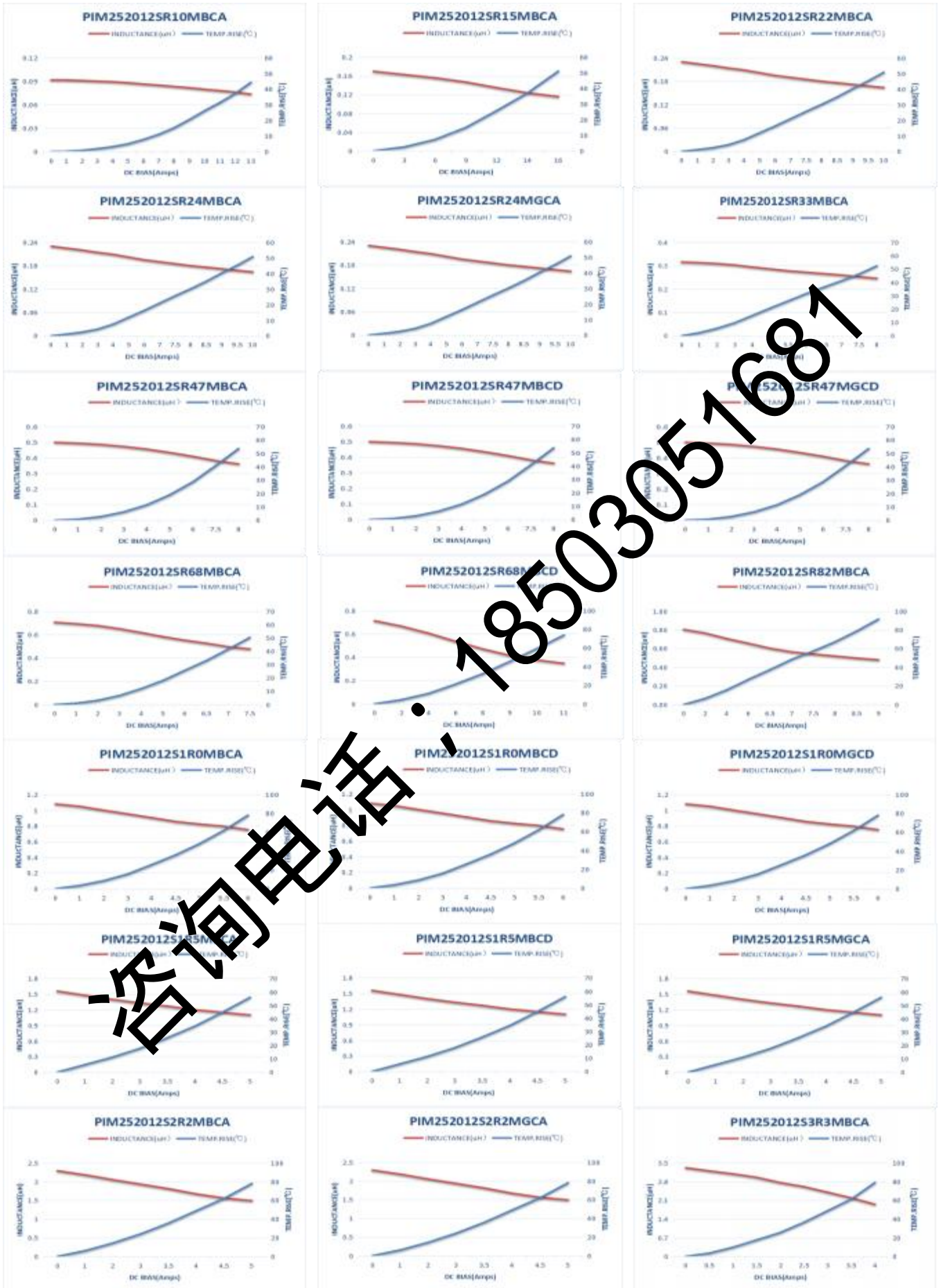
咨询电话: 18503051687

Mini Molding Power Inductors

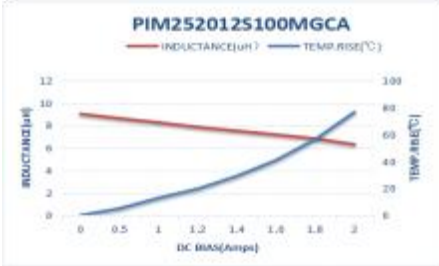


咨询电话: 18503051681

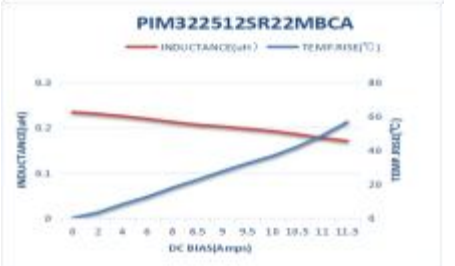
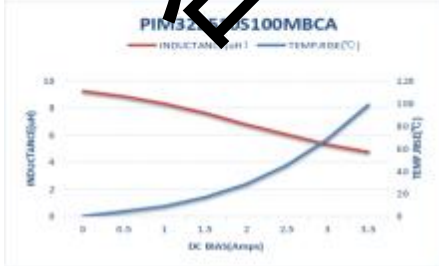
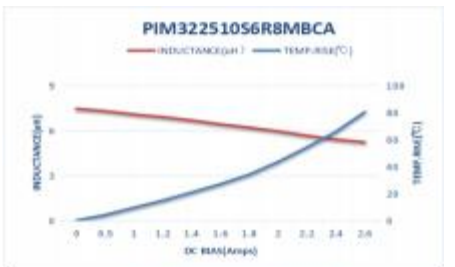
Mini Molding Power Inductors



Mini Molding Power Inductors

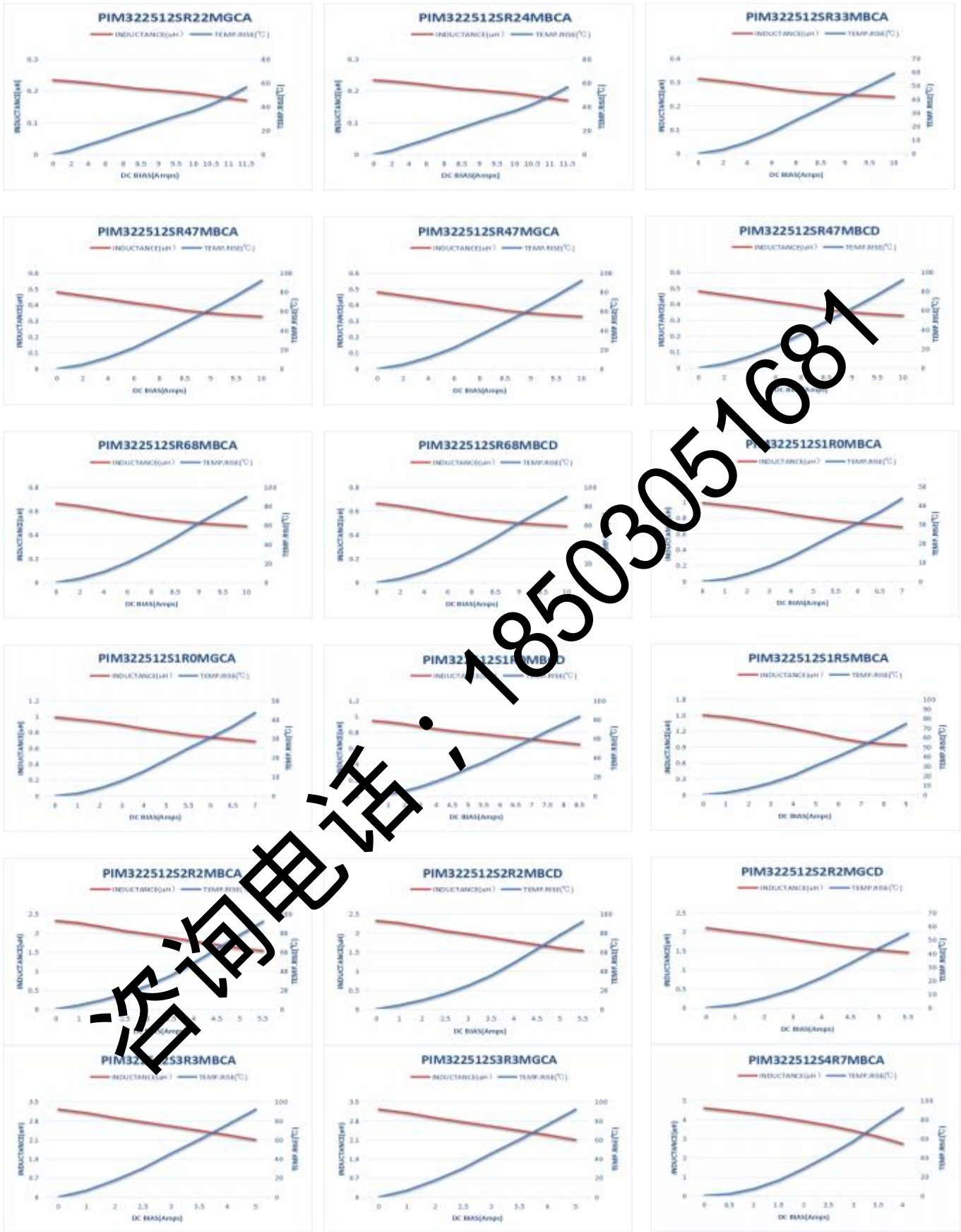


8>3225 Series

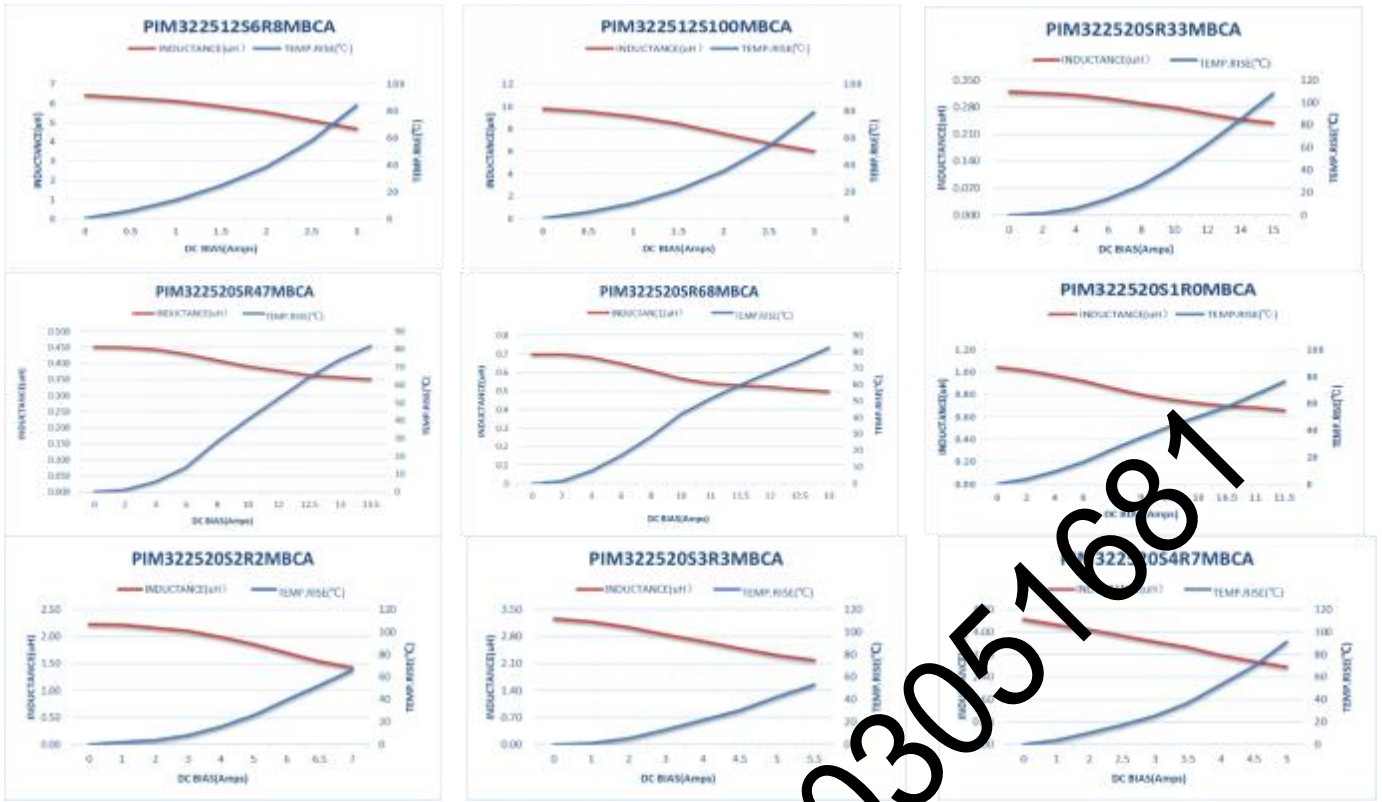


咨询电话: 18503051687

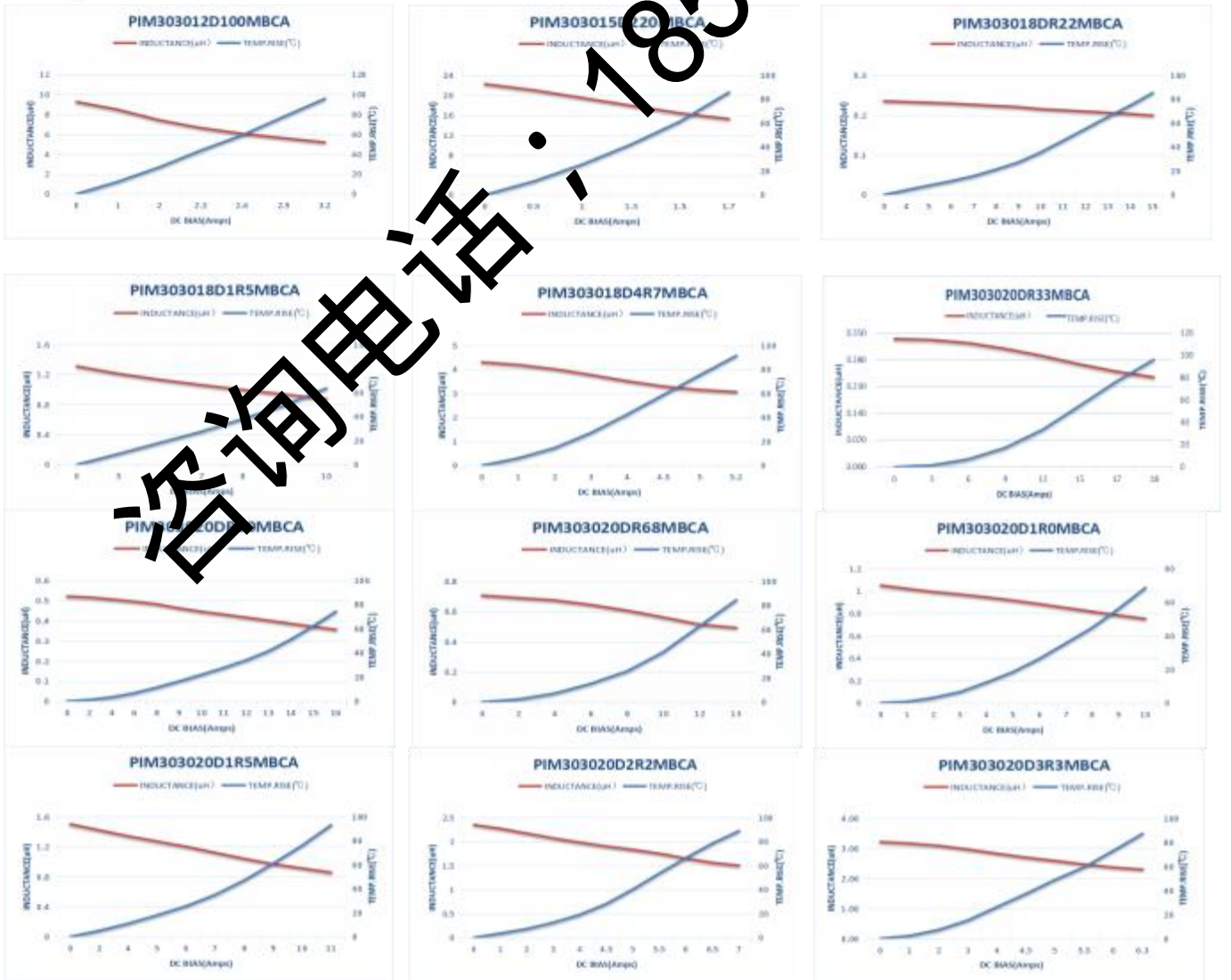
Mini Molding Power Inductors



Mini Molding Power Inductors



93030 Series

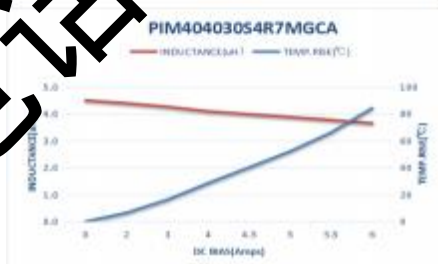
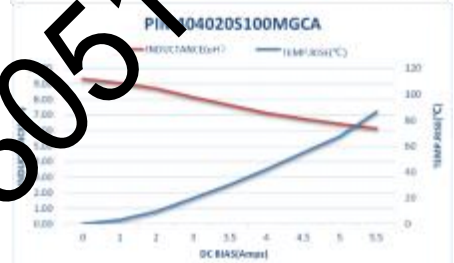
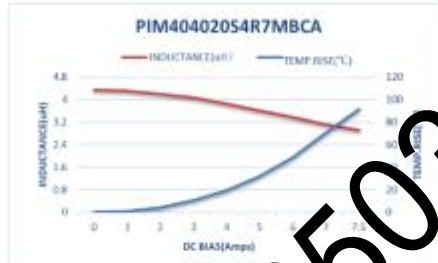
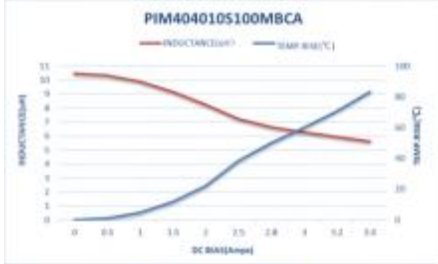


咨询电话: 18503051687

Mini Molding Power Inductors



10>4040 Series



咨询电话: 18503051687

Mini Molding Power Inductors

8. Reliability

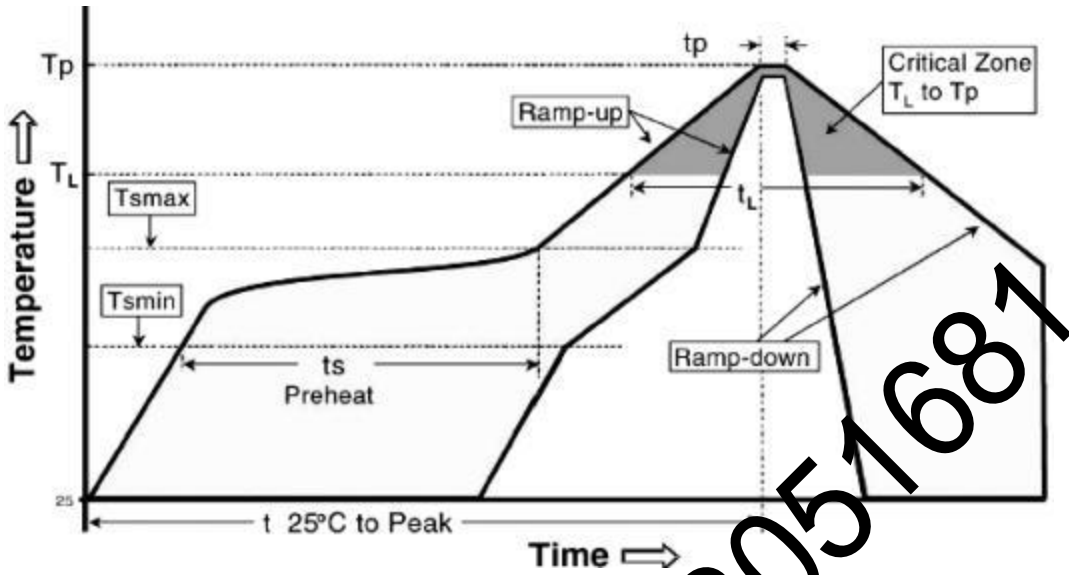
| Item | Requirements | Test Methods and Remarks |
|------------------------------|--|---|
| Insulation Resistance | $\geq 100M\Omega$ | 100 VDC between inductor coil and The middle of the top surface of the body for 60 seconds. |
| Solderability | 90% or more of electrode area shall be coated by new solde. | Dip pads in flux . Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free). Solder Temperature: $245 \pm 5^{\circ}C$. Immersion Time: (5 ± 1) s. |
| Resistance to Soldering Heat | No visible mechanical damage. Inductance change: Within $\pm 10\%$. | Dip pads in flux. Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free). Solder Temperature: $260 \pm 5^{\circ}C$. Immersion Time: 10 ± 1 sec. |
| Adhesion of teral electrode | Strong bond between the pad and the core, without come off PCB. | Inductors shall be subjected to $(260 \pm 5)^{\circ}C$ for (20 ± 5) s Soldering in the base with 1.6mm solder. And then aplombeled in the way plus tax 10 N for (10 ± 1) seconds |
| High temperature | No case deformation or change in appearance. Inductance change: Within $\pm 10\%$ | Temperature: $125 \pm 2^{\circ}C$ Time : 1000 hours. Measurement at 24 ± 4 hours after test conclusion. |
| Low temperature | No visible mechanical damage. Inductance change: Within $\pm 10\%$ | Temperature: $-40 \pm 2^{\circ}C$. Time : 1000 hours. Measurement at 24 ± 4 hours after test conclusion. |
| Thermal shock | No visible mechanical damage. Inductance change: Within $\pm 10\%$ | The test sample shall be placed at $(-55 \pm 3)^{\circ}C$ and $(125 \pm 3)^{\circ}C$ for (30 ± 3) , different temperature conversion time is 2~3 utes. The temperature cycle shall be repeated 32 cycles. Placed at room temperature for 2 hours, within 48 ± 4 hours of testing. |
| Temperature characteristic | Inductance change Pc-b,Pc-d: Within $\pm 10\%$ | a: $+20^{\circ}C$ (30~45) → b: $-40^{\circ}C$ (30~45) → c: $+20^{\circ}C$ (30~45) → d: $+125^{\circ}C$ (30~45) → e: $+20^{\circ}C$ (30~45) $P_{c-b} = \frac{L_b - L_c}{L_c} \times 100\%$; $P_{c-d} = \frac{L_d - L_c}{L_c} \times 100\%$ |
| Static Humidity | No visible mechanical damage. Inductance change: Within $\pm 10\%$ | Inductors shall be subjected to $(95 \pm 3)\%RH$. at $(60 \pm 2)^{\circ}C$ for (1000 ± 4) h. Placed at room temperature for 2 hours, within 48 hours of testing. |
| Life | No visible mechanical damage. Inductance change: Within $\pm 10\%$ | Inductors shall be store at $(85 \pm 2)^{\circ}C$ for (1000 ± 4) hours with Irms applied. Placed at room temperature for 2 hours, within 48 hours of testing |

Mini Molding Power Inductors

9. Soldering Condition

(This is for recommendation, please customer perform adjustment according to actual application)

Recommend Reflow Soldering Profile : (solder : Sn96.5 / Ag3 / Cu0.5)



| Profile Feature | Lead (Pb)-free solder |
|---|-----------------------|
| Preheat: | |
| Temperature Min (T_{smin}) | 150°C |
| Temperature Max (T_{smax}) | 200°C |
| Time (T_{smin} to T_{smax}) (t_s) | 60 - 120 seconds |
| Average ramp-up rate: | |
| (T_{smax} to T_p) | 3°C / second max. |
| Time maintained above : | |
| Temperature (T_L) | 217°C |
| Time (t_L) | 60-150 seconds |
| Peak Temperature (T_p) | 260°C |
| Time within $\begin{matrix} +0 \\ -5 \end{matrix}$ °C of actual peak Temperature (t_p) ² | 10 seconds |
| Ramp-down Rate | 6°C/second max. |
| Time 25°C to Peak Temperature | 8minutes max. |

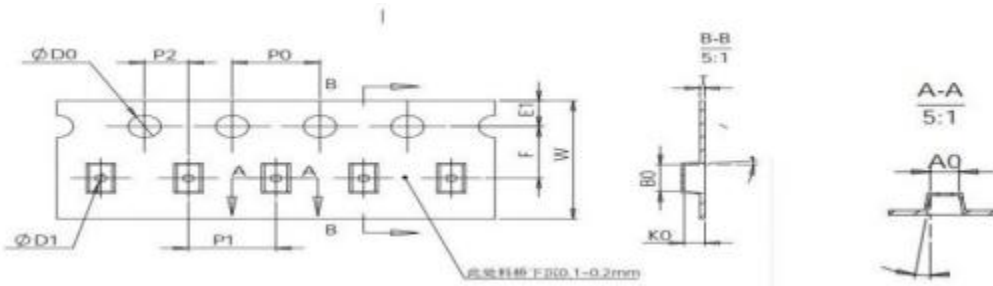
Allowed Re-flow times : 2 times

Remark : To avoid discoloration phenomena of chip on terminal electrodes, please use N₂ Re-flow furnace .

Mini Molding Power Inductors

10. Packing

10.1 Dimension of plastic taping: (Unit: mm)

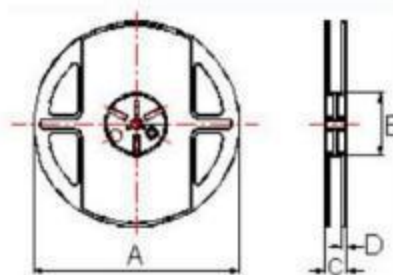


| Series | W ±0.30 | A0 ±0.05 | B0 ±0.05 | D +0.1/-0 | D1 Min | E ±0.10 | F ±0.10 | K0 ±0.05 | P0 ±0.10 | P2 ±0.10 | T ±0.05 | Qty/Reel | |
|--------|------------|-------------|-------------|--------------|-----------|------------|------------|-------------|-------------|-------------|------------|----------|----|
| 100765 | 8.00 | 0.90 | 1.25 | 1.50 | 0.6 | 1.75 | 3.50 | 0.80 | 4.00 | 2.00 | 4.00 | 0.23 | 5K |
| 121065 | 8.00 | 1.30 | 1.55 | 1.50 | 0.6 | 1.75 | 3.50 | 0.80 | 4.00 | 2.00 | 4.00 | 0.23 | 3K |
| 160865 | 8.00 | 1.10 | 1.95 | 1.50 | 0.6 | 1.75 | 3.50 | 0.80 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 160808 | 8.00 | 1.10 | 1.95 | 1.50 | 0.6 | 1.75 | 3.50 | 1.00 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 141265 | 8.00 | 1.50 | 1.75 | 1.50 | 1.0 | 1.75 | 3.50 | 1.00 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 141208 | 8.00 | 1.50 | 1.75 | 1.50 | 1.0 | 1.75 | 3.50 | 1.00 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 201265 | 8.00 | 1.50 | 2.35 | 1.50 | 1.0 | 1.75 | 3.50 | 1.00 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 201208 | 8.00 | 1.50 | 2.35 | 1.50 | 1.0 | 1.75 | 3.50 | 1.00 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 201210 | 8.00 | 1.50 | 2.35 | 1.50 | 1.0 | 1.75 | 3.50 | 1.20 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 201608 | 8.00 | 1.90 | 2.35 | 1.50 | 1.0 | 1.75 | 3.50 | 1.00 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 201610 | 8.00 | 1.90 | 2.35 | 1.50 | 1.0 | 1.75 | 3.50 | 1.20 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 201612 | 8.00 | 1.90 | 2.35 | 1.50 | 1.0 | 1.75 | 3.50 | 1.40 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 252008 | 8.00 | 2.40 | 2.85 | 1.50 | 1.0 | 1.75 | 3.50 | 1.00 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 252010 | 8.00 | 2.40 | 2.85 | 1.50 | 1.0 | 1.75 | 3.50 | 1.20 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 252012 | 8.00 | 2.40 | 2.85 | 1.50 | 1.0 | 1.75 | 3.50 | 1.40 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 322510 | 8.00 | 2.90 | 3.55 | 1.50 | 1.0 | 1.75 | 3.50 | 1.20 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 322512 | 8.00 | 2.90 | 3.55 | 1.50 | 1.0 | 1.75 | 3.50 | 1.40 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 322520 | 8.00 | 2.90 | 3.50 | 1.50 | 1.0 | 1.75 | 3.50 | 2.20 | 4.00 | 2.00 | 4.00 | 0.28 | |
| 303012 | 8.00 | 3.40 | 3.55 | 1.50 | 1.0 | 1.75 | 3.50 | 1.35 | 4.00 | 2.00 | 4.00 | 0.23 | |
| 303015 | 12.0 | 3.40 | 4.45 | 1.50 | 1.0 | 1.75 | 5.50 | 1.70 | 4.00 | 2.00 | 8.00 | 0.35 | |
| 303018 | 12.0 | 3.40 | 3.45 | 1.50 | 1.0 | 1.75 | 5.50 | 2.00 | 4.00 | 2.00 | 8.00 | 0.35 | |
| 303020 | 12.0 | 3.40 | 3.40 | 1.50 | 1.0 | 1.75 | 5.50 | 2.20 | 4.00 | 2.00 | 8.00 | 0.35 | |
| 404012 | 12.0 | 4.40 | 4.40 | 1.50 | 1.0 | 1.75 | 5.50 | 1.40 | 4.00 | 2.00 | 8.00 | 0.35 | |
| 404020 | 12.0 | 4.5±0.1 | 4.5±0.1 | 1.5 | 1.5 | 1.75 | 5.5 | 2.4±0.1 | 4.00 | 2.00 | 8.00 | 0.30 | |
| 404030 | 12.0 | 4.40 | 4.40 | 1.50 | 1.0 | 1.75 | 5.50 | 3.40 | 4.00 | 2.00 | 8.00 | 0.35 | |

10.2 Dimension of Reel : (Unit: mm)

| Type | A ±20 | B ±10 | C ±0.5 | D ±0.2 |
|------|----------|----------|-----------|-----------|
| All | 178 | 60 | 9.0 | 1.0 |

| Type | A ±20 | B ±10 | C ±10 | D ±0.3 |
|------|----------|----------|----------|-----------|
| All | 330 | 100 | 13.5 | 2.0 |



11. Note

11.1 Huacui recommend products store in warehouse with temperature between 15 to 35°C under humidity between 25 to 75%RH.

Even under storage conditions recommended above, solder ability of products will be degraded stored over 1 year old.

11.2 Cartons must be placed in correct direction which indicated on carton, otherwise the reel or wire will be deformed.

11.3 Storage conditions as below are inappropriate:

a. Stored in high electrostatic environment

b. Stored in direct sunshine, rain, snow or condensation.

c. Exposed to sea wind or corrosive gases, such as Cl₂, H₂S, NH₃, SO₂, NO₂, etc.

11.4 The products are used in circuit board thickness greater than 1.6mm. If customers use less than the thickness of the circuit board that you should confirm with the company, in order to recommend a more suitable product.

咨询电话：18503051681

Mini Molding Power Inductors

12. Record

| Version | Description | Page | Date | Amended by | Checked by |
|---------|--|------|--------------|------------|-------------|
| A0 | First version | 1~23 | Nov.21.2022 | Xi Rui.Niu | Dirk.Wang |
| A1 | newlyincreased : PIM303020D1R5MBCA PIM252010S6R8MBCA PIM252010S220MBCA PIM322510S2R2MBCA PIM201208SR47MBCD | 1~23 | Dec. 14.2022 | Xi Rui.Niu | Dirk.Wang |
| A2 | newlyincreased : PIM303018D4R7MBCA PIM322510S3R3MBCA PIM322510S4R7MBCA | 1~23 | Dec.29.2022 | Xi Rui.Niu | Dirk.Wang |
| A3 | newlyincreased : PIM141207SR24MBCA PIM141207SR47MBCA PIM201612SR47MBCA PIM303018DR22MBCA PIM322512SR10MBCA PIM322510SR68MBCA | 1~24 | Jan. 18.2023 | Xi Rui.Niu | Dirk.Wang |
| A4 | newlyincreased: PIM322512SR10MBCA PIM322510SR68MBCA | 1~24 | Feb. 10.2023 | Xi Rui.Niu | Dirk.Wang |
| A5 | newlyincreased: PIM252010SR47MBCD PIM322510S1R0MBCA PIM322512S6R8MBCA PIM322512S100MBCA | 1~24 | Feb.23.2023 | Xi Rui.Niu | Dirk.Wang |
| A6 | newlyincreased: PIM201208SR68MBCA PIM201612S2R2MBCA PIM252008S1R0MBCA PIM252008S2R2MBCA PIM252012SR68MBCD PIM322510SR33MBCA PIM322510SR47MBCA PIM322510S1R5MBCA PIM322510S100MBCA PIM303018D1R5MBCA Revise: PIM160808SR47MGCDM Rdc由48/55改為38/45 | 1~24 | Mar.5.2023 | Xi Rui.Niu | Dirk.Wang |
| A7 | newlyincreased: PIM322510S6R8MBCA PIM303012D100MBCA PIM303020DR50MBCA PIM303020DR68MBCA PIM252075S2R2MGCA PIM201208S4R7MBCA | 1~27 | Apr.28.2023 | Xi Rui.Niu | Dirk.Wang |
| A8 | newlyincreased: PIM303015D220MBCA PIM303020D100MBCA PIM404012S1R0MBCA PIM404030S4R7MGCA PIM303020D3R3MBCA PIM252008S1R5MBCA PIM201601S100MBCA PIM201612SR15MBCA PIM201601S3R3MBCA PIM252008SR47MBCA PIM252008SR68MBCA PIM201610S100MBCA PIM322520SR0MBCA PIM141208SR24MBCD PIM201612S1R5MBCA PIM201612S1R0MBCA PIM252012SR82MBCA | 1~27 | May.31.2023 | Xi Rui.Niu | Dirk.Wang |
| A9 | newlyincreased: PIM252010SR8MBCA PIM201208S3R3MBCA PIM201210S100MBCA PIM303020D4R7MBCA PIM303020D6R8MBCA PIM322520SR47MBCA PIM322520SR68MBCA PIM404020S2R2MGCA PIM404010S100MBCA | 1~30 | Jun.30.2023 | Xi Rui.Niu | Congdian.Lu |
| B1 | newlyincreased: PIM160808SR24MBCD PIM160808S4R7MBCA PIM252008S100MBCA PIM252010S2R2MBCD PIM322520SR33MBCA PIM252012SR2MBCA PIM322520S3R3MBCA PIM322510S4R7MBCA PIM303020DR33MBCA PIM404012S1R5MBCA PIM404020S4R7MGCA PIM404020S100MGCA PIM404020S150MGCA PIM404020S220MGCA PIM404030SR68MBCA PIM404030S6R8MBCA | 1~31 | Jul.29.2023 | Ning.Song | Congdian.Lu |