SMD Power Inductor

TMPF0402A-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.

Halogen-free

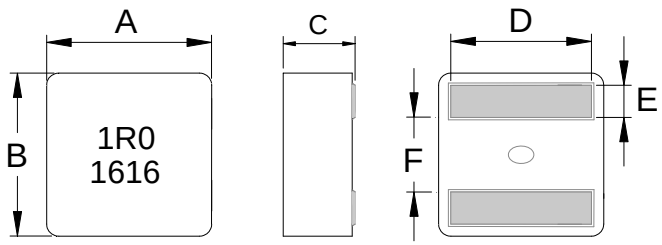
Pb-free

2. Applications

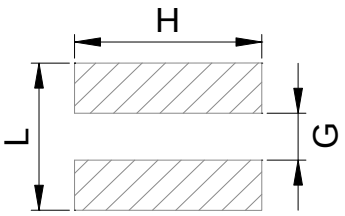
Note PC power system，incl. IMVP-6

DC/DC converter .

3. Dimensions



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
3.4 ref	1.4 ref	3.8 ref

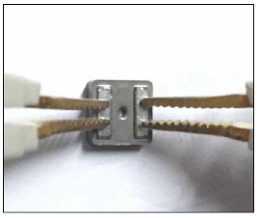
Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.12mm and above.

Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0402A	4.1±0.2	4.1±0.2	1.9±0.2	3.4±0.3	0.88±0.2	1.6±0.25

4. Part Numbering

TMPF	0402	A	-	1R0	MN	-	D
A	B	C		D	E		

A: Series
B: Dimension — BxC
C: Type — Material.
D: Inductance — 1R0=1.00uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.1R0 and 1616(16 YY, 16 WW,follow production date).



DCR Test

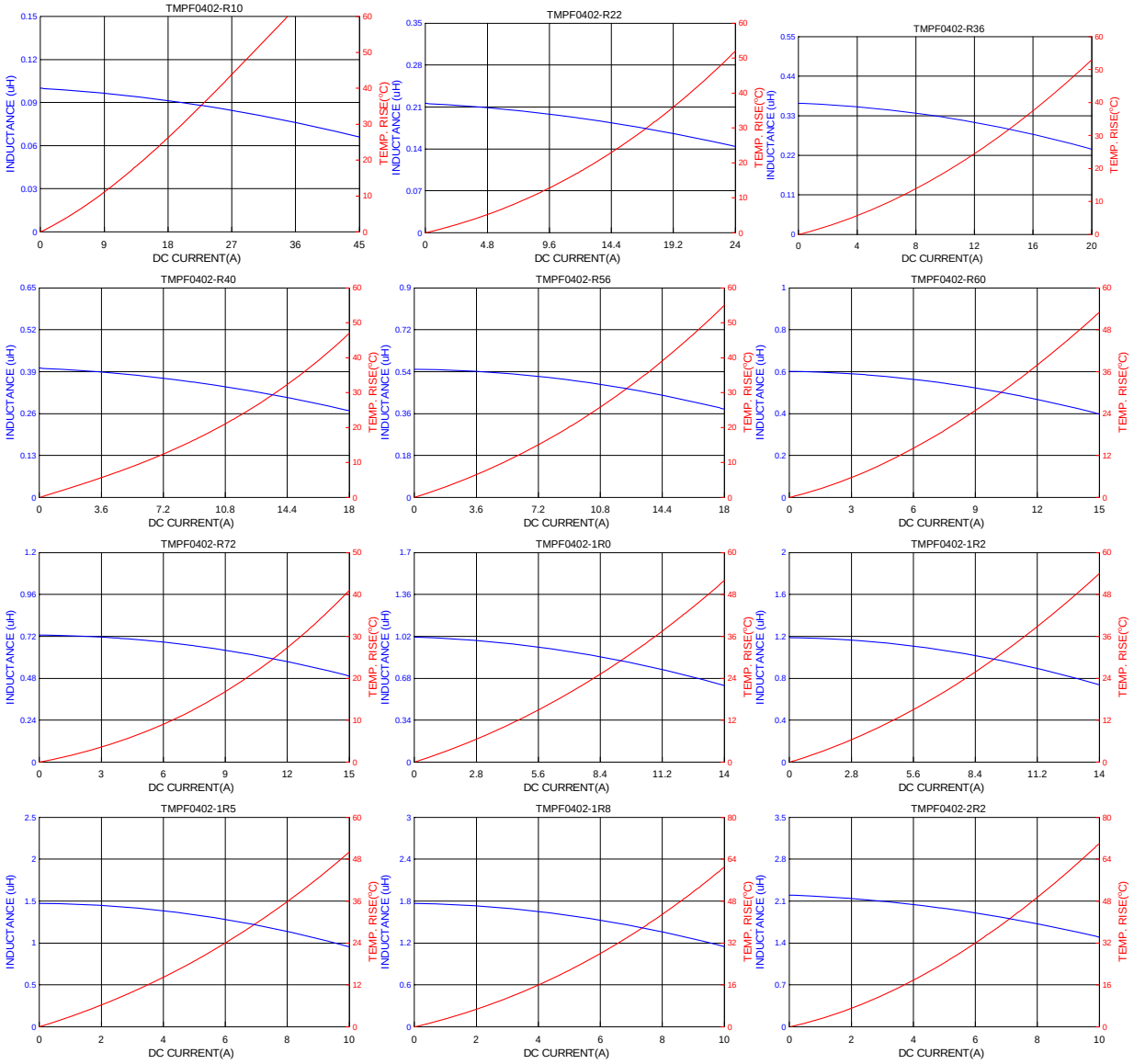
5. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)		DCR (mΩ) Typ.	DCR (mΩ) Max.
		20℃ rise	40℃ rise	Typ	Max		
TMPF0402A-R10MN-D	0.10	13.5	18.0	38.0	33.0	2.2	2.42
TMPF0402A-R22MN-D	0.22	13.0	16.8	19.5	18.8	4.1	4.6
TMPF0402A-R36MN-D	0.36	11.0	14.5	17.0	15.0	5.6	6.3
TMPF0402A-R40MN-D	0.40	10.0	14.0	15.5	13.5	6.9	7.73
TMPF0402A-R56MN-D	0.56	8.5	12.0	14.0	12.6	8.4	9.3
TMPF0402A-R60MN-D	0.60	8.0	11.7	13.7	12.3	8.6	9.52
TMPF0402A-R72MN-D	0.72	7.6	10.5	12.0	10.6	10.4	11.6
TMPF0402A-1R0MN-D	1.00	6.8	9.6	9.6	8.8	13.3	14.6
TMPF0402A-1R2MN-D	1.20	6.6	9.0	9.0	7.8	16.2	17.9
TMPF0402A-1R5MN-D	1.50	5.8	7.6	8.0	7.4	21.0	23.5
TMPF0402A-1R8MN-D	1.80	5.2	7.0	7.5	7.0	25.0	28.0
TMPF0402A-2R2MN-D	2.20	4.6	5.6	6.5	6.0	35.2	38.7

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L/Q: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25°C ambient.
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

6. Typical Performance Curves



SMD Power Inductor

TMPF0402LR-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.

Halogen-free

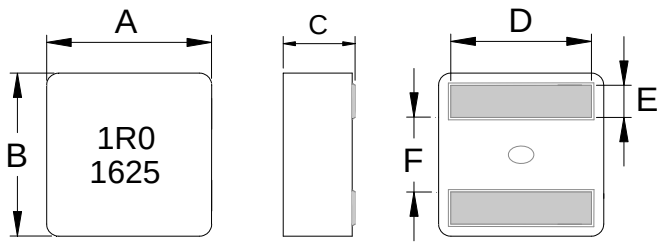
Pb-free

2. Applications

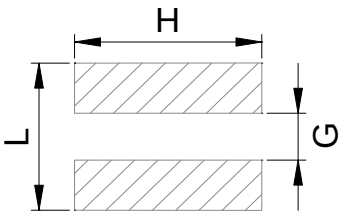
Note PC power system，incl. IMVP-6

DC/DC converter .

3. Dimensions



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
3.4 ref	1.4 ref	3.8 ref

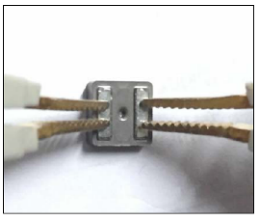
Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.12mm and above.

Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0402LR	4.1±0.2	4.1±0.2	1.9±0.2	3.4±0.3	0.88±0.2	1.6±0.25

4. Part Numbering

TMPF	0402	LR	-	1R0	MN	-	D
A	B	C		D	E		

A: Series
B: Dimension — BxC
C: Type — Material.
D: Inductance — 1R0=1.00uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.1R0 and 1616(16 YY, 25 WW,follow production date).



DCR Test

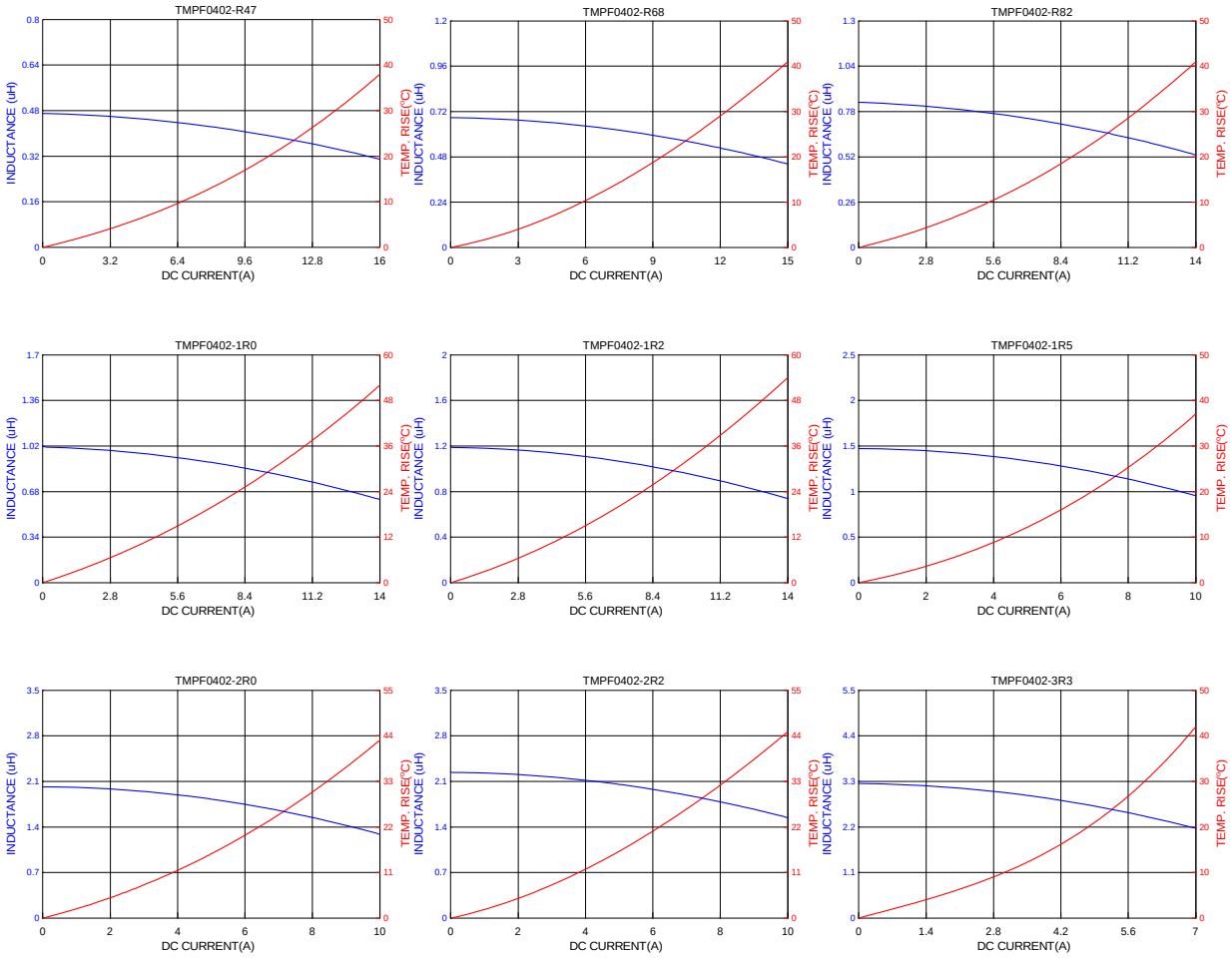
5. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)				DCR(mΩ) Typ.	DCR(mΩ) Max.
		20℃ rise	40℃ rise	Typ			Max		
				1	2	3	3		
TMPF0402LR-R47MN-D	0.47	9.8	13.2	7.0	10.0	14.0	12.5	6.0	6.8
TMPF0402LR-R68MN-D	0.68	9.2	12.0	5.2	8.0	11.6	10.0	7.3	8.2
TMPF0402LR-R82MN-D	0.82	8.5	11.5	4.8	6.5	10.2	9.0	8.6	9.5
TMPF0402LR-1R0MN-D	1.00	8.0	11.0	4.5	5.4	9.2	8.0	10.6	11.7
TMPF0402LR-1R2MN-D	1.20	7.2	9.5	4.3	5.0	8.6	7.5	12.2	13.4
TMPF0402LR-1R5MN-D	1.50	6.7	9.1	4.1	4.5	7.5	6.7	14.4	15.8
TMPF0402LR-2R0MN-D	2.00	6.2	8.2	3.2	4.0	6.2	5.0	21.15	23.3
TMPF0402LR-2R2MN-D	2.20	6.0	8.0	3.1	3.8	6.0	4.8	21.35	23.5
TMPF0402LR-3R3MN-D	3.30	4.4	5.5	2.7	3.4	5.3	4.4	34.2	38.3

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25℃ ambient.
5. Saturation Current (Isat 1) will cause L0 to drop approximately 10%.
   Saturation Current (Isat 2) will cause L0 to drop approximately 20%.
   Saturation Current (Isat 3) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

6. Typical Performance Curves



SMD Power Inductor

TMPF0502A-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.

Halogen-free

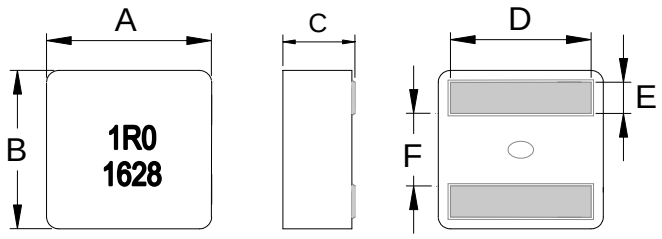
Pb-free

2. Applications

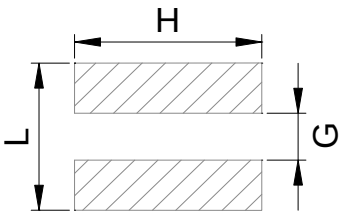
Note PC power system，incl. IMVP-6

DC/DC converter .

3. Dimensions



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
4.5 ref	2.0 ref	4.7 ref

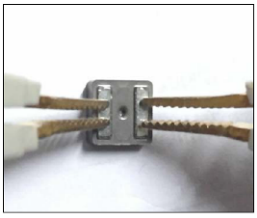
Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.12mm and above.

Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0502A	5.5±0.2	5.3±0.2	1.9±0.2	4.3±0.3	1.1±0.2	2.3±0.25

4. Part Numbering

TMPF	0502	A	-	1R0	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Material.
D: Inductance — 1R0=1.00uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.1R0 and 1628(16 YY, 28 WW,follow production date).



DCR Test

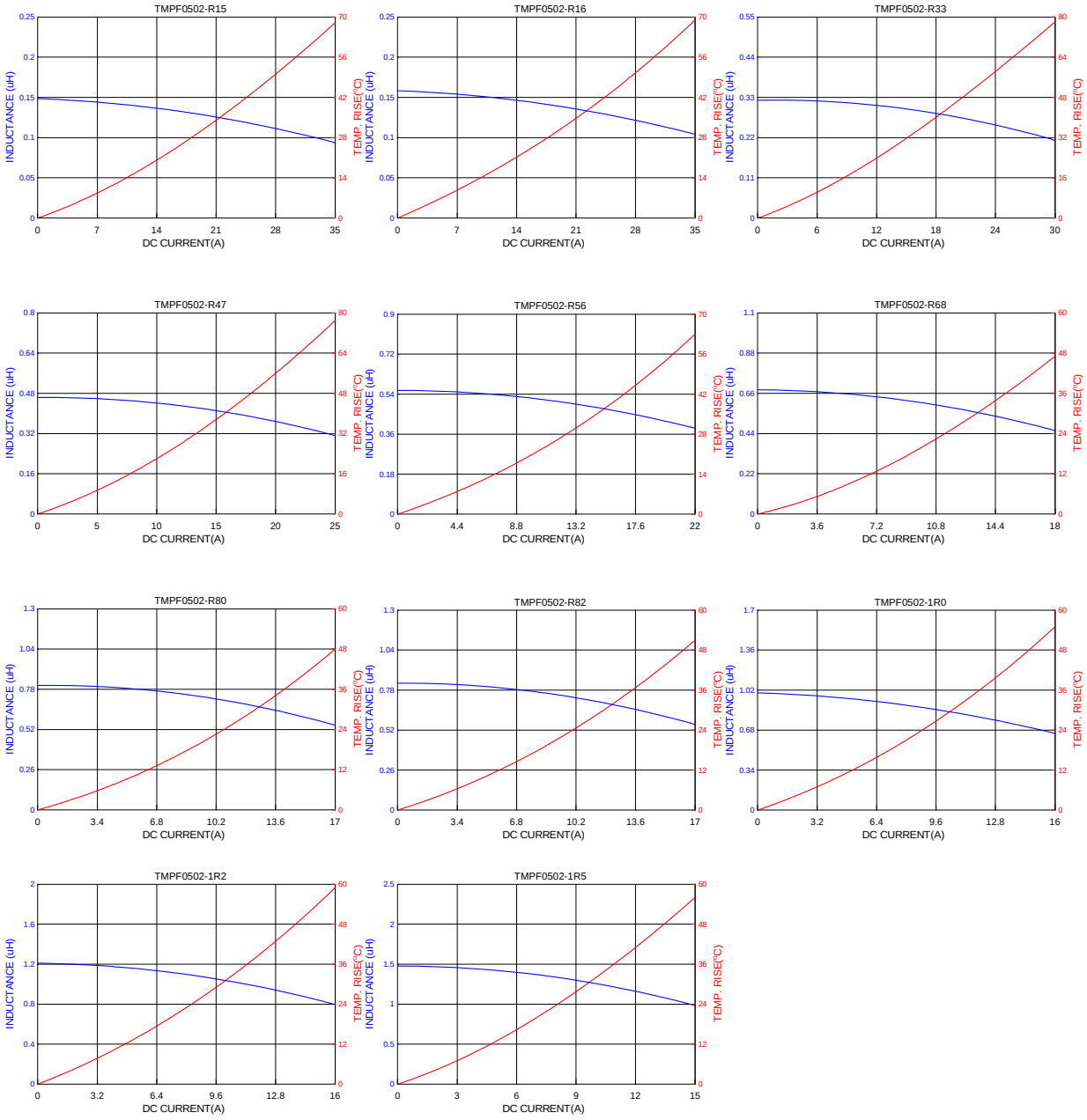
5. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)		DCR(mΩ) Typ.	DCR(mΩ) Max.
		20℃ rise	40℃ rise	Typ	Max		
TMPF0502A-R15MN-D	0.15	13.9	18.8	30.0	27.0	4.00	4.60
TMPF0502A-R16MN-D	0.16	13.9	18.8	30.0	27.0	4.00	4.60
TMPF0502A-R33MN-D	0.33	10.5	14.4	26.0	24.0	6.10	7.00
TMPF0502A-R47MN-D	0.47	10.1	14.1	22.0	20.0	7.00	8.05
TMPF0502A-R56MN-D	0.56	9.9	13.9	19.0	16.0	8.70	9.54
TMPF0502A-R68MN-D	0.68	9.6	13.4	16.0	14.0	8.90	10.2
TMPF0502A-R80MN-D	0.80	9.4	13.0	15.5	13.5	10.3	11.8
TMPF0502A-R82MN-D	0.82	8.5	12.0	15.0	13.0	11.0	12.7
TMPF0502A-1R0MN-D	1.00	7.5	10.5	14.5	12.8	12.0	13.8
TMPF0502A-1R2MN-D	1.20	6.8	9.40	14.0	12.2	14.2	16.3
TMPF0502A-1R5MN-D	1.50	6.4	8.80	13.3	11.7	16.2	18.7

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L/Q: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25℃ ambient.
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

6. Typical Performance Curves



SMD Power Inductor

TMPF0503A-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.

Halogen-free

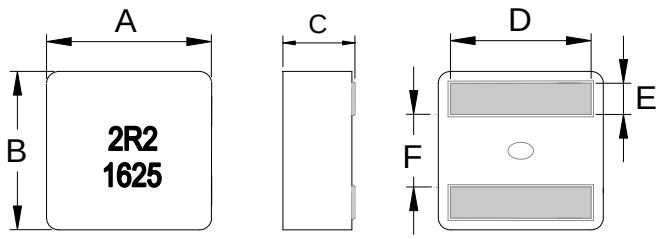
Pb-free

2. Applications

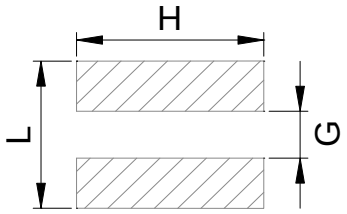
Note PC power system，incl. IMVP-6

DC/DC converter .

3. Dimensions



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
4.5 ref	2.0 ref	4.7 ref

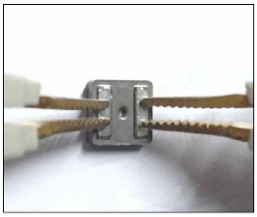
Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.12mm and above.

Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0503A	5.5±0.2	5.3±0.2	2.9±0.2	4.3±0.3	1.1±0.2	2.3±0.25

4. Part Numbering

TMPF	0503	A	-	2R2	MN	-	D
A	B	C		D	E		F

A: Series	
B: Dimension	BxC
C: Type	Material.
D: Inductance	2R2=2.20uH
E: Inductance Tolerance	M=±20%
F: Code	Marking: Black.2R2 and 1625(16 YY, 25 WW,follow production date).



DCR Test

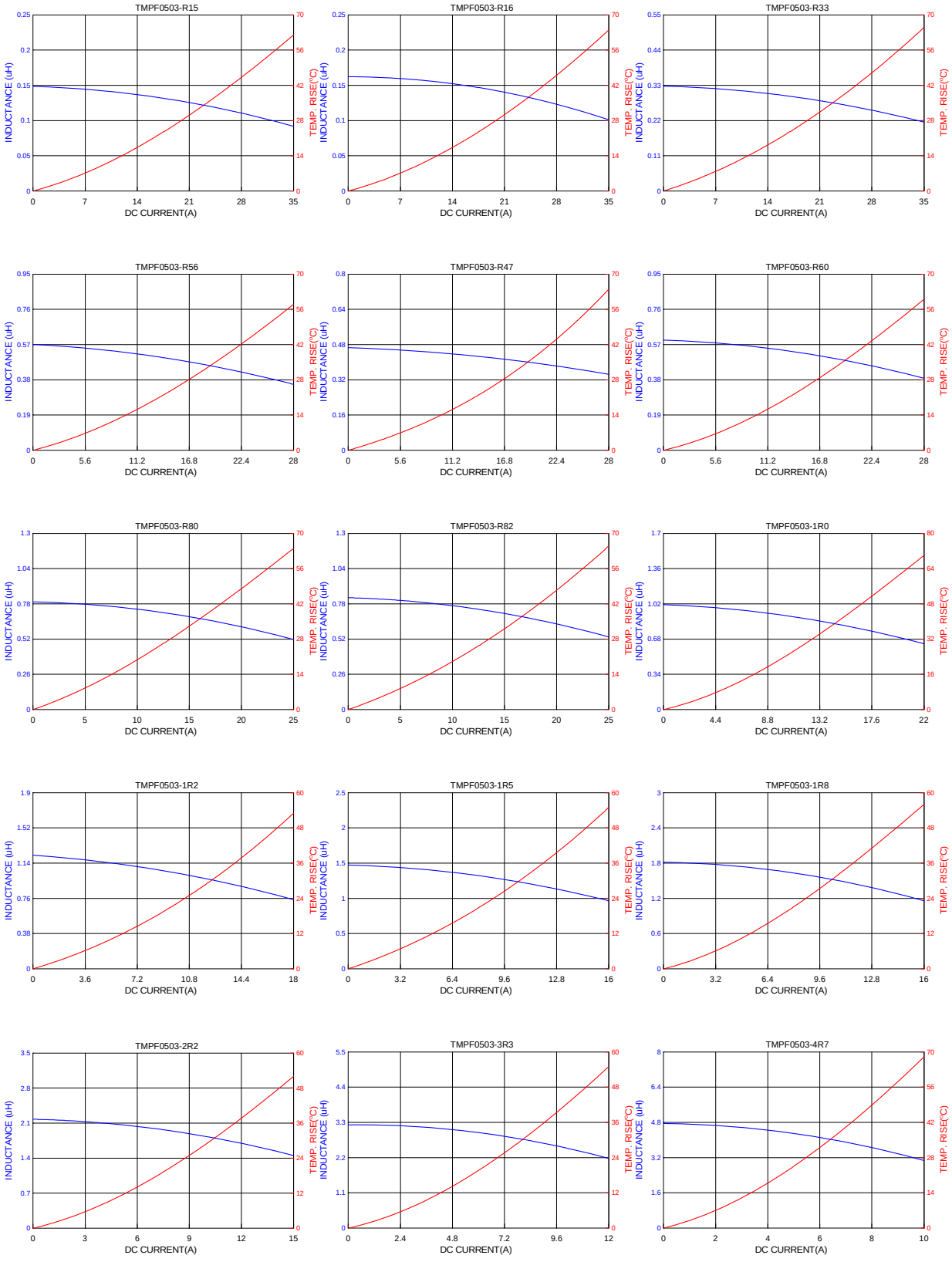
5. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)		DCR(mΩ) Typ.	DCR(mΩ) Max.
		20℃ rise	40℃ rise	Typ	Max		
TMPF0503A-R15MN-D	0.15	14.3	22.2	36.0	32.5	2.10	2.31
TMPF0503A-R16MN-D	0.16	14.2	22.2	35.0	32.0	2.12	2.33
TMPF0503A-R33MN-D	0.33	13.8	19.2	28.0	26.0	3.20	3.52
TMPF0503A-R47MN-D	0.47	13.7	18.4	26.0	24.0	3.75	4.13
TMPF0503A-R56MN-D	0.56	13.6	17.7	22.2	20.2	4.05	4.52
TMPF0503A-R60MN-D	0.60	13.6	17.7	22.0	20.0	4.11	4.52
TMPF0503A-R80MN-D	0.80	10.1	13.1	20.0	18.0	5.14	5.65
TMPF0503A-R82MN-D	0.82	9.90	12.9	19.7	17.6	5.25	5.78
TMPF0503A-1R0MN-D	1.00	9.00	12.2	16.5	14.3	6.90	7.60
TMPF0503A-1R2MN-D	1.20	8.50	11.0	15.0	13.5	8.80	9.70
TMPF0503A-1R5MN-D	1.50	8.00	10.5	14.0	12.5	10.1	11.2
TMPF0503A-1R8MN-D	1.80	7.60	10.1	12.3	11.3	11.5	12.7
TMPF0503A-2R2MN-D	2.20	7.20	9.70	10.0	9.0	13.2	14.5
TMPF0503A-3R3MN-D	3.30	5.90	8.10	9.5	8.7	21.0	23.1
TMPF0503A-4R7MN-D	4.70	4.30	5.90	8.2	7.0	33.0	36.3

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L/Q: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25℃ ambient.
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

6. Typical Performance Curves



SMD Power Inductor

TMPF0603A-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.

Halogen-free

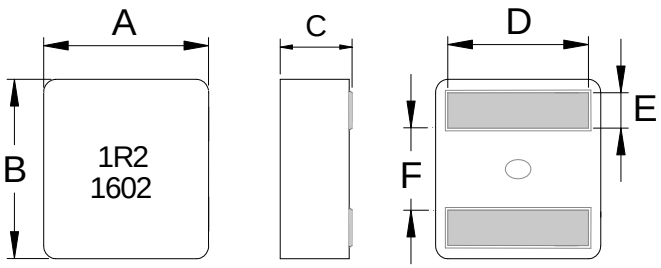
Pb-free

2. Applications

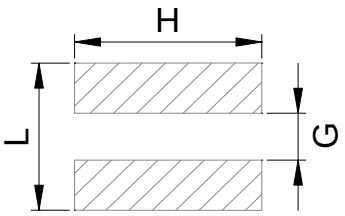
Note PC power system，incl. IMVP-6

DC/DC converter .

3. Dimensions



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
5.6 ref	2.5 ref	5.6 ref

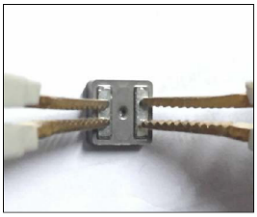
Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.15mm and above.

Series	Inductance Range	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0603A	1.2uH and below	6.6±0.2	6.4±0.2	2.8±0.2	See Spec table	1.4±0.2	2.6±0.25
	1.5uH and above			2.9±0.2			

4. Part Numbering

TMPF	0603	A	-	1R2	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Material.
D: Inductance — 1R2=1.20uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.1R2 and 1602(16 YY, 02 WW,follow production date).



DCR Test

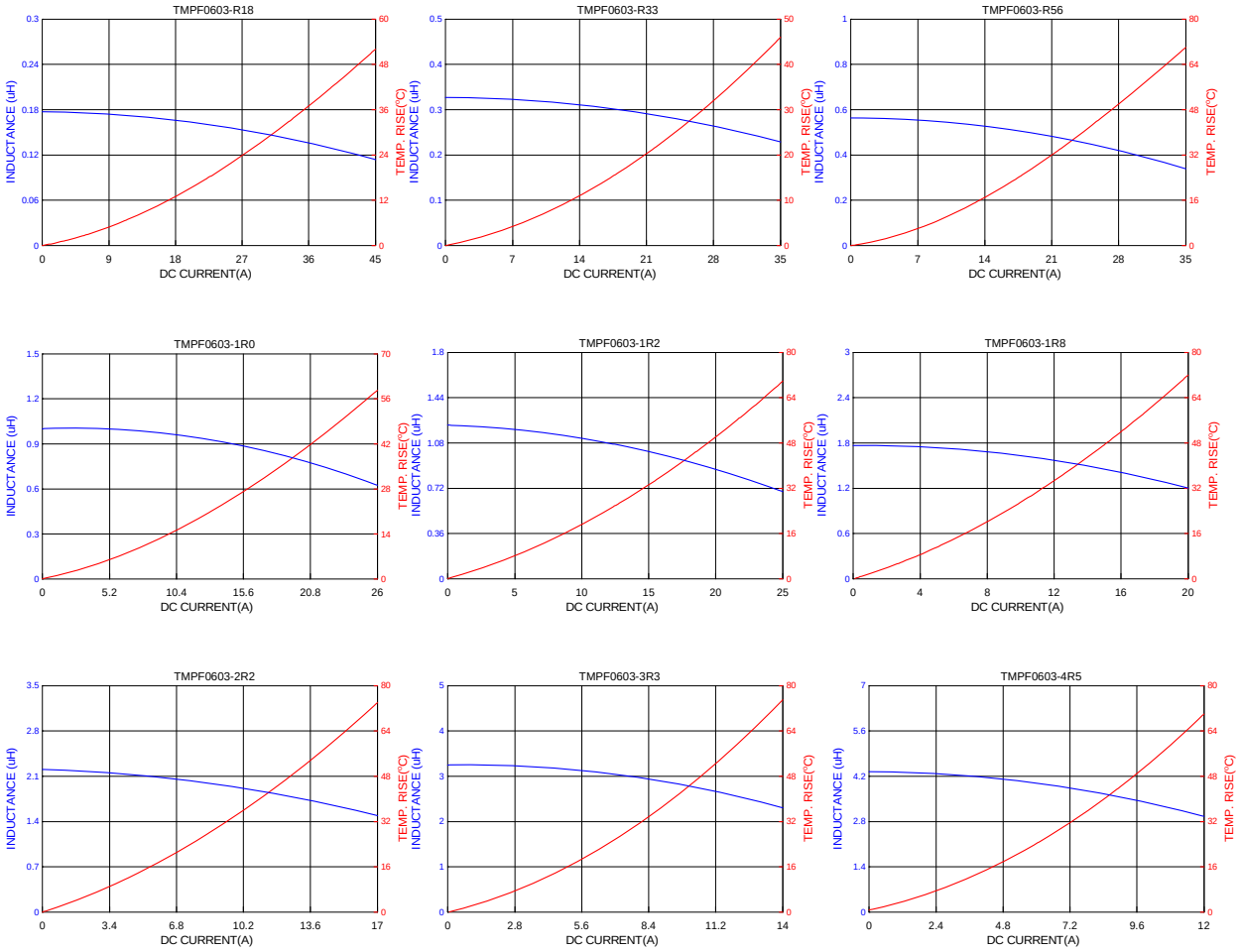
5. Specification

Part Number	Inductance(uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)		DCR (mΩ) Typ.	DCR (mΩ) Max.	D(mm) ±0.3
		20℃ rise	40℃ rise	Typ	Max			
TMPF0603A-R18MN-D	0.18	24.0	32.0	40.0	36.0	1.60	1.75	5.30
TMPF0603A-R33MN-D	0.33	20.0	25.0	32.0	28.0	2.25	2.50	5.55
TMPF0603A-R56MN-D	0.56	17.0	22.0	29.0	25.0	3.00	3.31	5.30
TMPF0603A-1R0MN-D	1.00	13.0	18.0	23.0	18.0	5.50	6.05	5.20
TMPF0603A-1R2MN-D	1.20	12.0	16.0	22.0	16.0	6.70	7.40	5.15
TMPF0603A-1R8MN-D	1.80	10.0	14.0	18.2	13.0	9.20	10.2	5.10
TMPF0603A-2R2MN-D	2.20	7.00	10.0	15.9	11.0	11.0	12.2	5.05
TMPF0603A-3R3MN-D	3.30	6.00	8.00	12.2	9.00	18.8	20.8	5.00
TMPF0603A-4R5MN-D	4.50	5.00	7.00	10.0	8.00	23.0	25.3	5.00

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25°C ambient.
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

6. Typical Performance Curves



SMD Power Inductor

TMPF0605A-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.
6. Operating temperature: -40~+125℃(Including self - temperature rise)

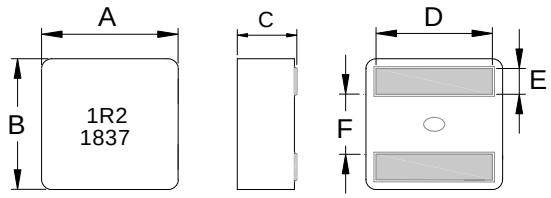
Halogen-free

RoHS

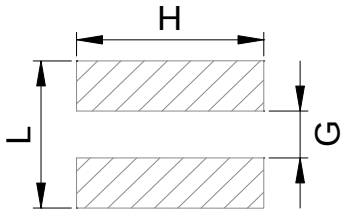
2. Applications

Note PC power system，incl. IMVP-6
DC/DC converter .

3. Dimensions



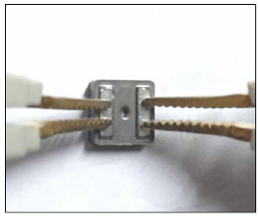
Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
5.6 ref	2.5 ref	5.6 ref

Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.15mm and above.

Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0605A	6.6±0.2	6.4±0.2	4.8±0.2	See Spec table	1.4±0.2	2.6±0.25



DCR Test

4. Part Numbering

TMPF	0605	A	-	1R2	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Material.
D: Inductance — 1R2=1.20uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.1R2 and 1837(18 YY, 37 WW,follow production date).

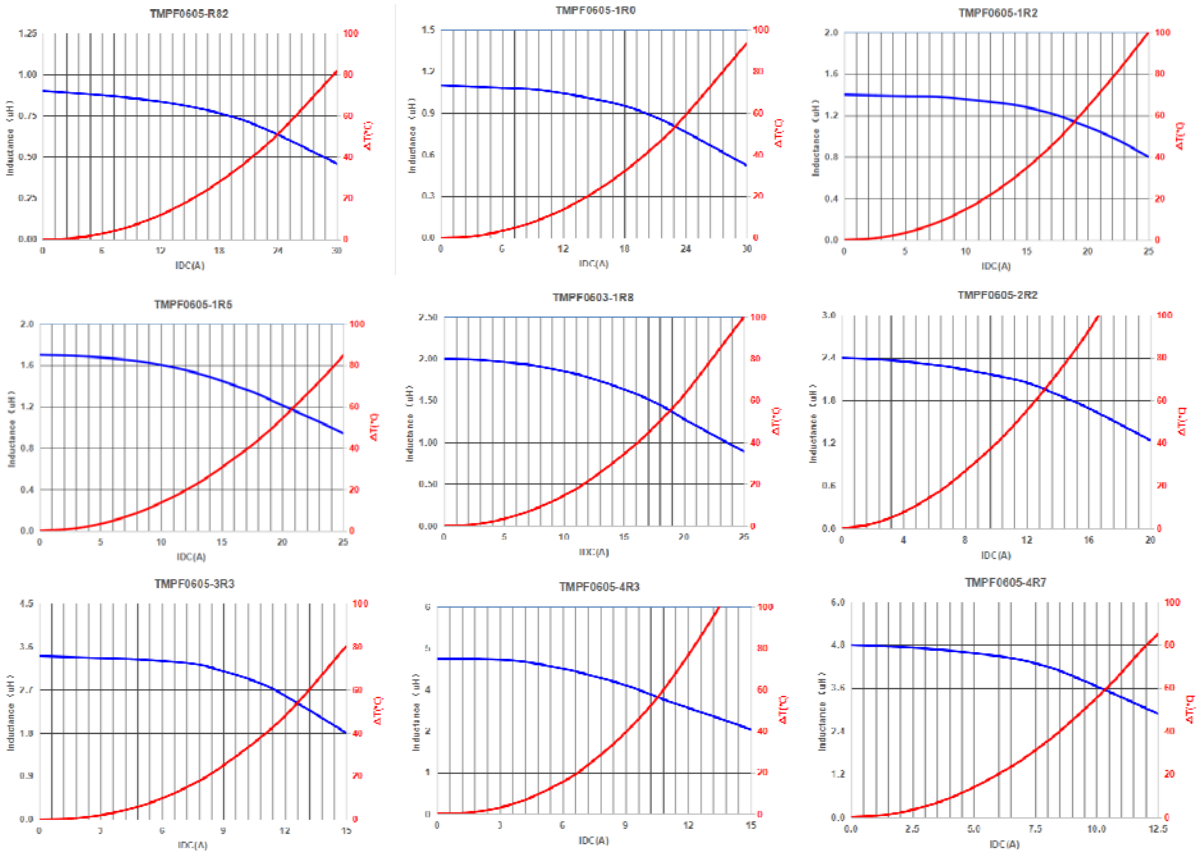
5. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)		DCR (mΩ) Typ.	DCR (mΩ) Max.	D (mm) ±0.3
		20℃ rise	40℃ rise	Typ	Max			
TMPF0605A-R82MN-D	0.82	16	21	24.0	20.0	3.8	4.18	5.3
TMPF0605A-1R0MN-D	1.00	15	20	23.0	18.0	4.1	4.52	5.3
TMPF0605A-1R2MN-D	1.20	14	18	22.0	16.0	5.3	5.83	5.3
TMPF0605A-1R5MN-D	1.50	13	17	19.5	14.5	5.7	6.3	5.3
TMPF0605A-1R8MN-D	1.80	12	16	18.5	13.5	6.4	7.1	5.3
TMPF0605A-2R2MN-D	2.20	10	13	16.0	12.0	7.7	8.5	5.2
TMPF0605A-3R3MN-D	3.30	8.5	11	12.5	10.0	11.2	12.5	5.2
TMPF0605A-4R3MN-D	4.30	7.0	9.0	11.0	8.5	15.1	16.2	5.2
TMPF0605A-4R7MN-D	4.70	6.5	8.5	10.5	8.0	16.7	18.4	5.2

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25℃ ambient.
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.
8. Rated operating voltage(across inductor) 40V ref.

6. Typical Performance Curves



SMD Power Inductor

TMPF0606LR-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.

Halogen-free

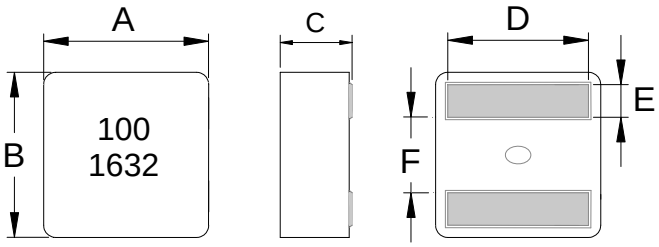
Pb-free

2. Applications

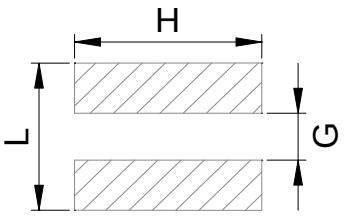
Note PC power system，incl. IMVP-6

DC/DC converter .

3. Dimensions



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
5.6 ref	2.5 ref	5.6 ref

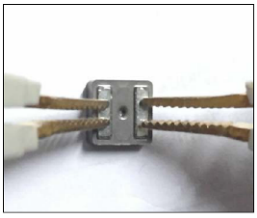
Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.15mm and above.

Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0606LR	6.6±0.2	6.4±0.2	5.8±0.2	5.3±0.3	1.4±0.2	2.6±0.25

4. Part Numbering

TMPF	0606	LR	-	100	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Material.
D: Inductance — 100=10.0uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.100 and 1632(16 YY, 32 WW,follow production date).



DCR Test

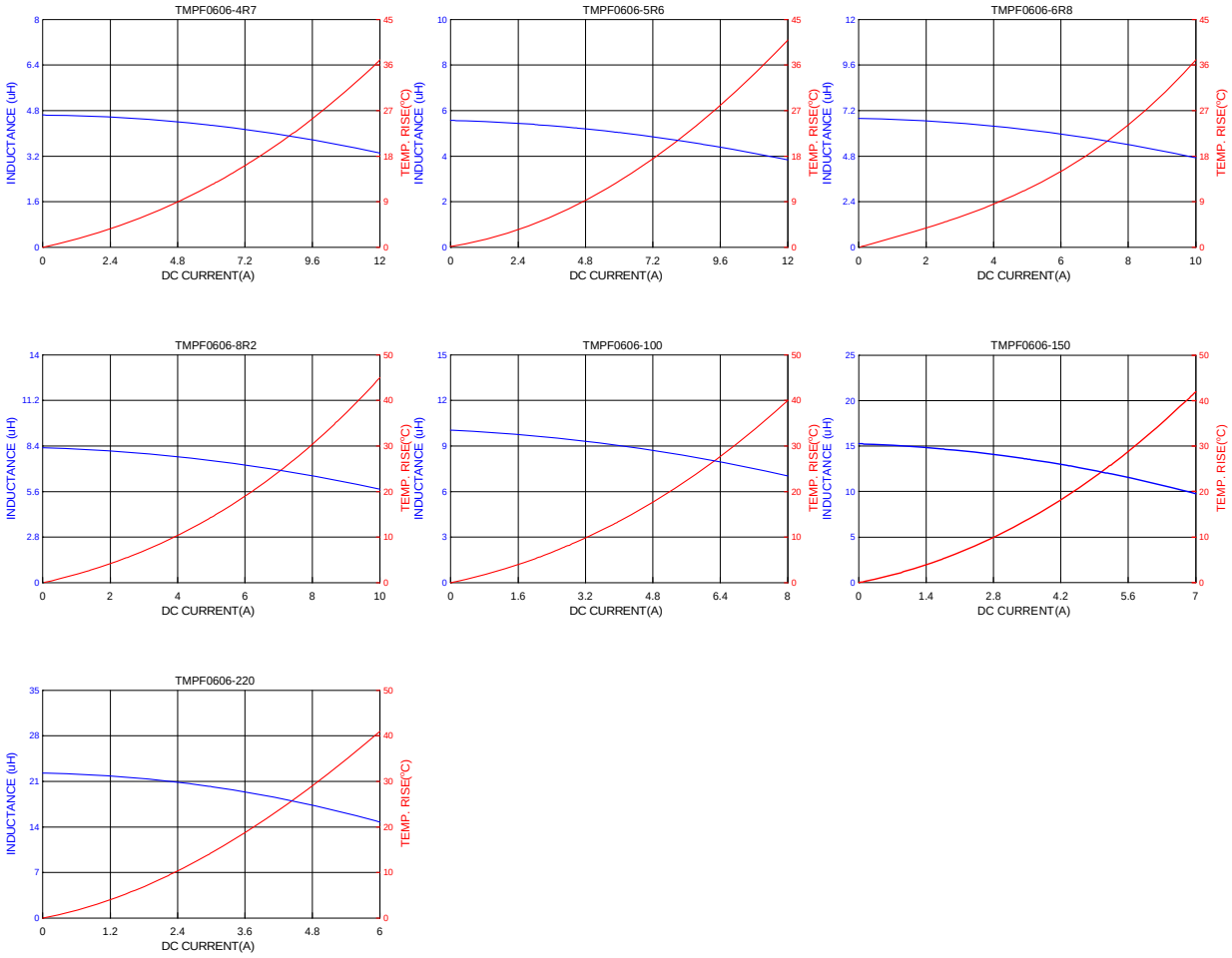
5. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)		DCR (mΩ) Typ.	DCR (mΩ) Max.
		20℃ rise	40℃ rise	Typ	Max		
TMPF0606LR-4R7MN-D	4.70	8.0	11.0	10.5	9.5	13.1	14.4
TMPF0606LR-5R6MN-D	5.60	7.5	10.0	10.0	9.0	14.3	15.8
TMPF0606LR-6R8MN-D	6.80	7.0	9.0	9.2	8.7	18.9	20.8
TMPF0606LR-8R2MN-D	8.20	6.0	8.0	8.5	8.0	22.5	24.8
TMPF0606LR-100MN-D	10.0	5.0	7.0	7.6	6.8	26.6	29.3
TMPF0606LR-150MN-D	15.0	4.5	6.0	5.8	5.2	39.0	43.0
TMPF0606LR-220MN-D	22.0	3.8	5.0	5.6	5.0	55.0	60.5

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25℃ ambient.
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

6. Typical Performance Curves



SMD Power Inductor

TMPF0703A-Series(N)-D

1. Features

1. Soft saturation.
2. High current，low DCR，high efficiency.
3. Very low acoustic noise and very low leakage flux noise.
4. High reliability.
5. 100% Lead(Pb)-Free and RoHS compliant.

Halogen-free

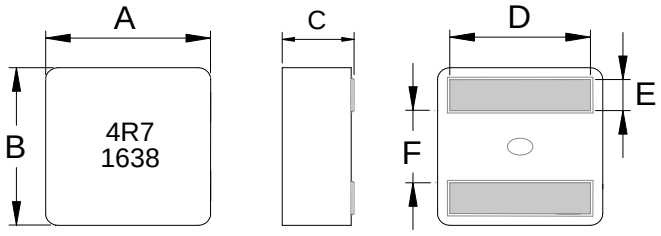
Pb-free

2. Applications

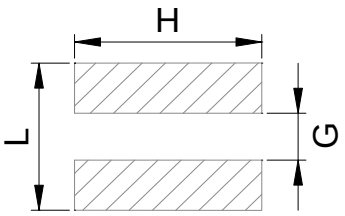
Note PC power system，incl. IMVP-6

DC/DC converter .

3. Dimensions



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
7.4 ref	2.8 ref	7.2 ref

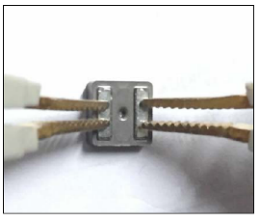
Note: 1、The above PCB layout reference only.
2、Recommend solder paste thickness at 0.15mm and above.

Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TMPF0703A	7.80±0.25	7.60±0.20	2.90±0.2	See Spec Table	1.75±0.2	3.15±0.25

4. Part Numbering

TMPF	0703	A	-	4R7	MN	-	D
A	B	C		D	E		F

A: Series	
B: Dimension	BxC
C: Type	Material.
D: Inductance	4R7=4.70uH
E: Inductance Tolerance	M=±20%
F: Code	Marking: Black.4R7 and 1638(16 YY, 38 WW,follow production date).



DCR Test

5. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms(A) Typ		I sat(A)		DCR (mΩ) Typ.	DCR (mΩ) Max.	D (mm) ±0.3
		20℃ rise	40℃ rise	Typ	Max			
TMPF0703A-R60MN-D	0.60	18.0	23.0	36.0	32.0	2.90	3.20	6.6
TMPF0703A-1R0MN-D	1.00	16.1	21.8	30.0	28.0	4.55	5.00	6.6
TMPF0703A-1R5MN-D	1.50	12.0	15.3	25.0	23.5	7.50	8.25	6.6
TMPF0703A-2R2MN-D	2.20	10.0	13.0	19.0	17.0	12.4	13.7	6.2
TMPF0703A-3R3MN-D	3.30	8.00	10.0	15.0	13.0	16.3	18.0	6.2
TMPF0703A-4R7MN-D	4.70	6.90	9.00	13.5	12.2	24.2	26.7	6.2
TMPF0703A-5R6MN-D	5.60	5.30	7.30	12.5	11.5	30.1	33.2	6.2
TMPF0703A-6R8MN-D	6.80	4.50	6.80	12.0	11.0	38.6	42.5	6.2
TMPF0703A-8R2MN-D	8.20	3.00	5.90	10.2	9.0	44.3	48.73	6.2

Note:

1. Test frequency : L : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L: HP4284A,HP4395A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER,or EQU.
4. Current that causes the specified temperature rise from 25℃ ambient.
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

6.Typical Performance Curves