

SMD Power Inductor TMHC0503SV-series(N)-D

1. Features

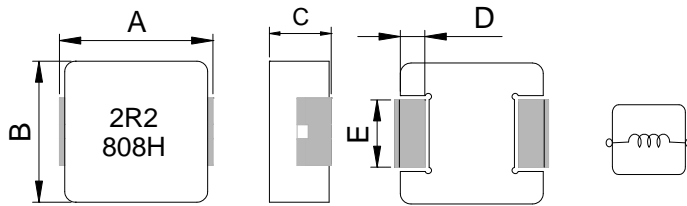
1. Shielded construction.
2. Capable of corresponding high frequency.
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. High reliability -Reliability test complied to AEC-Q200
8. Operating temperature:-55~+155°C (Including self - temperature rise)



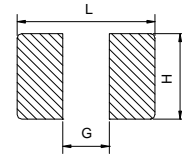
2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

3. Dimensions



Recommend PC Board Pattern



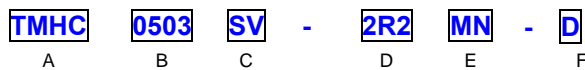
Series	A	A'	B	C	D	E	T
TMHC0503	5.7±0.3	5.2±0.3	5.2±0.2	2.8±0.2	1.0±0.3	2.0±0.2	0~0.15

Unit: mm

L(mm)	G(mm)	H(mm)
8.0	3.7	3.4

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

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Code
- BxC
- Standard. V : Vehicle
- 2R2=2.2uH
- M=±20%
- Marking: Black.2R2 and 808H (YY:2018(8),2019(9),2020(0)...WW:48, follow production date, H:P/N).

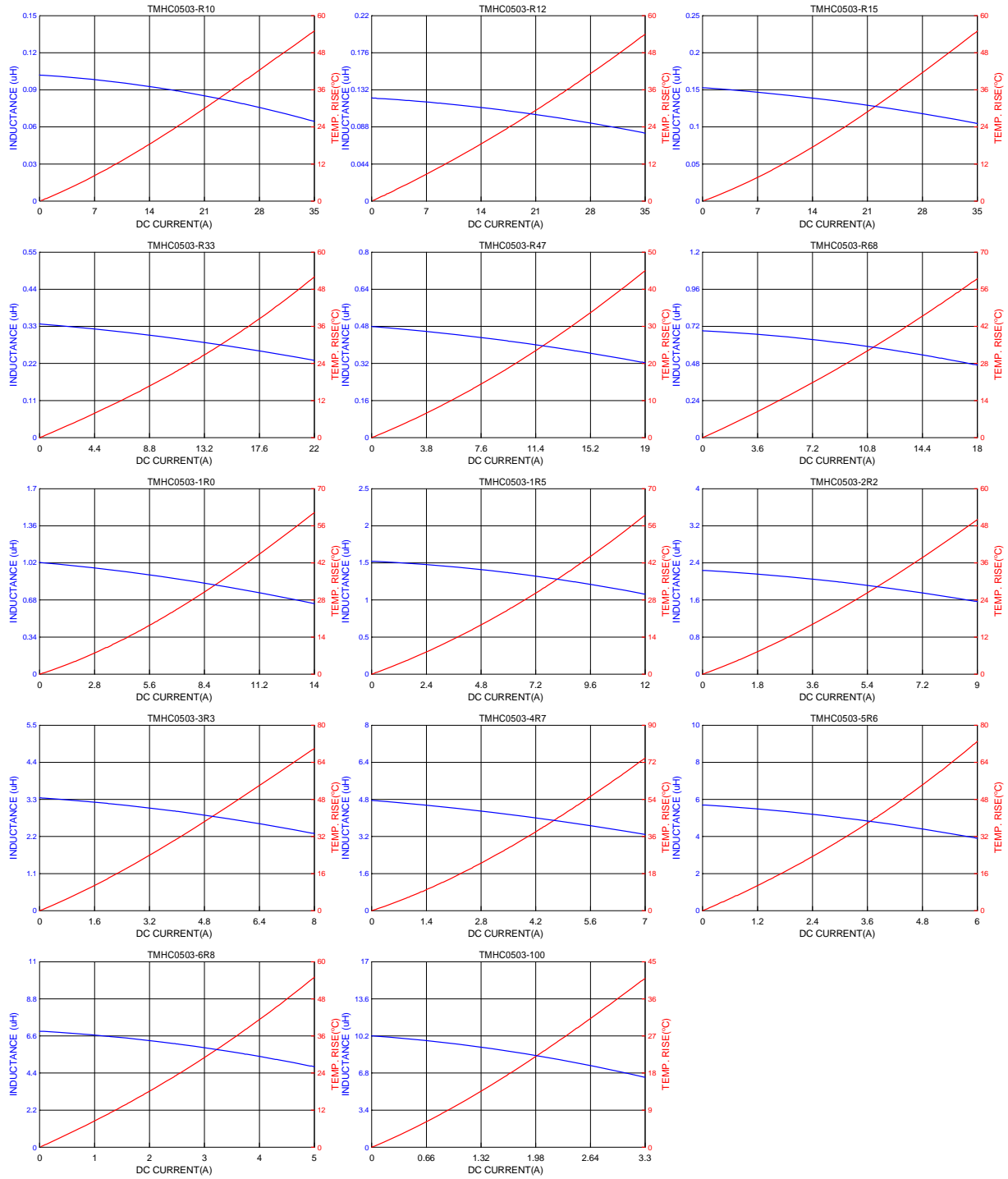
5. Specification

Part Number	Inductance L0 A(μH) ±20%	Heat Rating Current DC (A)I rms.		Saturation Current DC (A)I sat.		DCR (mΩ)Typ.	DCR (mΩ)Max.
		Typ	Max	Typ	Max		
TMHC0503SV-R10YN-D	0.10±30%	25.0	22.0	33	29	2.5	3.0
TMHC0503SV-R12YN-D	0.12±30%	23.0	20.0	31	28	2.5	3.0
TMHC0503SV-R15YN-D	0.15±30%	22.0	19.0	30	27	2.6	3.2
TMHC0503SV-R33MN-D	0.33	17.0	15.0	20	17	4.4	5.0
TMHC0503SV-R47MN-D	0.47	16.0	14.0	17	15	6.4	7.4
TMHC0503SV-R68MN-D	0.68	12.0	10.0	15	14	8.7	10
TMHC0503SV-1R0MN-D	1.00	10.0	9.0	12	11	12	14
TMHC0503SV-1R5MN-D	1.50	8.0	7.0	10.5	9.5	16	19
TMHC0503SV-2R2MN-D	2.20	7.0	6.0	8.0	7.0	26	32
TMHC0503SV-3R3MN-D	3.30	5.0	4.2	7.0	6.0	33	38
TMHC0503SV-4R7MN-D	4.70	4.0	3.5	6.0	5.0	50	53
TMHC0503SV-5R6MN-D	5.60	3.6	3.1	5.0	4.5	55	63
TMHC0503SV-6R8MN-D	6.80	3.3	2.8	4.0	3.5	63	72
TMHC0503SV-100MN-D	10.0	2.8	2.2	2.8	2.2	102	122

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155°C 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 TMHC0603CPV-series(N)-D

1. Features

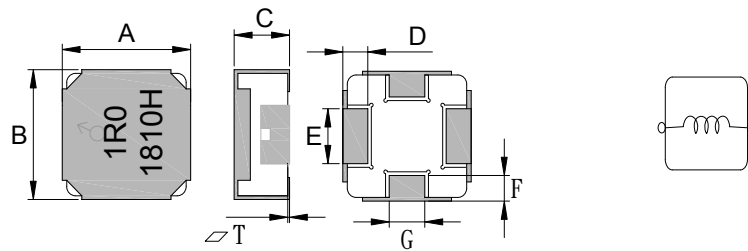
1. Shielded construction.
2. Capable of corresponding high frequency.
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. High reliability -Reliability test complied to AEC-Q200
8. Operating temperature:-55~+155°C (Including self - temperature rise)



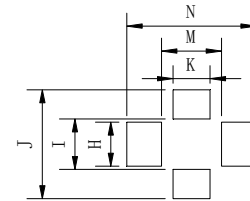
2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

3. Dimensions



Recommend PC Board Pattern



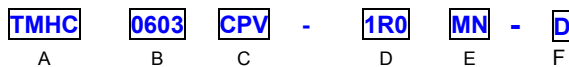
Series	A	B	C	D	E	F	G	T
TMHC0603CPV	7.2±0.3	7.2±0.3	3.2±0.3	1.4±0.3	3.0±0.2	1.4±0.3	2.1±0.2	0~0.2

N(mm)	M(mm)	K(mm)	J(mm)	I(mm)	H(mm)
8.4	3.9	2.4	8.4	3.9	3.4

Unit: mm. T: Coplanarity of the 4 terminals ≤0.10mm

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

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Code
- G: D/C
- BxC
- Standard. V: Vehicle
- 1R0=1.0uH
- M=±20%

Marking: Black.1R0 and 1810 (18:YY, 10:WW, follow production date).

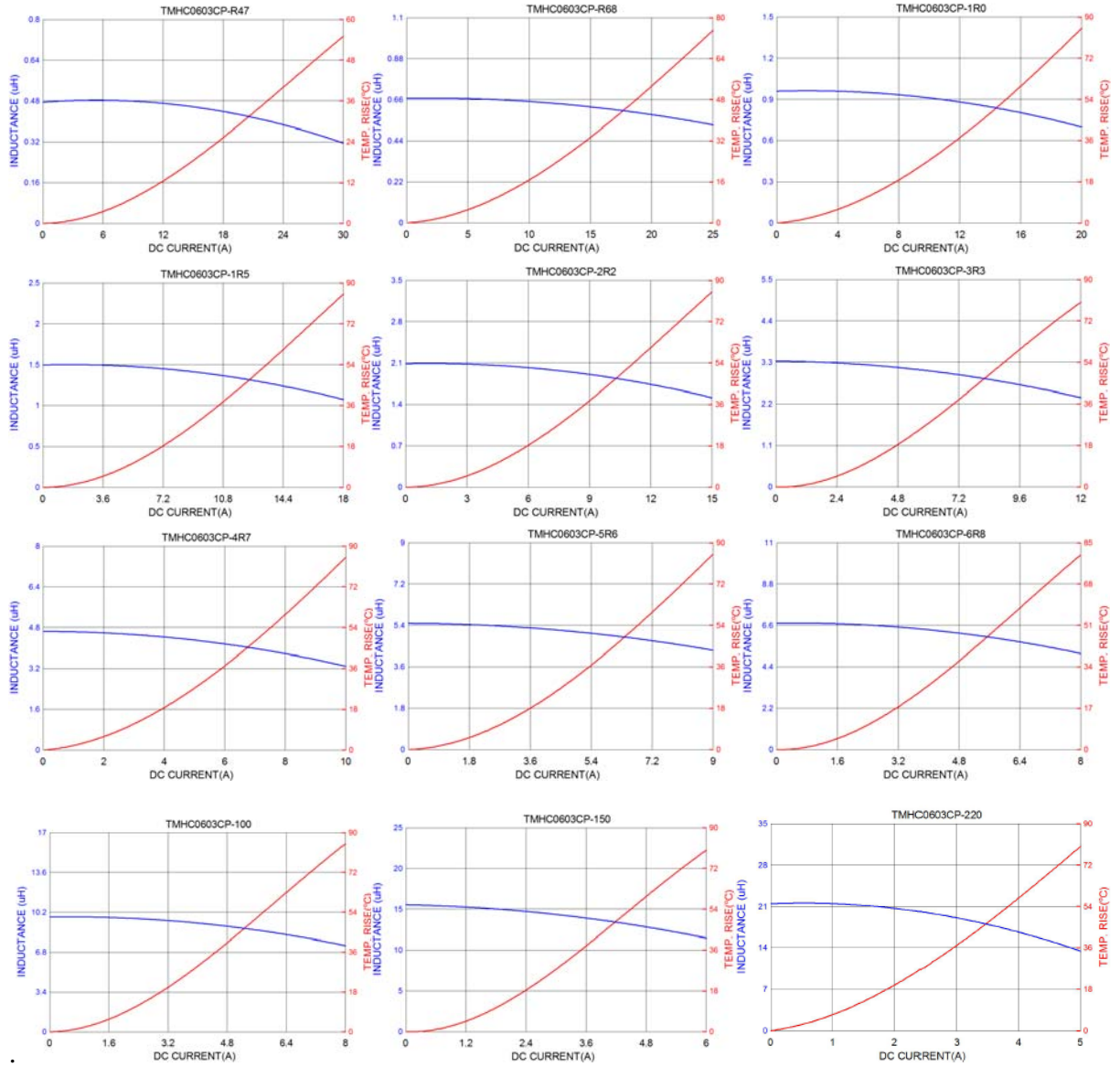
5. Specification

Part Number	Inductance L0 A(μ H) $\pm 20\%$	Heat Rating Current DC I _{rms} (A).		Saturation Current DC I _{sat} (A).		DCR (m Ω) Typ.	DCR (m Ω) Max.
		Typ	Max	Typ	Max		
TMHC0603CPV-R47MN-D	0.47	20	17	20	17	3.87	4.14
TMHC0603CPV-R68MN-D	0.68	17	15	19	16	5.00	5.50
TMHC0603CPV-1R0MN-D	1.00	13	11	18	15	7.00	8.00
TMHC0603CPV-1R5MN-D	1.50	10.8	9.5	15	13	11.0	13.2
TMHC0603CPV-2R2MN-D	2.20	8.8	7.7	12	10.8	16.3	18.0
TMHC0603CPV-3R3MN-D	3.30	7.3	6.5	11.0	9.5	26.0	28.4
TMHC0603CPV-4R7MN-D	4.70	6.4	5.5	9.0	8.0	35.0	38.4
TMHC0603CPV-5R6MN-D	5.60	5.6	4.8	8.0	7.0	41.6	45.6
TMHC0603CPV-6R8MN-D	6.80	5.0	4.4	7.0	6.0	52.2	57.4
TMHC0603CPV-100MN-D	10.0	4.5	4.0	5.0	4.5	63.0	68.0
TMHC0603CPV-150MN-D	15.0	3.5	3.0	4.0	3.5	105	116
TMHC0603CPV-220MN-D	22.0	3.0	2.6	3.5	3.1	155	171

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25 $^{\circ}$ C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately ΔT of 40 $^{\circ}$ C
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.
6. Rated operating voltage(across inductor) 50V.
7. The part temperature (ambient + temp rise) should not exceed 155 $^{\circ}$ C 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.
8. Special inquiries besides the above common used types can be met on your requirement.

6. Typical Performance Curves



SMD Power Inductor TMHC0603LFV-Series(N)-D

1. Features

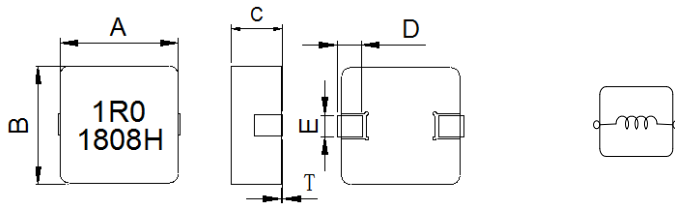
1. Shielded construction.
2. Capable of corresponding high frequency.
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. High reliability -Reliability test complied to AEC-Q200
8. Operating temperature: -55~+155°C (Including self - temperature rise)



2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

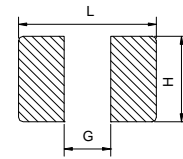
3. Dimensions



Series	A	B	C	D	E	T
TMHC0603	7.1±0.3	6.6±0.2	2.8±0.2	1.6±0.3	1.3±0.2	0~0.4

Unit: mm

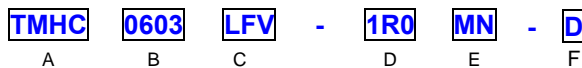
Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
8.0	3.7	1.6

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

4. Part Numbering



- A: Series
 - B: Dimension
 - C: Type
 - D: Inductance
 - E: Inductance Tolerance
 - F: Code
 - G: D/C
- BxC
 - Standard.V :Vehicle
 - 1R0=1.0uH
 - M=±20%
 - Marking: Black.1R0 and 1808 (18:YY,08:WW, follow production date).

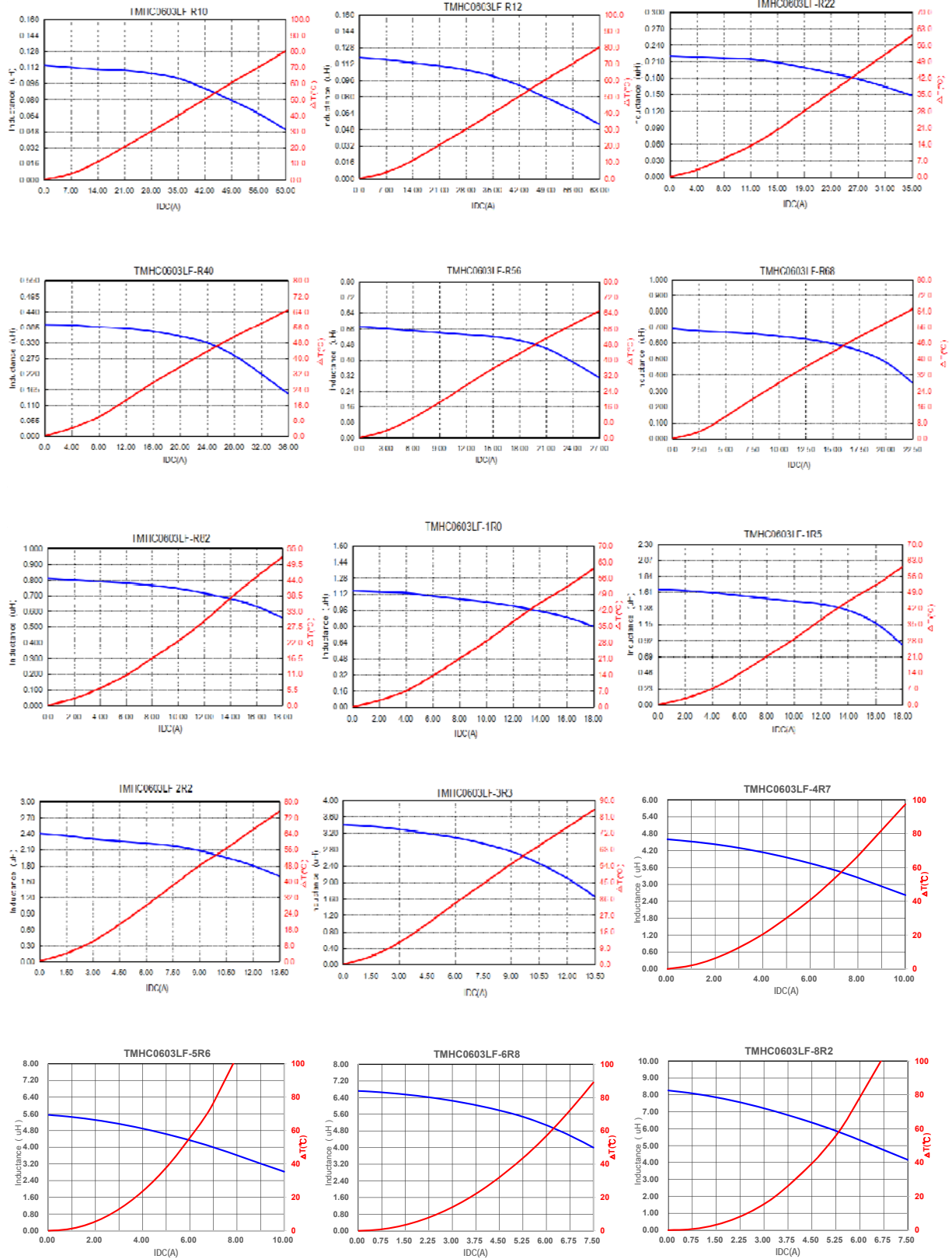
5. Specification

Part Number	Inductance L0 A(μ H) $\pm 20\%$	Heat Rating Current DC I _{rms} (A).		Saturation Current DC I _{sat} (A).		DCR (m Ω) Typ.	DCR (m Ω) Max.
		Typ	Max	Typ	Max		
TMHC0603LFV-R10YN-D	0.10 $\pm 30\%$	32	27	52	47	1.15	1.30
TMHC0603LFV-R12YN-D	0.12 $\pm 30\%$	32	27	52	47	1.15	1.30
TMHC0603LFV-R22MN-D	0.22	24	21	34	30	1.70	1.87
TMHC0603LFV-R40MN-D	0.40	20	18	29	26	2.40	2.64
TMHC0603LFV-R56MN-D	0.56	16	13	23	20	3.10	3.41
TMHC0603LFV-R68MN-D	0.68	15	12	20	18	3.70	4.10
TMHC0603LFV-R82MN-D	0.82	14	11	18	16	4.30	4.80
TMHC0603LFV-1R0MN-D	1.00	12	10	17	15	5.10	5.90
TMHC0603LFV-1R5MN-D	1.50	11	9	16	14	7.60	8.74
TMHC0603LFV-2R2MN-D	2.20	7	6	13	11	11.8	13.6
TMHC0603LFV-3R3MN-D	3.30	6.5	5.5	10	9	20.5	23.6
TMHC0603LFV-4R7MN-D	4.70	5.8	5.1	8.0	7.0	24.0	29.0
TMHC0603LFV-5R6MN-D	5.60	5.2	4.8	7.0	6.0	29.0	35.0
TMHC0603LFV-6R8MN-D	6.80	5.0	4.5	6.5	5.7	38.0	46.0
TMHC0603LFV-8R2MN-D	8.20	4.5	4.2	5.5	5.0	44.0	53.0

Note:

1. Test frequency : Ls : 100KHz / 1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately ΔT of 40°C
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155°C 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 TMHC0603SV-series(N)-D

1. Features

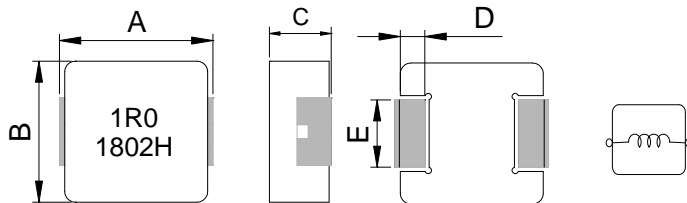
1. Shielded construction.
2. Capable of corresponding high frequency.
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. High reliability -Reliability test complied to AEC-Q200
8. Operating temperature: -55~+155°C (Including self - temperature rise)



2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

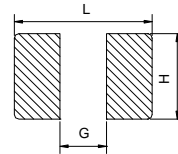
3. Dimensions



Series	A	B	C	D	E
TMHC0603	7.1±0.3	6.6±0.2	2.8±0.2	1.6±0.2	3.0±0.2

Unit: mm

Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
8.0	3.7	3.4

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

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Code
- BxC
- Standard.V : Vehicle
- 1R0=1.0uH
- M=±20%
- Marking: Black.1R0 and 1802H (18:YY, 02:WW, follow production date, H:P/N).

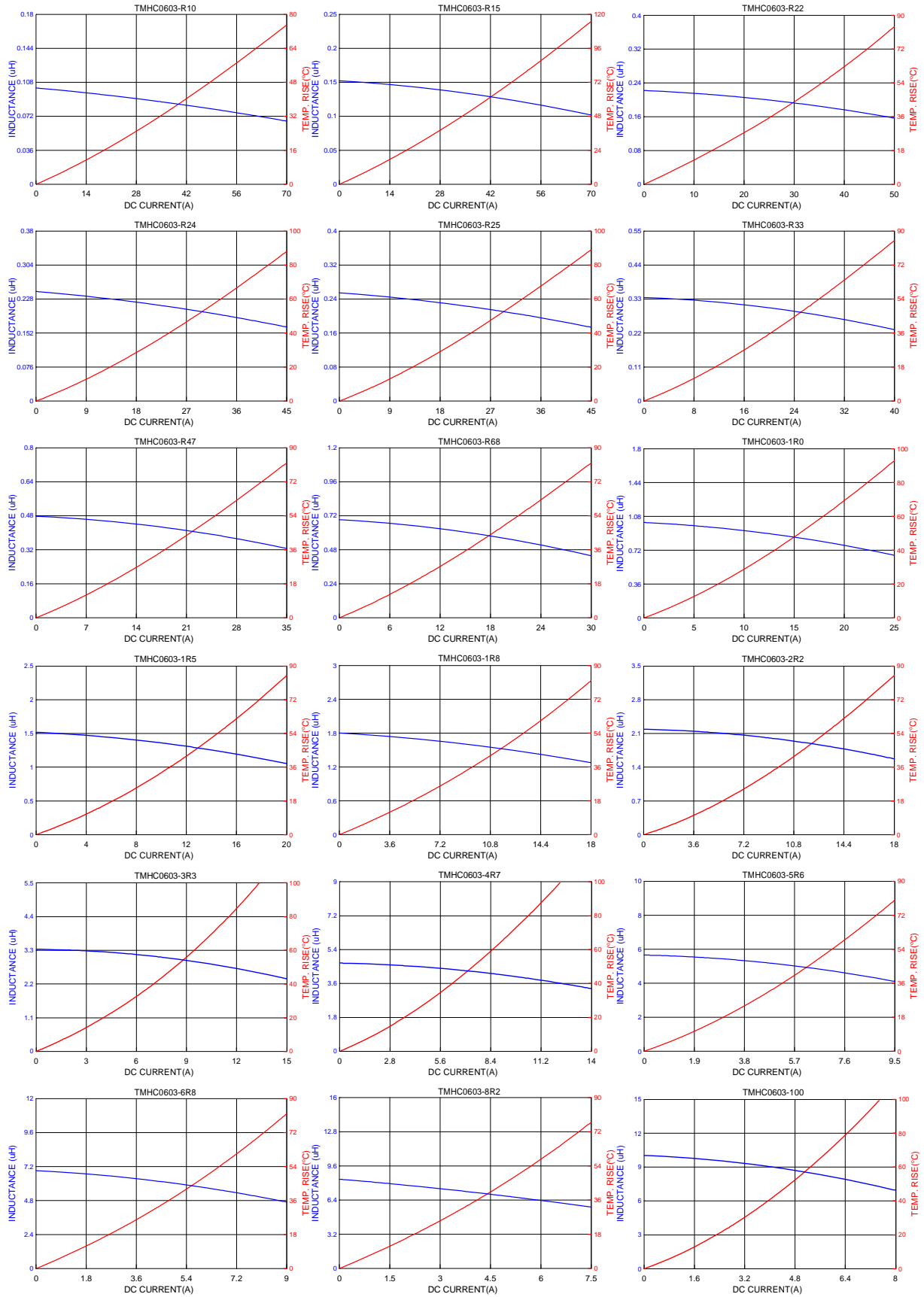
5. Specification

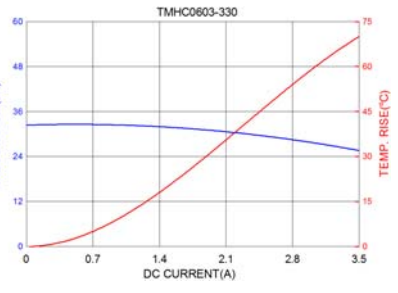
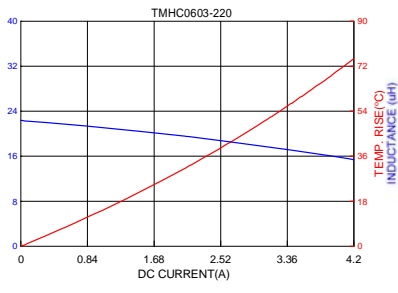
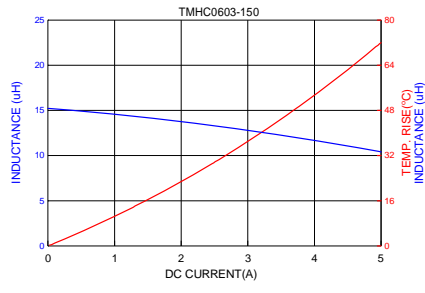
Part Number	Inductance L0 A(μ H) $\pm 20\%$	Heat Rating Current DC I _{rms} (A).		Saturation Current DC I _{sat} (A).		DCR (m Ω) Typ.	DCR (m Ω) Max.
		Typ	Max	Typ	Max		
TMHC0603SV-R10MN-D	0.10	37.5	28.0	60.0	55.0	1.2	1.7
TMHC0603SV-R15MN-D	0.15	27.0	23.0	50.0	45.0	1.5	1.9
TMHC0603SV-R22MN-D	0.22	25.0	21.0	40.0	36.0	2.2	2.6
TMHC0603SV-R24MN-D	0.24	23.0	20.0	39.0	34.0	2.5	3.1
TMHC0603SV-R25MN-D	0.25	23.0	20.0	39.0	34.0	2.5	3.1
TMHC0603SV-R33MN-D	0.33	20.0	17.0	32.0	28.0	3.5	3.9
TMHC0603SV-R47MN-D	0.47	17.5	16.0	27.0	23.0	4.0	4.3
TMHC0603SV-R68MN-D	0.68	15.5	14.0	25.0	22.0	4.8	5.5
TMHC0603SV-1R0MN-D	1.00	11.0	10.0	22.0	19.0	8.3	10
TMHC0603SV-1R5MN-D	1.50	9.0	8.0	18.0	17.0	11	14
TMHC0603SV-1R8MN-D	1.80	8.5	7.5	16.0	15.0	13	16
TMHC0603SV-2R2MN-D	2.20	8.0	7.0	14.0	12.0	15	18
TMHC0603SV-3R3MN-D	3.30	6.0	5.3	13.5	11.5	27	30
TMHC0603SV-4R7MN-D	4.70	5.5	4.9	10.0	8.5	37	40
TMHC0603SV-5R6MN-D	5.60	5.0	4.5	8.5	7.5	42	48
TMHC0603SV-6R8MN-D	6.80	4.5	4.0	8.3	7.0	54	60
TMHC0603SV-8R2MN-D	8.20	4.1	3.6	6.8	5.5	60	66
TMHC0603SV-100MN-D	10.0	3.5	3.1	6.0	5.0	63	68
TMHC0603SV-150MN-D	15.0	3.0	2.7	4.0	3.5	107	123
TMHC0603SV-220MN-D	22.0	2.2	1.9	3.6	3.2	155	180
TMHC0603SV-330MN-D	33.0	2.0	1.7	3.0	2.5	200	240

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25 $^{\circ}$ C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately ΔT of 40 $^{\circ}$ C
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155 $^{\circ}$ C 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 TMHC0605SV-Series(N)-D

1. Features

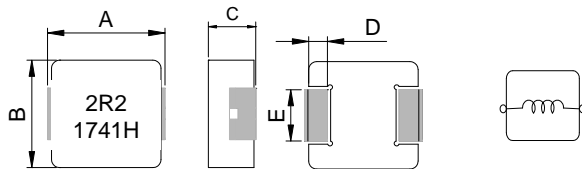
1. Shielded construction.
2. Capable of corresponding high frequency .
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. High reliability -Reliability test complied to AEC-Q200
8. Operating temperature: -55--+155°C (Including self - temperature rise)



2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

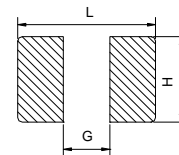
3. Dimensions



Series	A	B	C	D	E
TMHC0605	7.3±0.3	6.6±0.3	4.8±0.2	1.6±0.3	3.0±0.2

Unit: mm

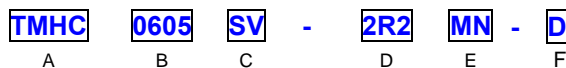
Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
8.0	3.5	3.4

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

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Code
- BxC
- Standard,V : Vehicle.
- 2R2=2.20uH
- M=±20%
- Marking: Black.2R2 and 1741H (17:YY, 41:WW, follow production date, H:P/N).

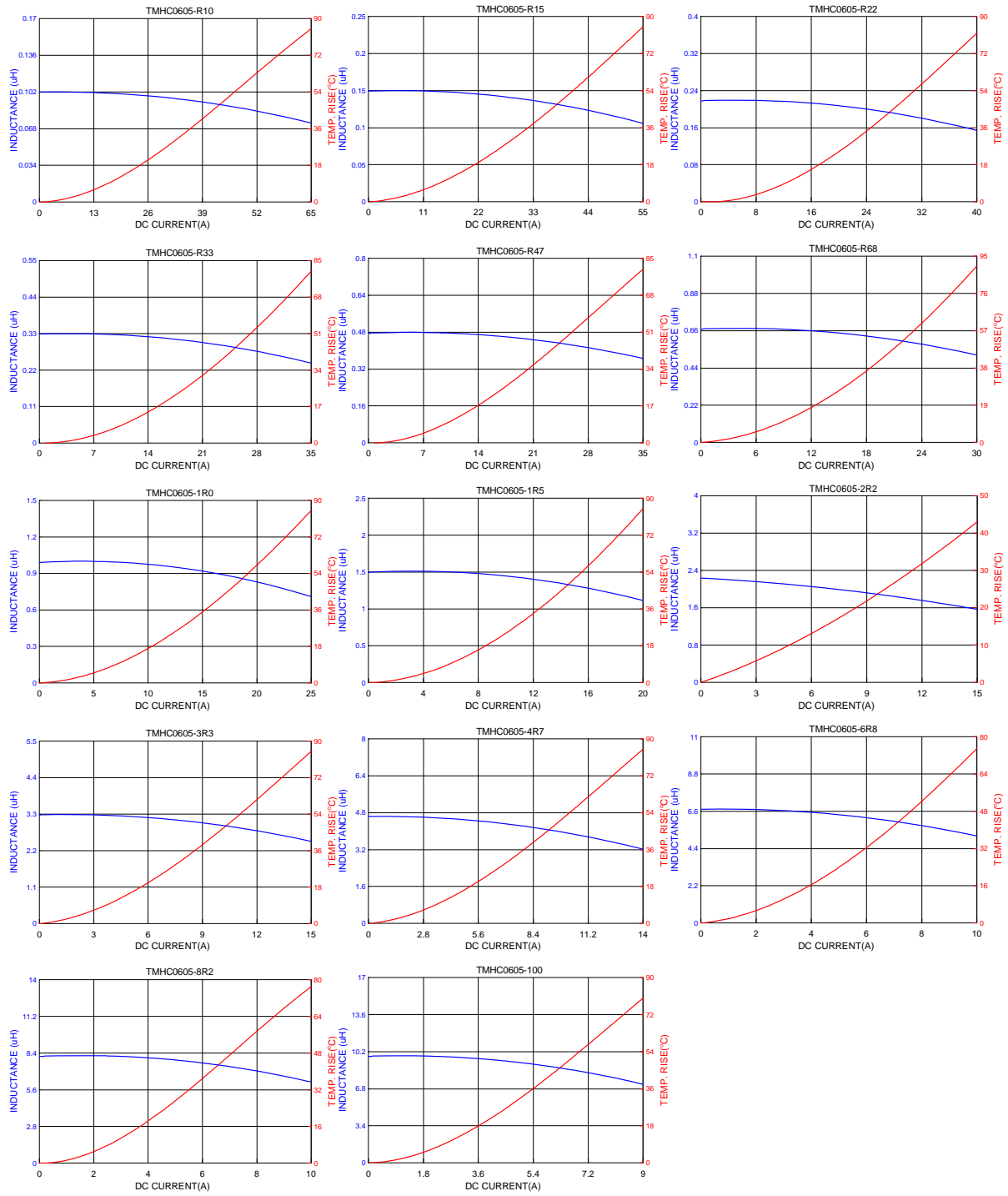
5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC I _{rms} (A).		Saturation Current DC I _{sat} (A).		DCR (mΩ) Typ.	DCR (mΩ) Max.
		Typ	Max	Typ	Max		
TMHC0605SV-R10YN-D	0.10±30%	32	28	65	60	1.05	1.20
TMHC0605SV-R15YN-D	0.15±30%	30	27	55	50	1.30	1.70
TMHC0605SV-R22MN-D	0.22	26	23	40	35	1.60	1.90
TMHC0605SV-R33MN-D	0.33	24	21	35	32	2.50	3.00
TMHC0605SV-R47MN-D	0.47	22	20	30	27	3.20	3.70
TMHC0605SV-R68MN-D	0.68	18	16	25	22	4.00	4.50
TMHC0605SV-1R0MN-D	1.00	16	14	18	15	5.60	6.20
TMHC0605SV-1R5MN-D	1.50	14	12	16	14	7.60	8.50
TMHC0605SV-2R2MN-D	2.20	13	11	13	11	11.2	12.0
TMHC0605SV-3R3MN-D	3.30	8.5	7.5	12	10	19.0	20.9
TMHC0605SV-4R7MN-D	4.70	8.0	6.5	9.5	8.0	26.5	30.0
TMHC0605SV-6R8MN-D	6.80	6.5	5.5	8.5	7.0	42.0	48.0
TMHC0605SV-8R2MN-D	8.20	6.0	5.0	7.5	6.5	49.0	56.0
TMHC0605SV-100MN-D	10.0	5.5	4.5	7.0	6.0	52.0	60.0

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately Δ T of 40°C
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155°C 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 TMHC1004SV-Series(N)-D

1. Features

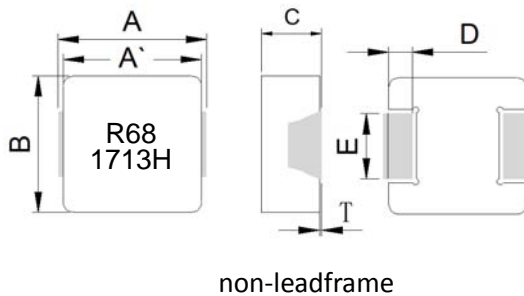
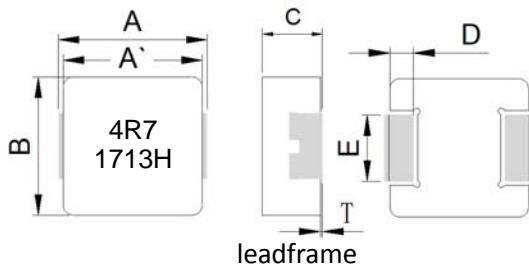
1. Shielded construction.
2. Capable of corresponding high frequency.
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. High reliability -Reliability test complied to AEC-Q200
8. Operating temperature: -55~+155°C (Including self - temperature rise)



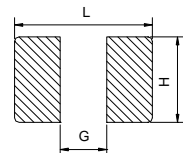
2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

3. Dimensions



Recommend PC Board Pattern



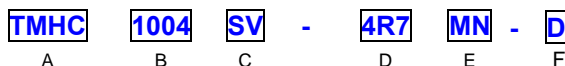
Series	A	A'	B	C	D	T	E	Inductance
TMHC1004	11.0±0.3	10.0±0.3	10.0±0.3	3.8±0.2	2.0±0.3	0~0.2	2.5±0.3	0.68uH
							3.0±0.3	0.56uH and below 1.00uH and above

L(mm)	G(mm)	H(mm)
12.5	5.4	3.5

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

Unit: mm

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Code
- BxC
- Standard ,V :Vehicle
- 4R7=4.70uH
- M=±20%
- Marking: Black.4R7 and 1713H (17:YY, 13:WW, follow production date, H:P/N).

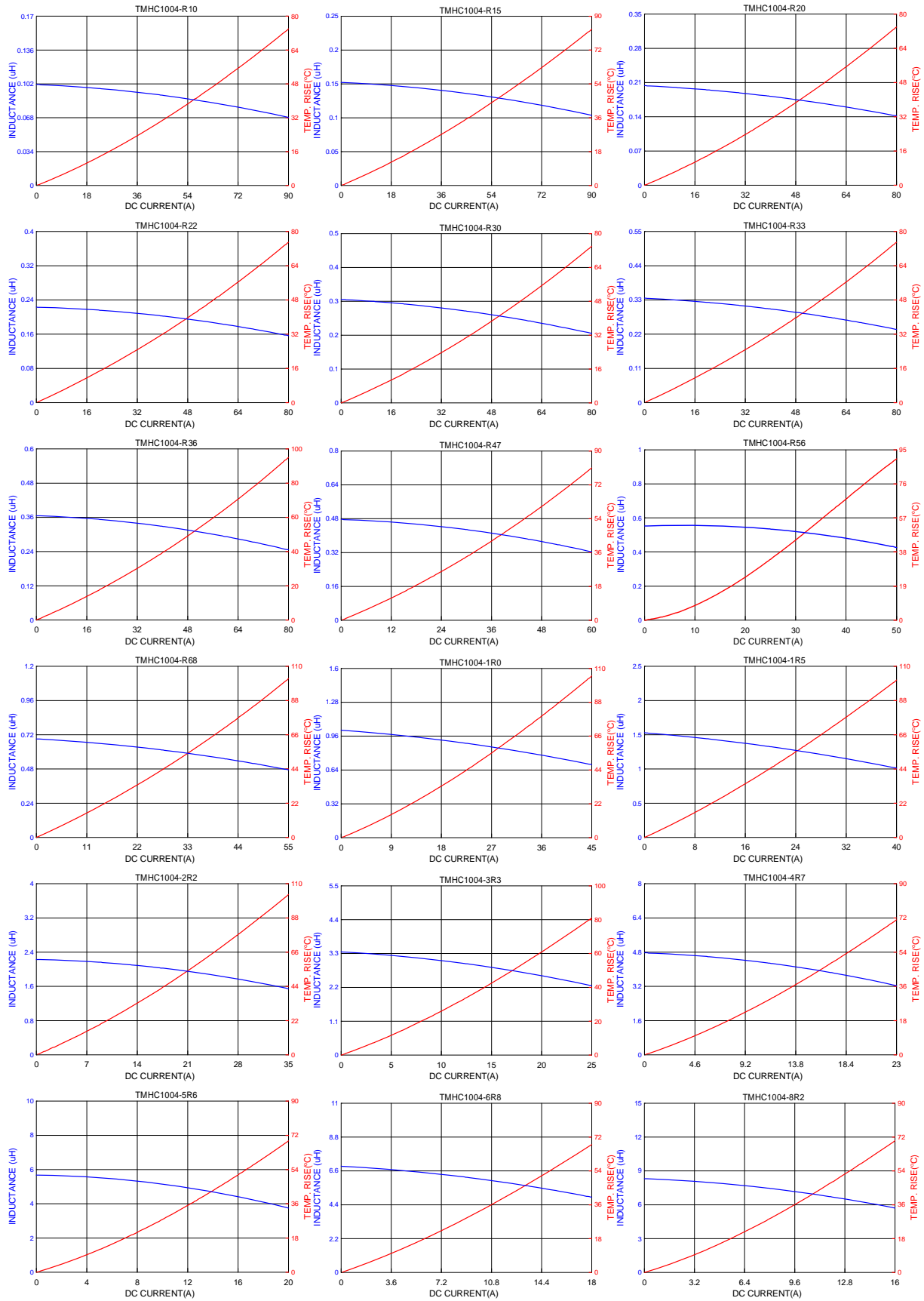
5. Specification

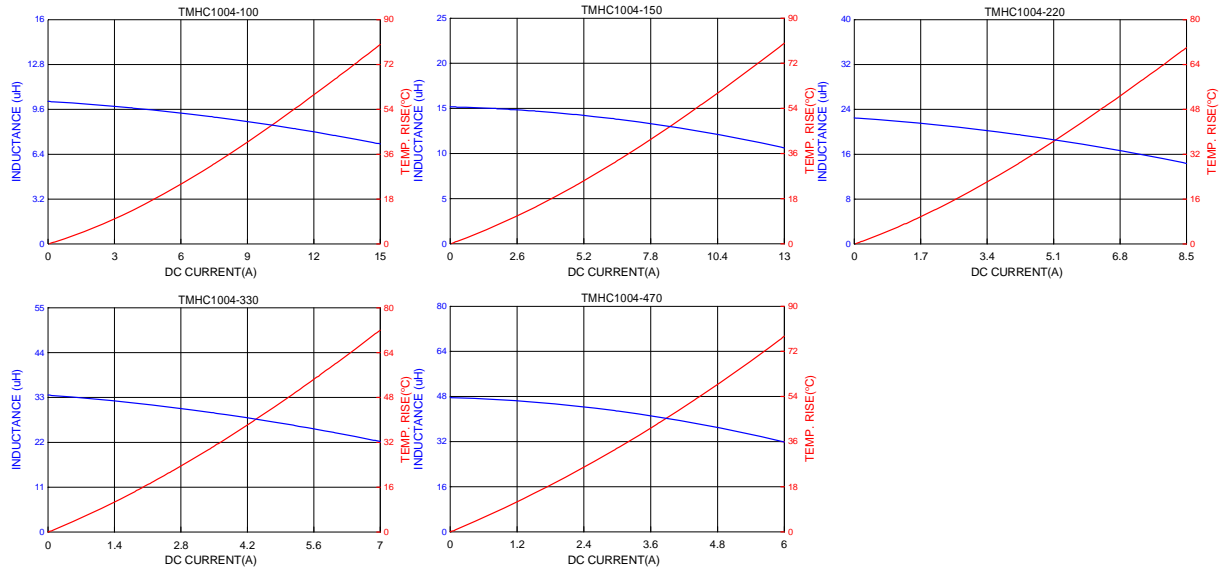
Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC I rms.(A)		Saturation Current DC I sat. (A)		DCR (mΩ)Typ	DCR (mΩ)Max	Type
		Typ	Max	Typ	Max			
TMHC1004VS-R10YN-D	0.10±30%	53.0	47.0	85.0	80.0	0.32	0.38	non-leadframe
TMHC1004SV-R15MN-D	0.15	45.0	40.0	80.0	70.0	0.50	0.60	non-leadframe
TMHC1004SV-R20MN-D	0.20	40.0	37.0	75.0	65.0	0.80	1.00	non-leadframe
TMHC1004SV-R22MN-D	0.22	40.0	37.0	75.0	65.0	0.80	1.00	non-leadframe
TMHC1004SV-R30MN-D	0.30	38.0	35.0	70.0	60.0	1.00	1.20	non-leadframe
TMHC1004SV-R33MN-D	0.33	38.0	35.0	70.0	60.0	1.00	1.20	non-leadframe
TMHC1004SV-R36MN-D	0.36	36.0	33.0	60.0	52.0	1.05	1.20	non-leadframe
TMHC1004SV-R47MN-D	0.47	31.0	28.0	48.0	43.0	1.30	1.50	non-leadframe
TMHC1004SV-R56MN-D	0.56	27.0	25.0	46.0	41.0	1.60	1.80	non-leadframe
TMHC1004SV-R68MN-D	0.68	24.0	22.0	45.0	40.0	2.30	2.70	non-leadframe
TMHC1004SV-1R0MN-D	1.00	20.0	18.0	39.0	36.0	3.50	4.00	leadframe
TMHC1004SV-1R5MN-D	1.50	18.0	16.0	35.0	33.0	4.70	5.30	leadframe
TMHC1004SV-2R2MN-D	2.20	15.0	13.0	27.0	24.0	6.50	7.20	leadframe
TMHC1004SV-3R3MN-D	3.30	14.0	11.0	22.0	19.0	10.8	11.8	leadframe
TMHC1004SV-4R7MN-D	4.70	13.0	10.5	20.0	18.0	14.5	15.5	leadframe
TMHC1004SV-5R6MN-D	5.60	12.0	10.0	16.0	14.0	18.0	19.3	leadframe
TMHC1004SV-6R8MN-D	6.80	10.0	9.00	15.0	13.5	19.0	23.3	leadframe
TMHC1004SV-8R2MN-D	8.20	9.00	8.00	13.5	12.5	20.0	22.5	leadframe
TMHC1004SV-100MN-D	10.0	8.50	7.50	12.5	11.0	29.0	32.0	leadframe
TMHC1004SV-150MN-D	15.0	6.30	6.00	10.0	8.00	40.0	45.0	leadframe
TMHC1004SV-220MN-D	22.0	5.20	4.60	7.50	6.50	62.0	74.0	leadframe
TMHC1004SV-330MN-D	33.0	4.00	3.50	6.00	5.00	94.0	112	leadframe
TMHC1004SV-470MN-D	47.0	3.20	2.70	5.00	4.50	145	167	leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I rms) will cause the coil temperature rise approximately ΔT of 40°C
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155°C 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 TMHC1205SPV-Series(N)-D

1. Features

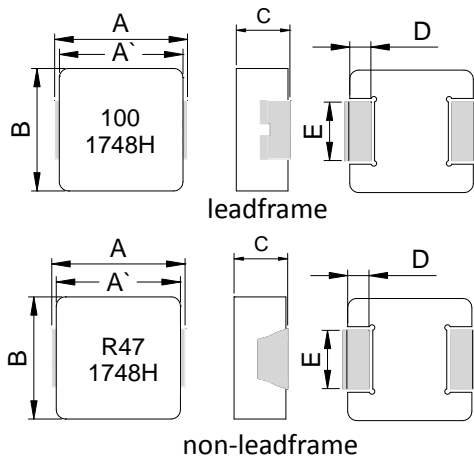
1. Shielded construction.
2. Capable of corresponding high frequency .
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. Operating temperature: -55~+155°C (Including self - temperature rise)



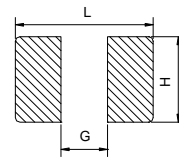
2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

3. Dimensions



Recommend PC Board Pattern



Series	A	A'	B	C	D	E	Inductance
TMHC1205	13.5±0.5	12.6±0.3	12.6±0.2	4.7±0.3	2.3±0.3	4.0±0.3	0.47uH~0.68uH
						4.7±0.3	0.36uH and below 1.00uH and above

L(mm)	G(mm)	H(mm)
14.5	8.0	5.0

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

Unit: mm

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Code
- BxC.
- Standard, V :Vehicle
- 100=10uH
- M=±20%
- Marking: Black.100and 1748H (17:YY, 48:WW, follow production date, H:P/N).

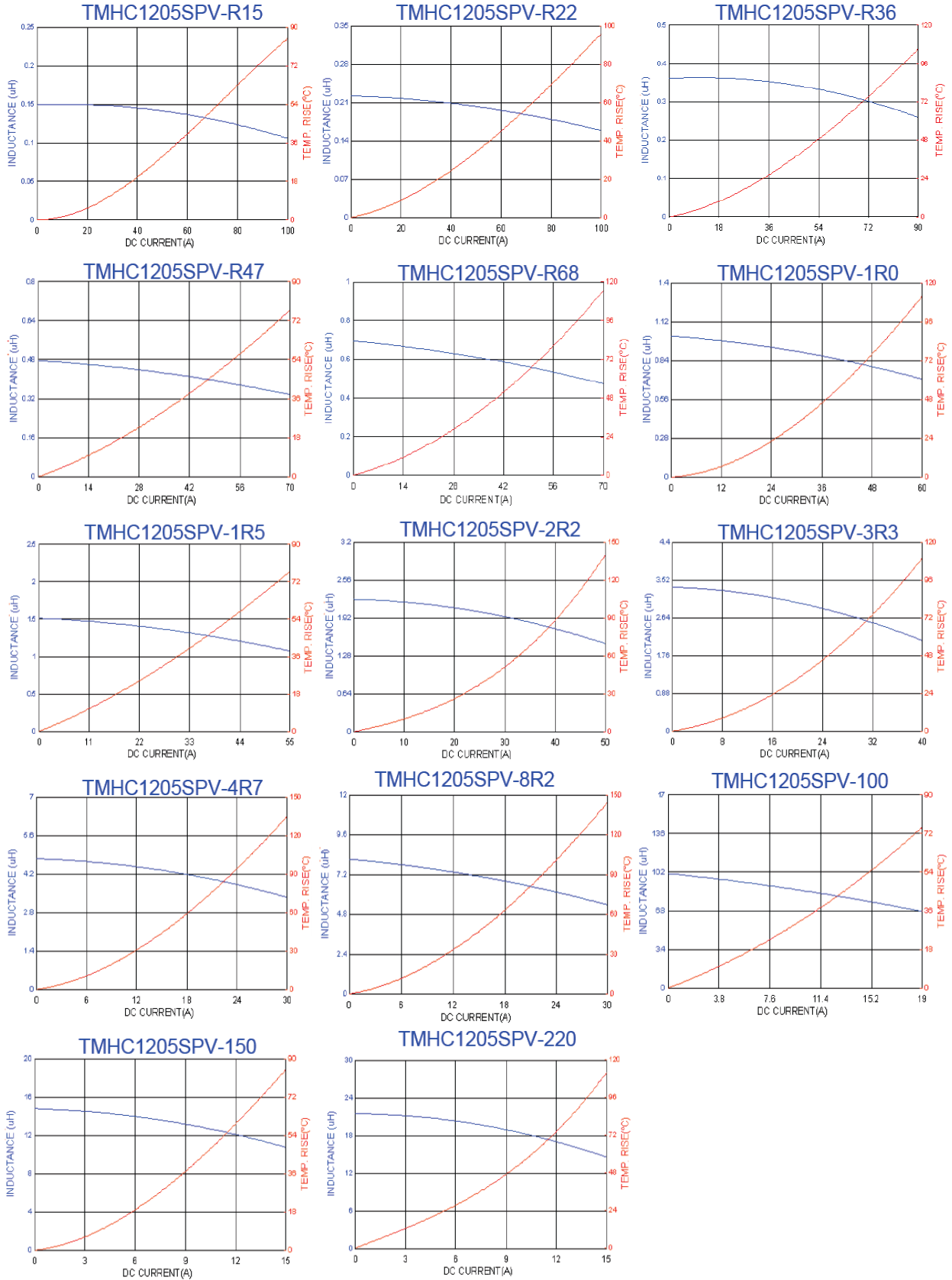
5. Specification

Part Number	Inductance L0 A(μ H) $\pm 20\%$	Heat Rating Current DC (A) I rms.		Saturation Current DC (A) I sat.		DCR (m Ω) Typ	DCR (m Ω) Max	Type
		Typ	Max	Typ	Max			
TMHC1205SPV-R15YN-D	0.15 $\pm 30\%$	55	50	100	90	0.36	0.41	non-leadframe
TMHC1205SPV-R22MN-D	0.22	48	42	95	85	0.50	0.55	non-leadframe
TMHC1205SPV-R36MN-D	0.36	41	37	80	70	0.75	0.83	non-leadframe
TMHC1205SPV-R47MN-D	0.47	38	35	65	60	0.96	1.15	non-leadframe
TMHC1205SPV-R68MN-D	0.68	32	28	54	50	1.40	1.60	non-leadframe
TMHC1205SPV-1R0MN-D	1.00	30	26	50	46	2.00	2.40	leadframe
TMHC1205SPV-1R5MN-D	1.50	27	23	48	44	3.00	3.50	leadframe
TMHC1205SPV-2R2MN-D	2.20	25	22	40	35	4.30	5.00	leadframe
TMHC1205SPV-3R3MN-D	3.30	20	16	32	28	7.30	8.40	leadframe
TMHC1205SPV-4R7MN-D	4.70	14	12	27	24	11.4	15.0	leadframe
TMHC1205SPV-6R8MN-D	6.80	12	10	23	20	14.5	16.7	leadframe
TMHC1205SPV-8R2MN-D	8.20	11.5	9.5	20	18	18.6	21.5	leadframe
TMHC1205SPV-100MN-D	10.0	11.0	9.0	17	15	21.4	25.5	leadframe
TMHC1205SPV-150MN-D	15.0	9.0	8.0	13	11	32.6	38.0	leadframe
TMHC1205SPV-220MN-D	22.0	7.5	6.5	11	10	50.0	58.0	leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25 $^{\circ}$ C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I rms) will cause the coil temperature rise approximately ΔT of 40 $^{\circ}$ C
5. Saturation Current (I sat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155 $^{\circ}$ C 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 TMHC1265SPV-Series(N)-D

1. Features

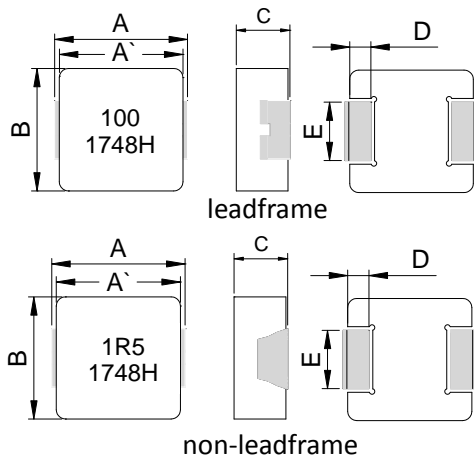
1. Shielded construction.
2. Capable of corresponding high frequency .
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. Operating temperature: -55~+155°C (Including self - temperature rise)



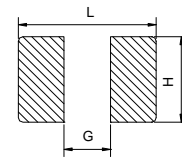
2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

3. Dimensions



Recommend PC Board Pattern



Series	A	A'	B	C	D	E	Inductance
TMHC1265	13.5±0.5	12.6±0.3	12.6±0.2	6.2±0.3	2.3±0.3	4.0±0.3	1.00~1.50uH among
						4.7±0.3	0.68uH and below 2.20uH and above

L(mm)	G(mm)	H(mm)
14.5	8.0	5.0

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

Unit: mm

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Code
- BxC.
- Standard, V :Vehicle
- 100=10uH
- M=±20%
- Marking: Black.100and 1748H (17:YY, 48:WW, follow production date, H:P/N).

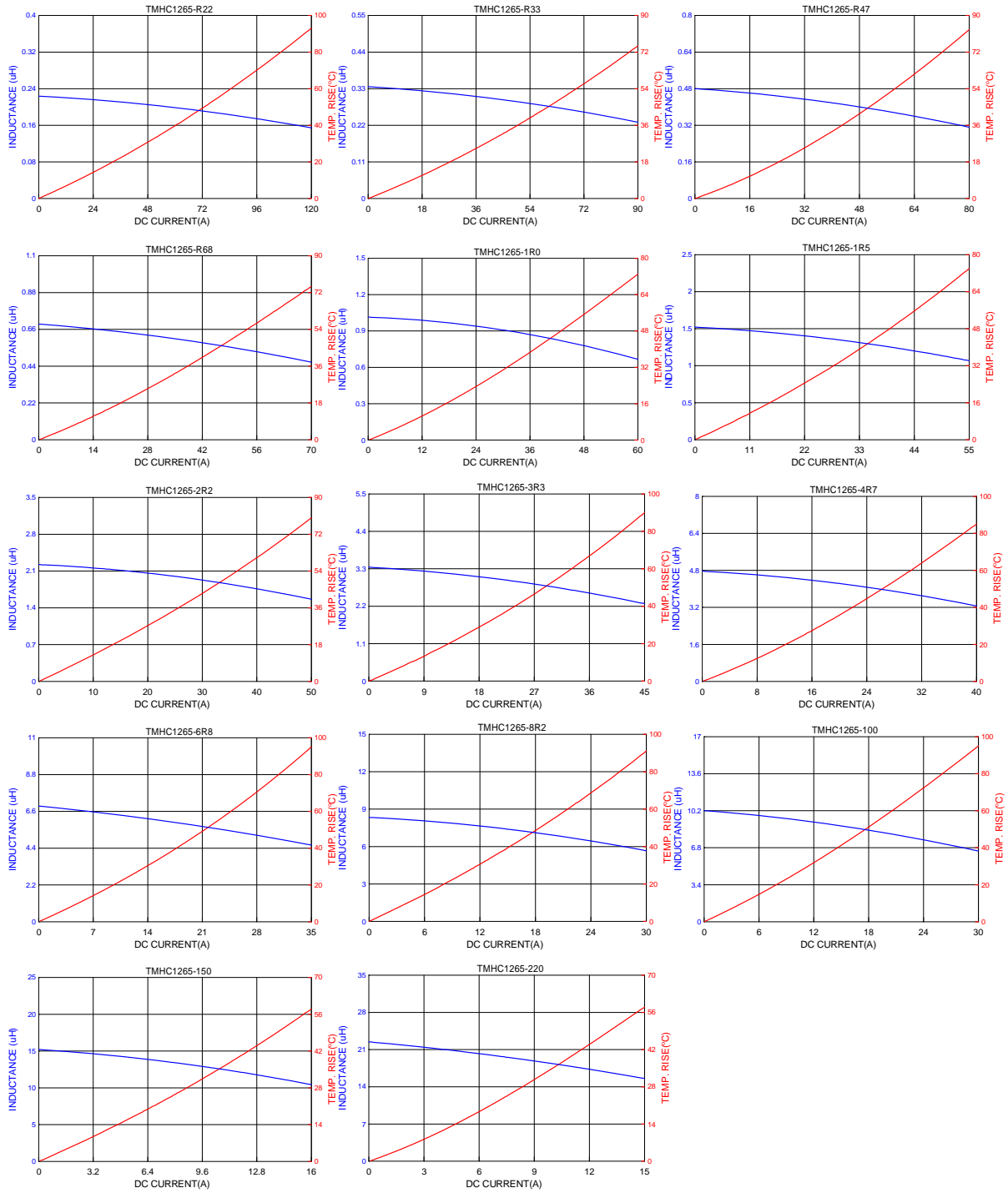
5. Specification

Part Number	Inductance L0 A(μH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat.		DCR (mΩ) Typ	DCR (mΩ) Max	Type
		Typ	Max	Typ	Max			
TMHC1265SPV-R22MN-D	0.22	55.0	50.0	105.0	95.0	0.47	0.60	non-leadframe
TMHC1265SPV-R33MN-D	0.33	50.0	45.0	70.0	64.0	0.65	0.80	non-leadframe
TMHC1265SPV-R47MN-D	0.47	45.0	41.0	66.0	62.0	0.90	1.20	non-leadframe
TMHC1265SPV-R68MN-D	0.68	41.0	37.0	58.0	54.0	1.25	1.50	non-leadframe
TMHC1265SPV-1R0MN-D	1.00	35.0	30.0	50.0	46.0	1.70	2.30	non-leadframe
TMHC1265SPV-1R5MN-D	1.50	31.0	27.0	45.0	40.0	2.30	2.80	non-leadframe
TMHC1265SPV-2R2MN-D	2.20	25.0	22.0	40.0	37.0	4.20	4.80	leadframe
TMHC1265SPV-3R3MN-D	3.30	22.0	18.0	35.0	31.0	5.70	6.80	leadframe
TMHC1265SPV-4R7MN-D	4.70	20.0	16.0	31.0	28.0	8.30	9.50	leadframe
TMHC1265SPV-6R8MN-D	6.80	15.0	13.0	25.0	22.0	11.5	13.2	leadframe
TMHC1265SPV-8R2MN-D	8.20	13.0	11.0	22.0	19.0	13.0	15.5	leadframe
TMHC1265SPV-100MN-D	10.0	12.0	10.0	20.0	17.0	15.6	18.0	leadframe
TMHC1265SPV-150MN-D	15.0	11.0	9.0	13.5	12.5	23.2	28.0	leadframe
TMHC1265SPV-220MN-D	22.0	10.0	8.0	12.0	10.0	32.5	37.0	leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155°C 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 TMHC1707SPV-Series(N)-D

1. Features

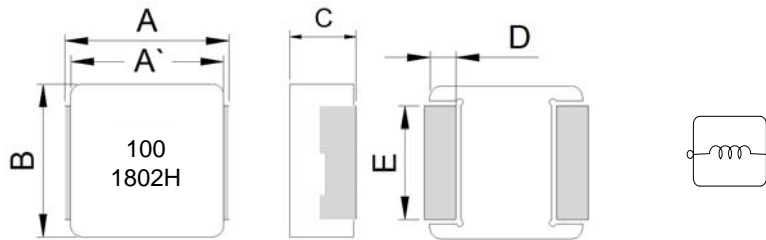
1. Shielded construction.
2. Capable of corresponding high frequency .
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. High reliability -Reliability test complied to AEC-Q200.
8. Operating temperature: -55~+155°C (Including self - temperature rise)



2. Applications

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

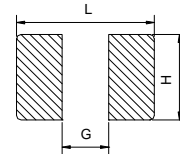
3. Dimensions



Series	A	A'	B	C	D	E
TMHC1707	17.8±0.5	16.9±0.3	16.9±0.3	6.7±0.3	2.3±0.3	11.9±0.3

Unit: mm

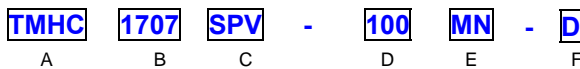
Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
18.5	11.0	12.5

Note: 1. The above PCB layout reference only.
 2. Recommend solder paste thickness at 0.17mm and above.

4. Part Numbering



- A: Series
 - B: Dimension
 - C: Type
 - D: Inductance
 - E: Inductance Tolerance
 - F: Code
- BxC.
 - Standard, V :Vehicle
 - 100=10uH
 - M=±20%
 - Marking: Black.100and 1802H (18:YY, 02:WW, follow production date, H:P/N).

5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A)I rms.		Saturation Current DC (A)I sat.		DCR (mΩ) Typ	DCR (mΩ) Max
		Typ	Max	Typ	Max		
TMHC1707SPV-R47MN-D	0.47	60	55	115	100	0.75	0.83
TMHC1707SPV-1R0MN-D	1.00	48	43	68	60	1.30	1.50
TMHC1707SPV-1R5MN-D	1.50	42	37	55	48	1.80	2.10
TMHC1707SPV-2R2MN-D	2.20	40	35	45	40	2.50	2.80
TMHC1707SPV-3R3MN-D	3.30	28	25	40	35	3.50	3.90
TMHC1707SPV-4R7MN-D	4.70	26	23	37	32	4.80	5.50
TMHC1707SPV-5R6MN-D	5.60	24	21	35	31	5.90	6.80
TMHC1707SPV-6R8MN-D	6.80	22	18	30	25	8.40	9.20
TMHC1707SPV-8R2MN-D	8.20	18	15	28	24	9.60	10.8
TMHC1707SPV-100MN-D	10.0	17	14	25	21	11.6	13.0
TMHC1707SPV-150MN-D	15.0	14	12.5	23	20	16.5	19.5
TMHC1707SPV-180MN-D	18.0	13.0	11.0	21	18.0	20.0	24.0
TMHC1707SPV-220MN-D	22.0	12.0	10.0	19.0	17.0	24.0	27.6
TMHC1707SPV-270MN-D	27.0	11.3	9.5	17.0	15.0	31.0	36.0
TMHC1707SPV-330MN-D	33.0	10.7	9.0	15	13	36.0	42.0
TMHC1707SPV-470MN-D	47.0	8.7	7.0	13	11	46.0	53.0

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155°C 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

