SMD Power Inductor

TMPA0503SV-Series(N)-D

1. Features

1. Shielded construction.
2. Capable of corresponding high frequency (5MHz).
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℃(Including self - temperature rise)

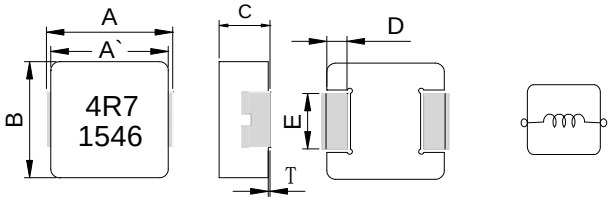
Halogen-free

RoHS

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.

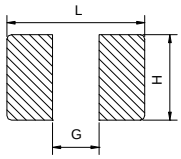
3. Dimensions



Series	A	A`	B	C	D	E	T
TMPA0503	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

Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
6.0	2.8	2.5

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

4. Part Numbering

TMPA	0503	SV	-	4R7	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Standard. V: Vehicle
D: Inductance — 4R7=4.7uH .
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.4R7 and 1546(15 YY, 46 WW,follow production date).

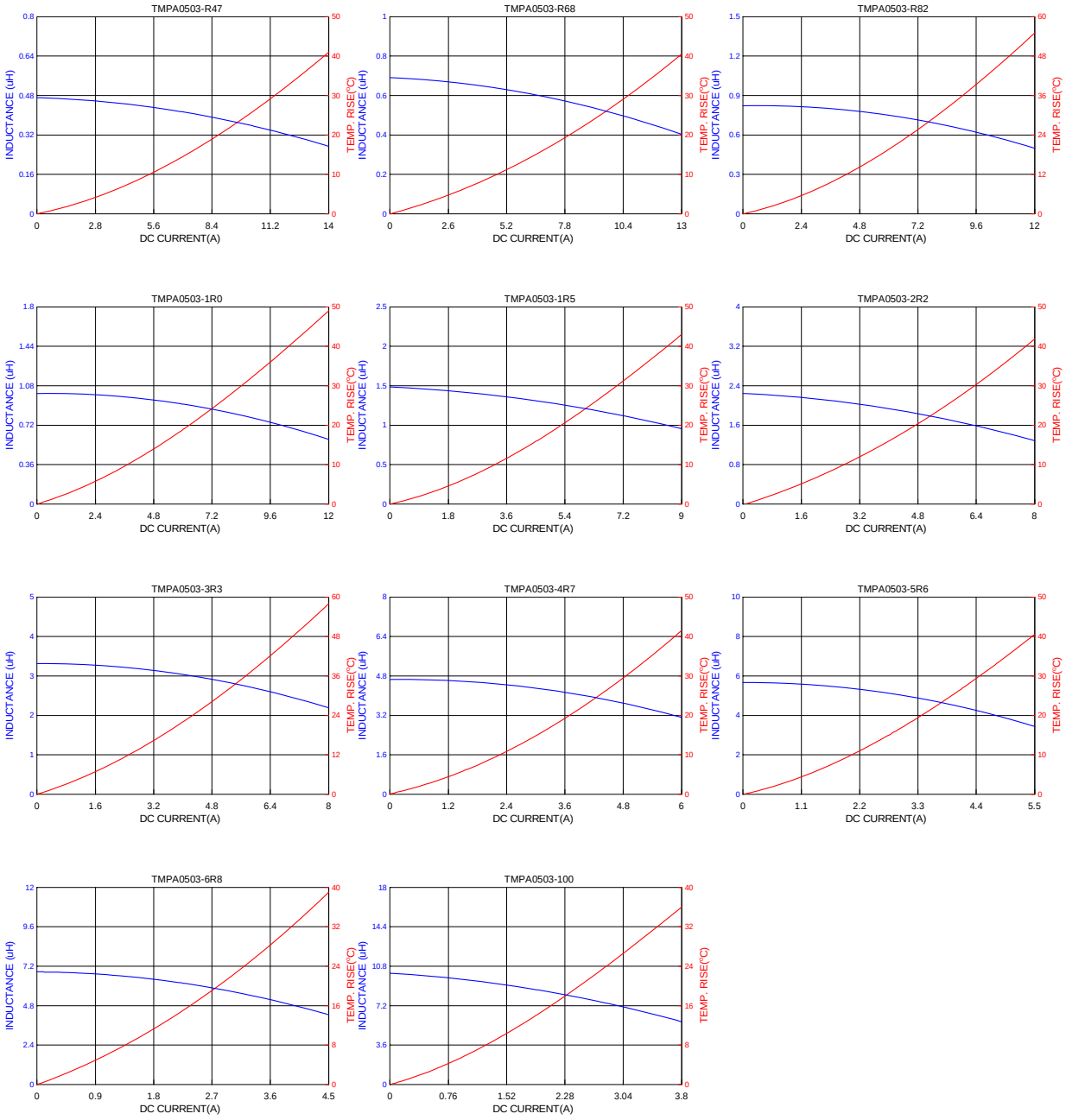
5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC Typ (A) Irms.		Saturation Current DC Typ (A)I sat		DCR (mΩ)Typ	DCR (mΩ)Max
		Typ	Max	Typ	Max		
TMPA0503SV-R47MN-D	0.47	13.5	12	10	9.0	5.2	6.0
TMPA0503SV-R68MN-D	0.68	12.5	11	9.0	8.0	7.4	8.5
TMPA0503SV-R82MN-D	0.82	10	9.0	8.8	7.7	8.0	9.2
TMPA0503SV-1R0MN-D	1.00	9.0	8.0	8.5	7.5	10.5	12
TMPA0503SV-1R5MN-D	1.50	8.0	7.0	7.5	6.5	13.6	15.7
TMPA0503SV-2R2MN-D	2.20	7.0	6.5	6.5	5.8	21.6	25
TMPA0503SV-3R3MN-D	3.30	6.3	5.8	6.0	5.3	28	33
TMPA0503SV-4R7MN-D	4.70	5.5	4.8	5.3	4.6	38	44
TMPA0503SV-5R6MN-D	5.60	5.0	4.3	4.6	4.0	50	58
TMPA0503SV-6R8MN-D	6.80	4.3	3.7	3.5	3.1	57	66
TMPA0503SV-100MN-D	10.0	3.8	3.4	2.5	2.1	88	103

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ 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℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155℃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

TMPA0603HTV-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~+180℃(Including self - temperature rise)

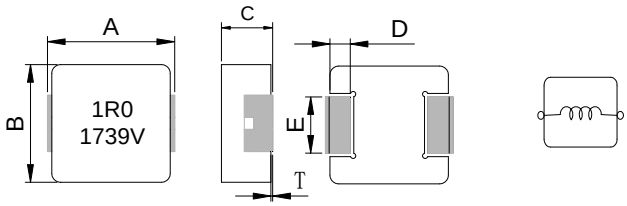
Halogen-free

RoHS

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.

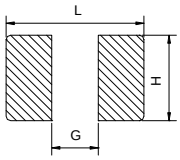
3. Dimensions



Series	A	B	C	D	E	T
TMPA0603	7.1±0.3	6.6±0.2	2.8±0.2	1.6±0.3	3.0±0.2	0~0.15

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

TMPA	0603	HTV	-	1R0	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Standard.
D: Inductance — 1R0=1.0uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.1R0 and 1739V (17:YY, 39:WW, follow production date, V:P/N).

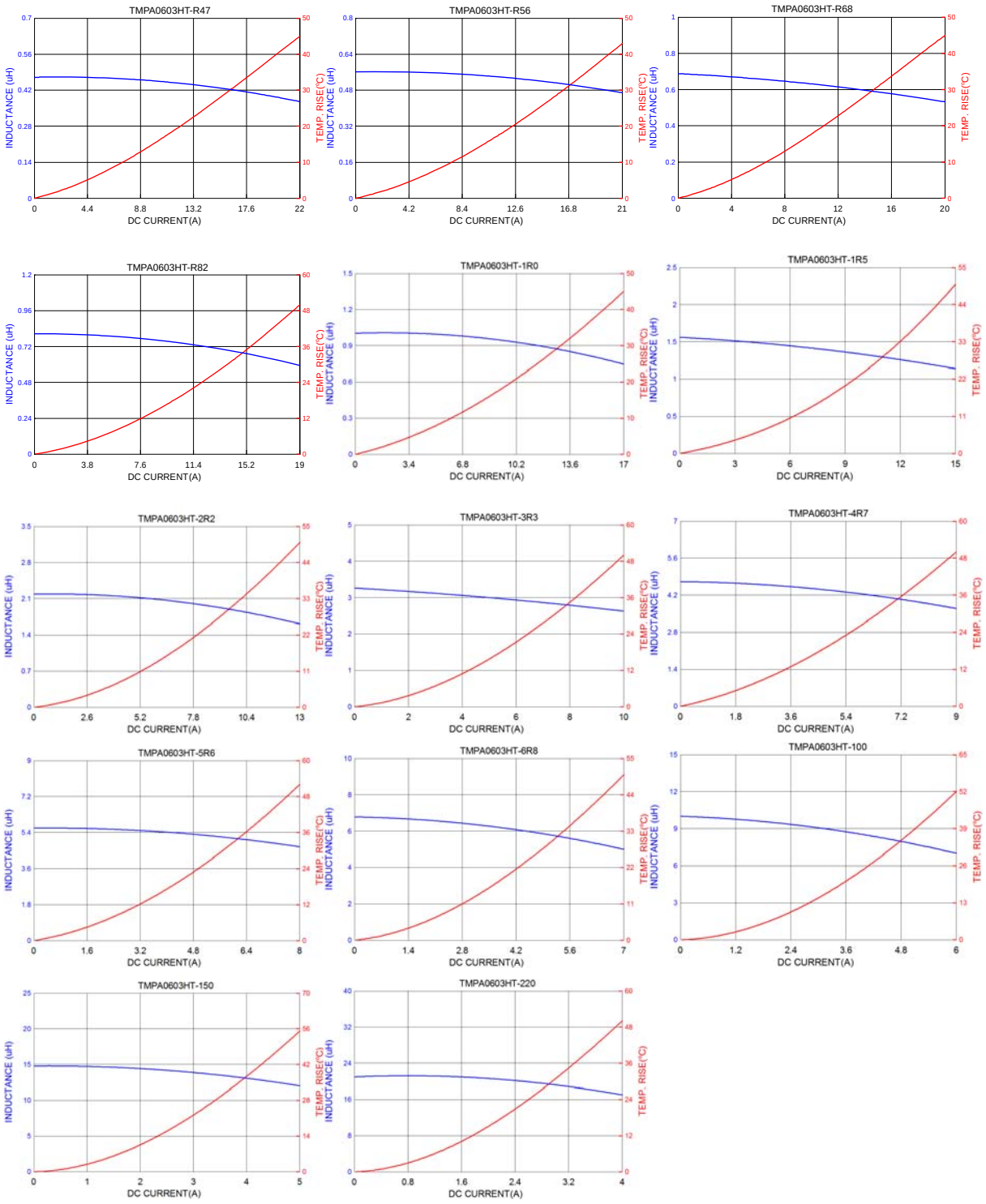
5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat.		DCR (mΩ)Typ	DCR (mΩ)Max
		Typ	Max	Typ	Max		
TMPA0603HTV-R47MN-D	0.47	20	18	21	18	3.5	4.0
TMPA0603HTV-R56MN-D	0.56	19	17	20	17	4.2	4.8
TMPA0603HTV-R68MN-D	0.68	17	15.5	19	16.5	4.8	5.6
TMPA0603HTV-R82MN-D	0.82	16	14	18	16	5.7	6.8
TMPA0603HTV-1R0MN-D	1.00	15	13	16	14	6.6	8.0
TMPA0603HTV-1R5MN-D	1.50	13	11	14	12	11.2	13.2
TMPA0603HTV-2R2MN-D	2.20	11	9	13	11	13.7	15.8
TMPA0603HTV-3R3MN-D	3.30	9.0	7.3	9.5	8.3	21.5	25.8
TMPA0603HTV-4R7MN-D	4.70	7.0	6.0	8.5	7.0	32	37
TMPA0603HTV-5R6MN-D	5.60	6.5	5.5	7.2	6.0	36	42
TMPA0603HTV-6R8MN-D	6.80	6.0	5.0	6.5	5.5	43	50
TMPA0603HTV-100MN-D	10.0	5.0	4.2	5.0	4.2	62	68
TMPA0603HTV-150MN-D	15.0	4.1	3.5	3.2	2.8	95	114
TMPA0603HTV-220MN-D	22.0	3.4	2.8	3.0	2.6	140	168

Note:

1. Test frequency : Ls : 100KHz /1V.
2. All test data referenced to 25℃ 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℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 180℃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

TMPA0603SV-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℃(Including self - temperature rise)

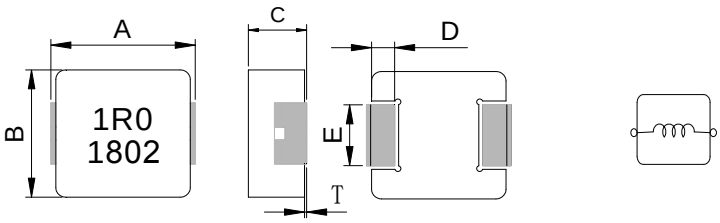
Halogen-free

RoHS

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.

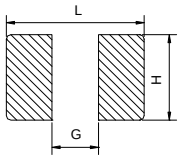
3. Dimensions



Series	A	B	C	D	E	T
TMPA0603	7.1±0.3	6.6±0.2	2.8±0.2	1.6±0.3	3.0±0.2	0~0.15

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

TMPA	0603	SV	-	1R0	MN	-	D
A	B	C		D	E		F

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

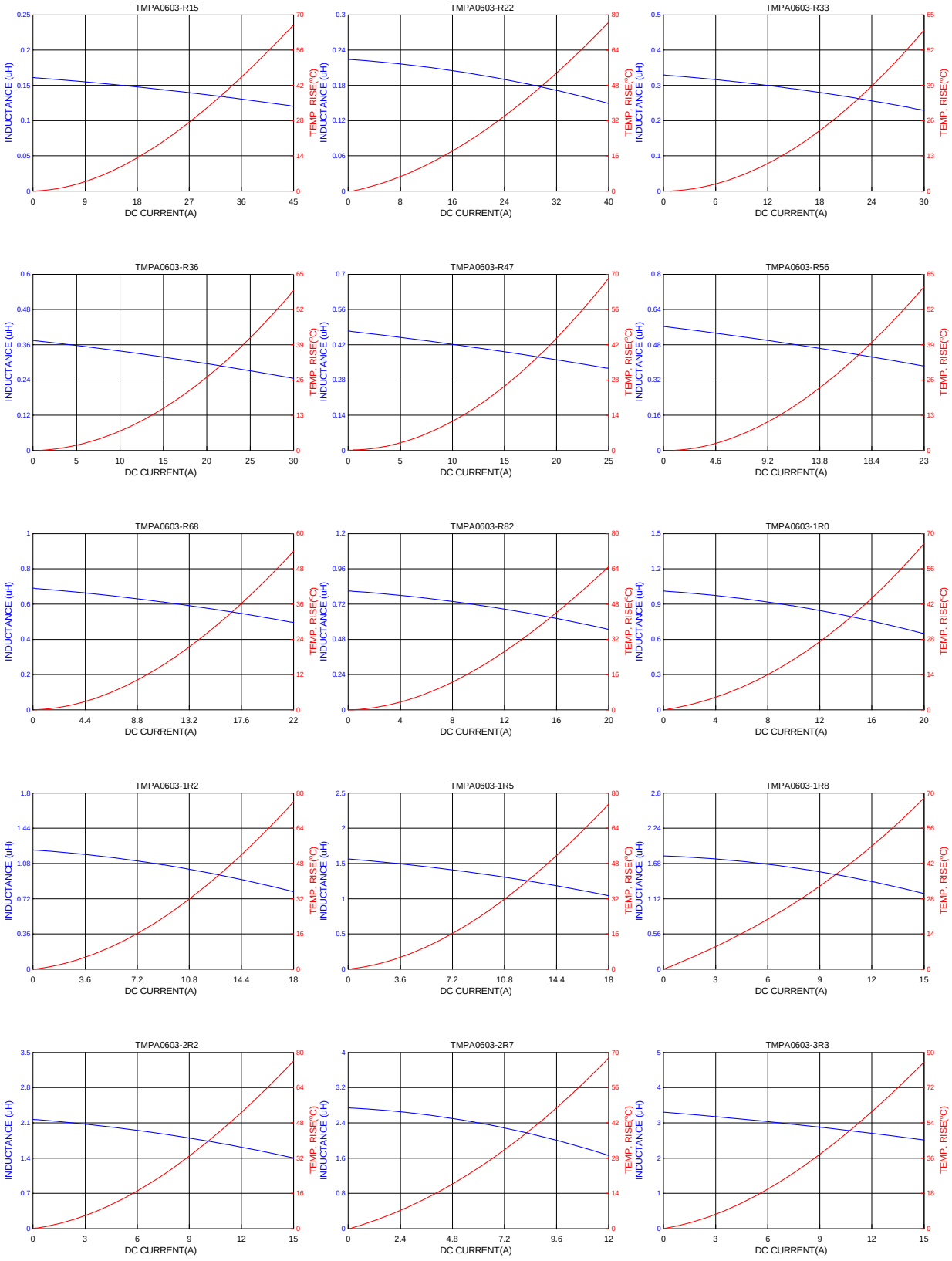
5. Specification

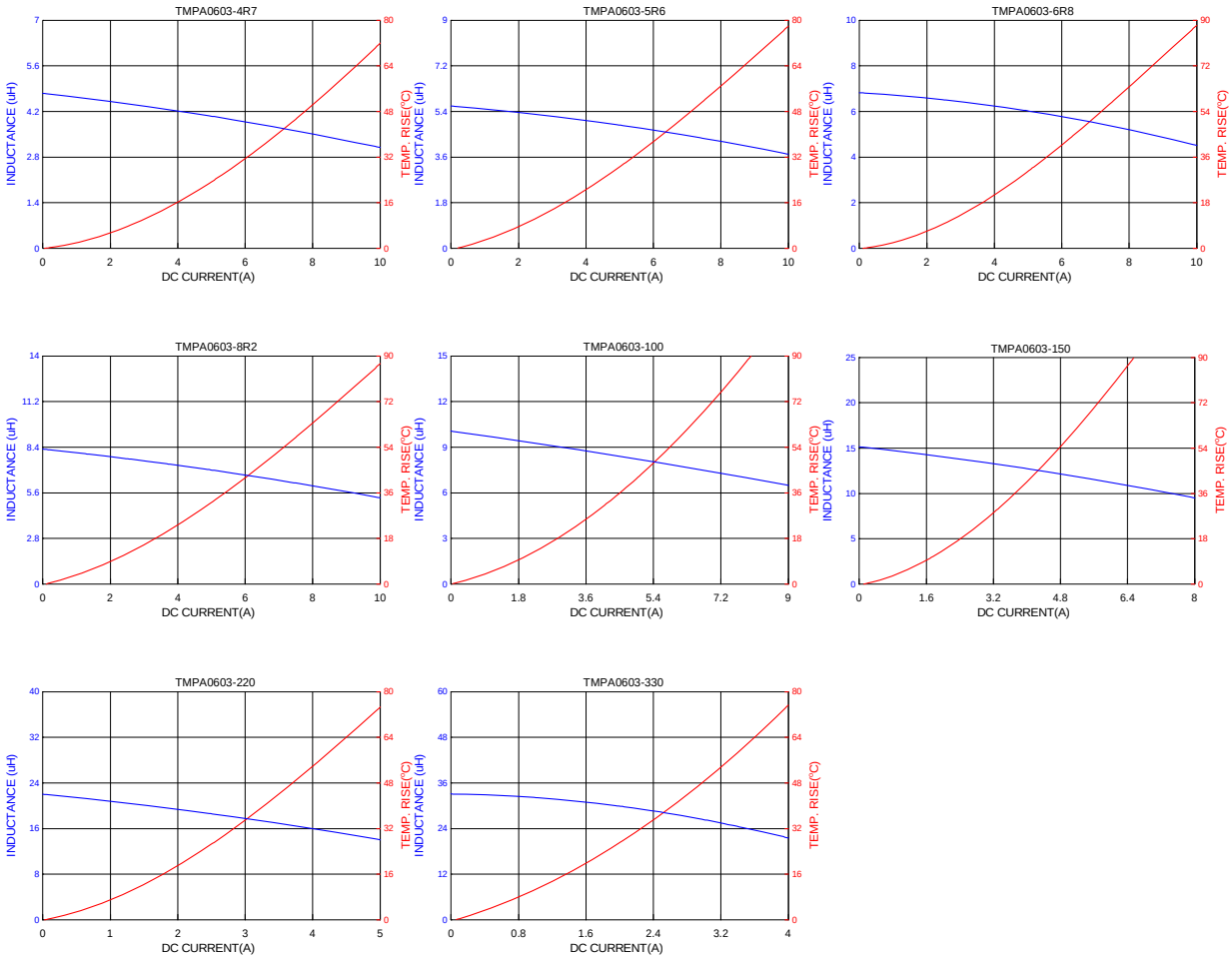
Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ)Typ	DCR (mΩ)Max
		Typ	Max	Typ	Max		
TMPA0603SV-R15YN-D	0.15±30%	30	25	40	36	1.7	2.1
TMPA0603SV-R22MN-D	0.22	23	21	34	32	2.0	2.5
TMPA0603SV-R33MN-D	0.33	21	20	25	22	2.8	3.4
TMPA0603SV-R36MN-D	0.36	20	18	24	21	3.3	3.9
TMPA0603SV-R47MN-D	0.47	18	16	20	18	3.4	4.0
TMPA0603SV-R56MN-D	0.56	16.5	15	18	16	3.9	4.5
TMPA0603SV-R68MN-D	0.68	16	14.5	17	15	4.7	5.3
TMPA0603SV-R82MN-D	0.82	14	13	16	14	5.4	6.0
TMPA0603SV-1R0MN-D	1.00	12	11	15	13.5	6.7	7.4
TMPA0603SV-1R2MN-D	1.20	10	9.5	14	12.5	7.7	9.5
TMPA0603SV-1R5MN-D	1.50	10	9.0	14	12	10.2	12.1
TMPA0603SV-1R8MN-D	1.80	9.0	8.0	12	10	10.9	13
TMPA0603SV-2R2MN-D	2.20	8.0	7.5	10	9.0	13.5	15
TMPA0603SV-2R7MN-D	2.70	7.2	7.0	9.8	8.8	17.3	20
TMPA0603SV-3R3MN-D	3.30	6.5	6.0	9.5	8.5	19	22
TMPA0603SV-4R7MN-D	4.70	5.5	5.0	6.5	5.5	28	33
TMPA0603SV-5R6MN-D	5.60	5.5	5.0	6.0	5.2	39	42
TMPA0603SV-6R8MN-D	6.80	4.5	4.2	6.0	5.0	43	50
TMPA0603SV-8R2MN-D	8.20	4.5	4.0	6.0	4.7	54	60
TMPA0603SV-100MN-D	10.0	4.0	3.5	5.5	4.5	62	68
TMPA0603SV-150MN-D	15.0	3.0	2.5	4.5	4.0	110	140
TMPA0603SV-220MN-D	22.0	2.5	2.0	3.0	2.5	150	190
TMPA0603SV-330MN-D	33.0	2.1	1.8	2.5	2.0	215	258

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ 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 △T of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155℃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




TMPA0603-4R7
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA0603-5R6
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA0603-6R8
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA0603-8R2
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA0603-100
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA0603-150
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA0603-220
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA0603-330
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)

SMD Power Inductor

TMPA0604SV-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℃(Including self - temperature rise)

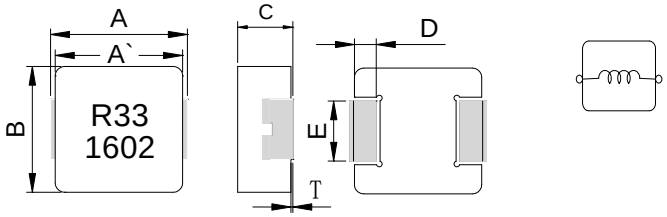
Halogen-free

RoHS

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.

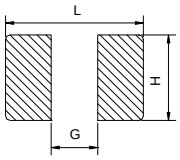
3. Dimensions



Series	A	A`	B	C	D	E	T
TMPA0604	7.1±0.3	6.4±0.3	6.6±0.2	3.8±0.2	1.6±0.3	3.0±0.2	0~0.15

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

TMPA	0604	SV	-	R33	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Standard.. V:Vehicle
D: Inductance — R33=0.33uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.R33 and 1602(16 YY, 02 WW,follow production date).

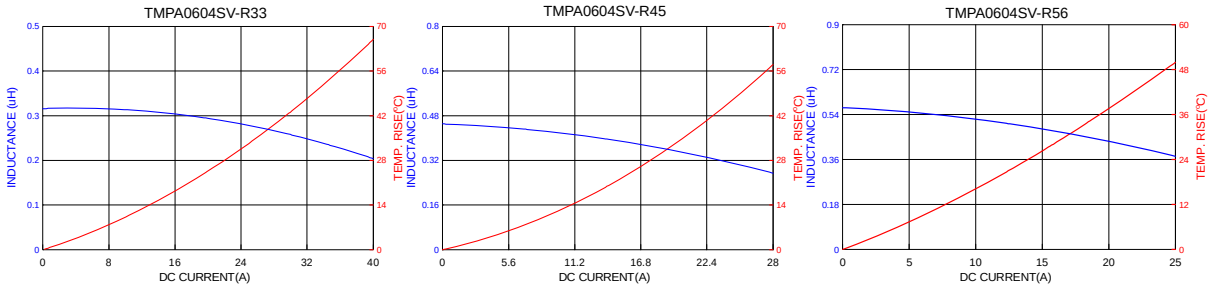
5. Specification

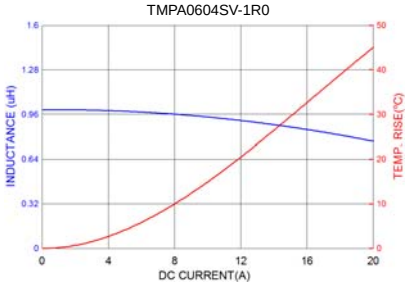
Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ)Typ	DCR (mΩ)Max
		Typ	Max	Typ	Max		
TMPA0604SV-R33MN-D	0.33	25	23	28	25	2.2	2.5
TMPA0604SV-R45MN-D	0.45	20	18	21	18	2.8	3.2
TMPA0604SV-R56MN-D	0.56	19	16	20	17	3.4	3.7
TMPA0604SV-1R0MN-D	1.00	15	13	15	13.5	5.6	6.2

Note:

1. Test frequency : Ls : 100KHz /1V.
2. All test data referenced to 25℃ 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℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155℃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

TMPA0605SV-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℃(Including self - temperature rise)

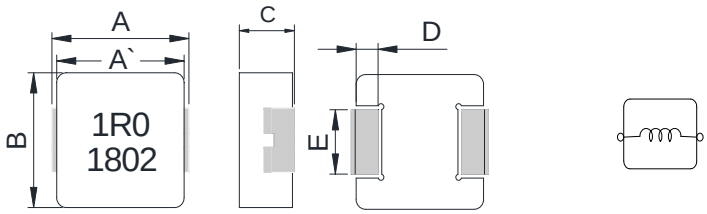
Halogen-free

RoHS

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.

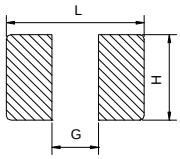
3. Dimensions



Series	A	A`	B	C	D	E
TMPA0605	7.3±0.3	6.7±0.2	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

TMPA	0605	SV	-	1R0	MN	-	D
A	B	C		D	E		F

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

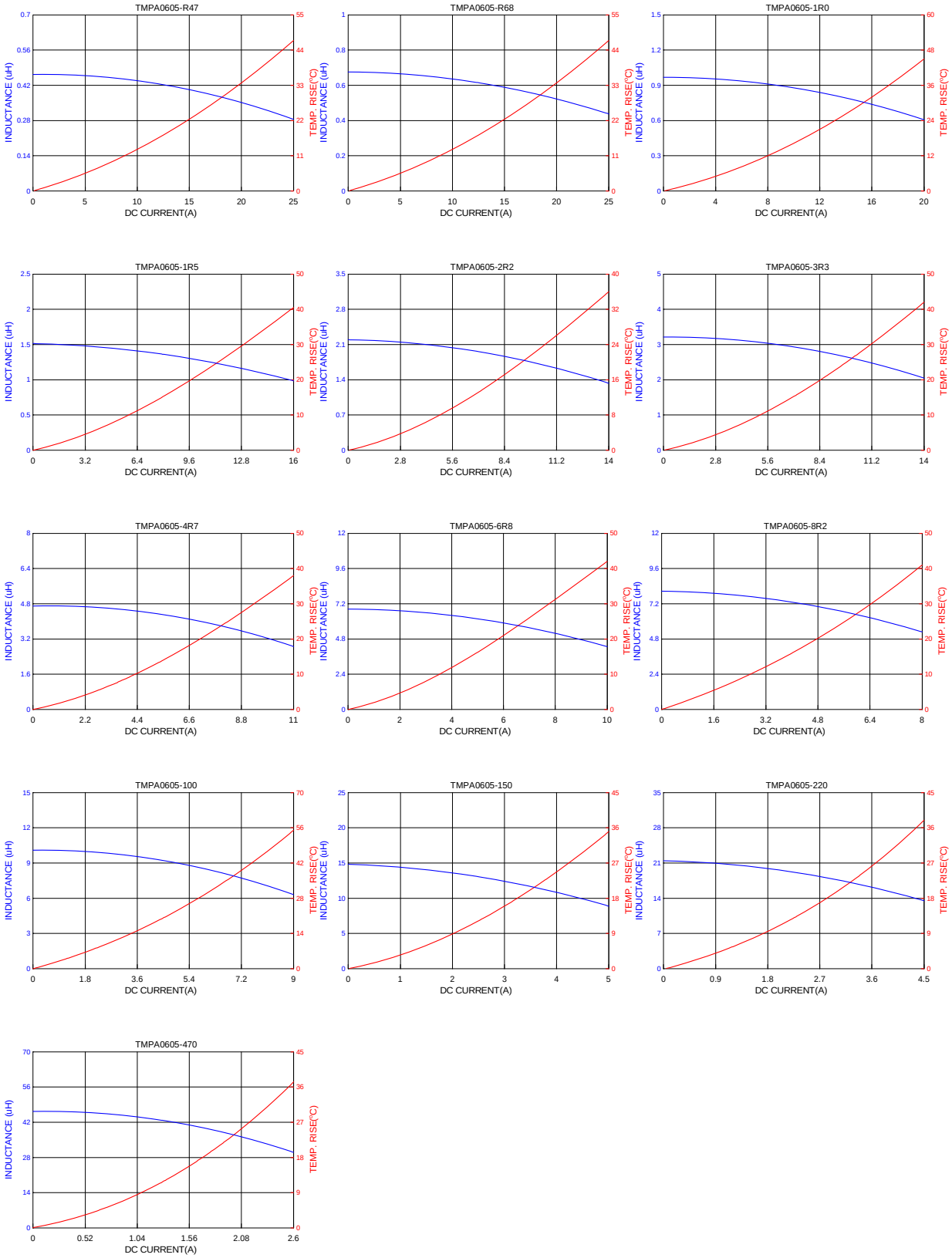
5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ)Typ	DCR (mΩ)Max
		Typ	Max	Typ	Max		
TMPA0605SV-R47MN-D	0.47	22	20	22	20	2.9	3.3
TMPA0605SV-R68MN-D	0.68	20	18	20	17	3.6	4.1
TMPA0605SV-1R0MN-D	1.00	17	15	16	13	5.6	6.2
TMPA0605SV-1R5MN-D	1.50	15	13	13	10.5	6.6	7.3
TMPA0605SV-2R2MN-D	2.20	14	12	10	8.5	10	11.5
TMPA0605SV-3R3MN-D	3.30	13	11	9.5	8.0	14	16.2
TMPA0605SV-4R7MN-D	4.70	11	9.5	8.8	7.5	20.8	24
TMPA0605SV-6R8MN-D	6.80	9.0	8.0	7.6	7.0	30	36
TMPA0605SV-8R2MN-D	8.20	7.5	6.5	6.5	6.0	38.5	45
TMPA0605SV-100MN-D	10.0	7.0	6.0	6.0	5.7	44	53
TMPA0605SV-150MN-D	15.0	5.0	4.0	4.0	3.2	73	85
TMPA0605SV-220MN-D	22.0	4.2	3.6	3.6	3.1	122	142
TMPA0605SV-470MN-D	47.0	2.6	2.0	1.8	1.5	275	320

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ 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 △T of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155℃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

TMPA0624SV-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℃(Including self - temperature rise)

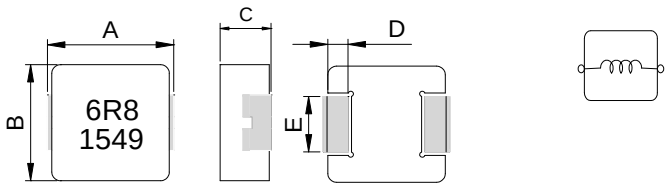
Halogen-free

RoHS

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.

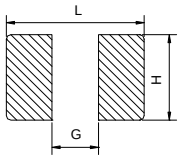
3. Dimensions



Series	A	B	C	D	E
TMPA0624	7.1±0.3	6.7±0.2	2.2±0.2	1.6±0.3	3.0±0.2

Unit:mm

Recommend PC Board Pattern



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

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

4. Part Numbering

TMPA	0624	SV	-	6R8	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Standard V:Vehicle..
D: Inductance — 6R8=6.8uH
E: Inductance Tolerance — M=±20%, Y=±30%
F: Code — Marking: Black.6R8 and 1549(15 YY, 49 WW,follow production date).

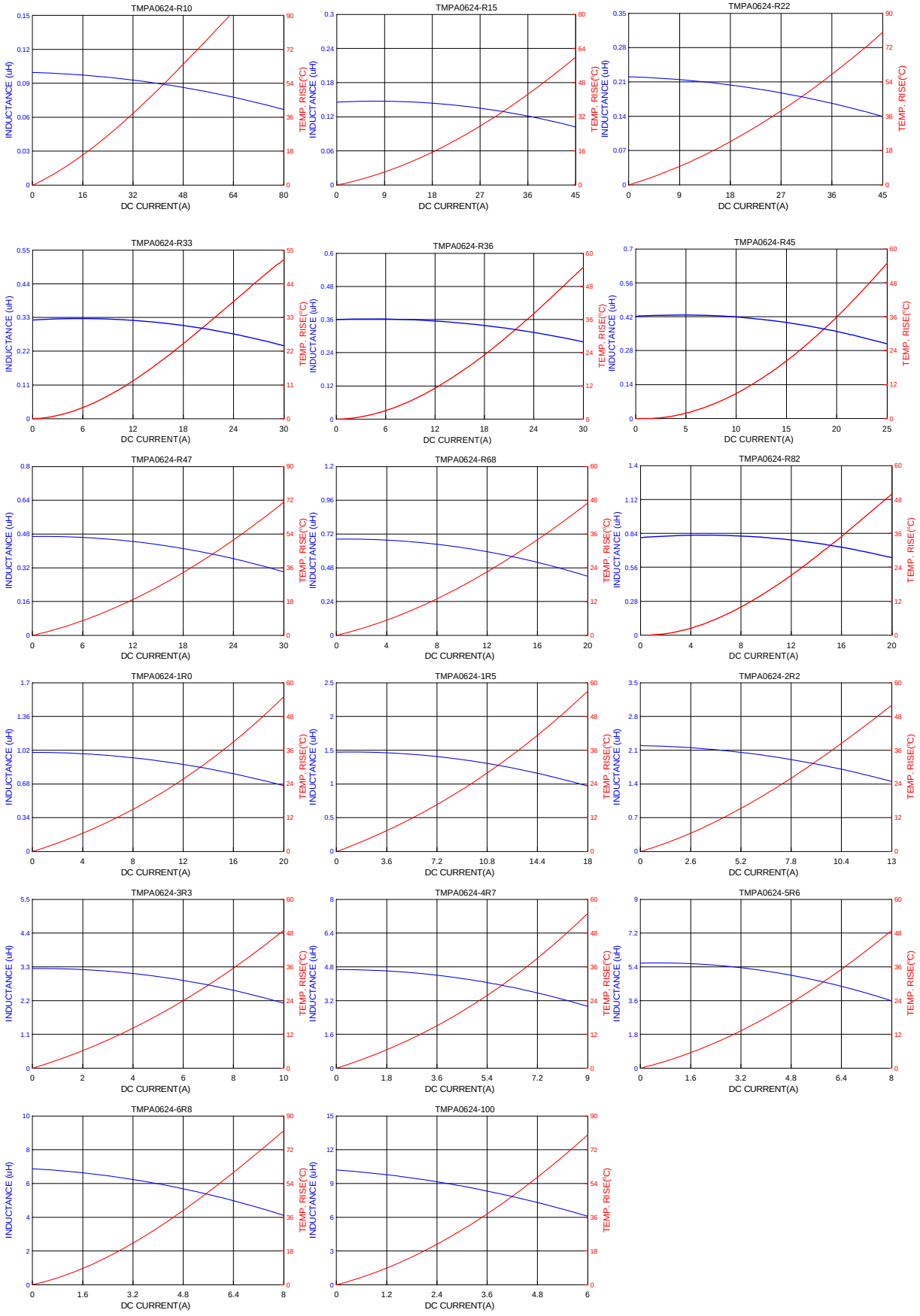
5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ)Typ	DCR (mΩ)Max
		Typ	Max	Typ	Max		
TMPA0624SV-R10YN-D	0.10±30%	30	25	70	60	1.20	1.35
TMPA0624SV-R15MN-D	0.15	32	30	41	34	1.50	1.80
TMPA0624SV-R22MN-D	0.22	26	23	34	28	2.20	2.53
TMPA0624SV-R33MN-D	0.33	24	21	27	24	3.20	3.52
TMPA0624SV-R36MN-D	0.36	23	20	25	22	3.40	3.80
TMPA0624SV-R45MN-D	0.45	20	17	22	18	4.00	4.40
TMPA0624SV-R47MN-D	0.47	19	16	22	18	4.40	5.06
TMPA0624SV-R68MN-D	0.68	17	14	17	15	5.20	6.00
TMPA0624SV-R82MN-D	0.82	16	13	16	14	7.30	8.10
TMPA0624SV-1R0MN-D	1.00	13	11	15	13	10.0	11.8
TMPA0624SV-1R5MN-D	1.50	11	9	14	12	13.5	16.0
TMPA0624SV-2R2MN-D	2.20	9.5	8	10	9	18.5	23.0
TMPA0624SV-3R3MN-D	3.30	8	6	8.5	7	31.0	38.0
TMPA0624SV-4R7MN-D	4.70	6.5	5.5	7	6	38.0	46.0
TMPA0624SV-5R6MN-D	5.60	6.0	5.0	6.2	5.7	47	56.4
TMPA0624SV-6R8MN-D	6.80	4.5	4.0	6.0	5.6	58	67
TMPA0624SV-100MN-D	10.0	3.7	3.4	4.6	4.2	81	93

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ 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 △T of 40℃
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

TMPA1004HTV-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~+180℃(Including self - temperature rise)

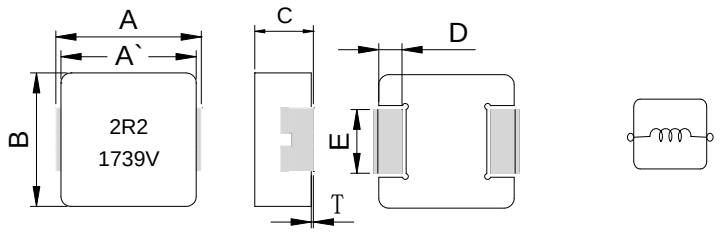
Halogen-free

RoHS

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.

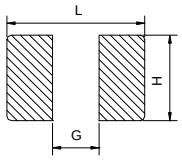
3. Dimensions



Series	A	A`	B	C	D	T	E
TMPA1004	11.0±0.3	10.0±0.3	10.0±0.3	3.8±0.2	2.0±0.3	0~0.2	3.0±0.3

Unit: mm

Recommend PC Board Pattern



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.

4. Part Numbering

TMPA	1004	HTV	-	2R2	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Standard. T: Vehicle.
D: Inductance — 2R2=2.2uH .
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.2R2 and 1739V (17:YY, 39:WW, follow production date, V:P/N).

5. Specification

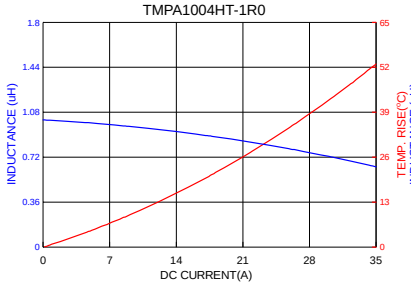
Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC I rms.(A)		Saturation Current DC I sat. (A)		DCR (mΩ)Typ	DCR (mΩ)Max
		Typ	Max	Typ	Max		
TMPA1004HTV-1R0MN-D	1.00	27.0	24.0	29.0	26.0	2.80	3.07
TMPA1004HTV-1R5MN-D	1.50	22.0	19.0	27.0	24.0	4.20	4.50
TMPA1004HTV-2R2MN-D	2.20	18.0	15.0	21.0	18.0	6.50	7.20
TMPA1004HTV-3R3MN-D	3.30	15.0	12.0	18.0	16.0	10.2	11.8
TMPA1004HTV-4R7MN-D	4.70	13.0	10.0	15.0	13.0	14.3	15.3
TMPA1004HTV-5R6MN-D	5.60	12.0	9.6	13.0	11.0	15.5	17.5
TMPA1004HTV-6R8MN-D	6.80	10.5	9.0	11.0	10.0	20.2	22.3
TMPA1004HTV-100MN-D	10.0	8.0	7.0	9.0	8.0	29.3	33.0
TMPA1004HTV-150MN-D	15.0	7.0	6.0	7.6	6.5	45.0	50.0
TMPA1004HTV-220MN-D	22.0	6.0	5.0	6.5	5.7	64.0	72.0
TMPA1004HTV-330MN-D	33.0	5.0	4.2	5.3	4.5	110	117.7
TMPA1004HTV-470MN-D	47.0	4.0	3.4	4.5	4.0	145	167.0
TMPA1004HTV-680MN-D	68.0	3.5	3.0	3.5	2.8	210	240.0

Note:

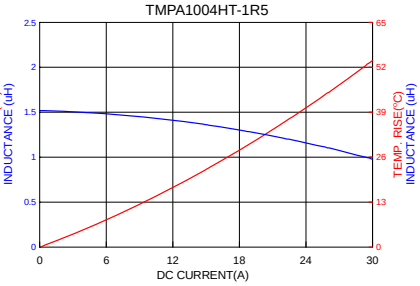
1. Test frequency : Ls : 100KHz /1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately △T of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 180℃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

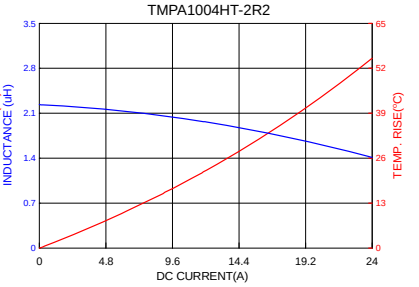
TMPA1004HT-1R0



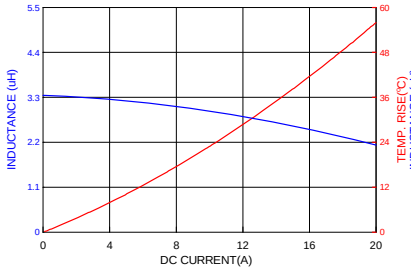
TMPA1004HT-1R5



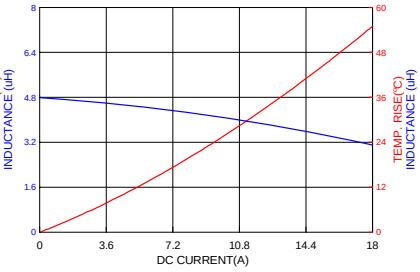
TMPA1004HT-2R2



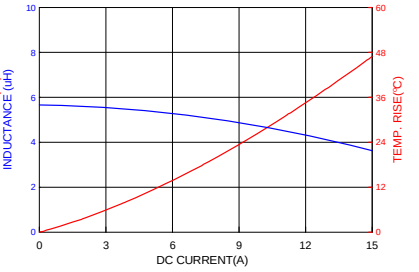
TMPA1004HT-3R3



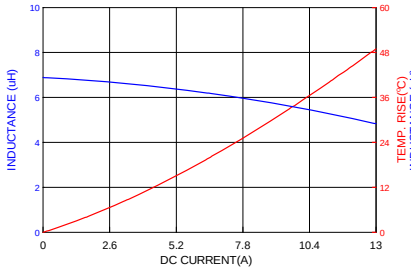
TMPA1004HT-4R7



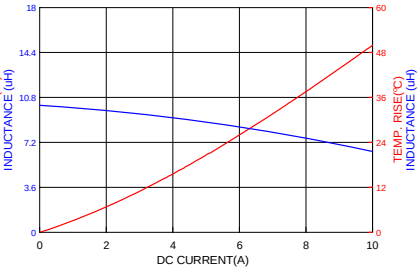
TMPA1004HT-5R6



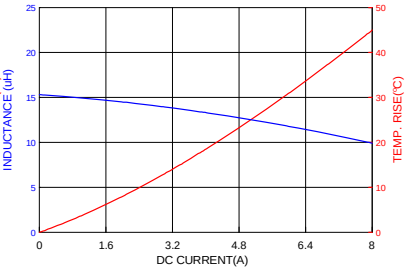
TMPA1004HT-6R8



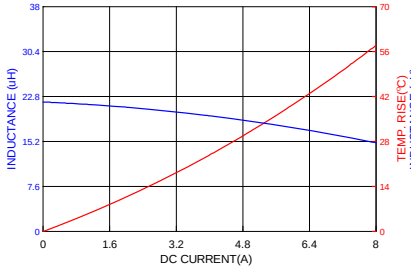
TMPA1004HT-100



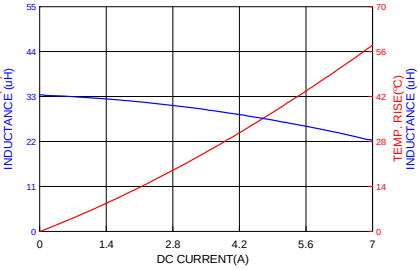
TMPA1004HT-150



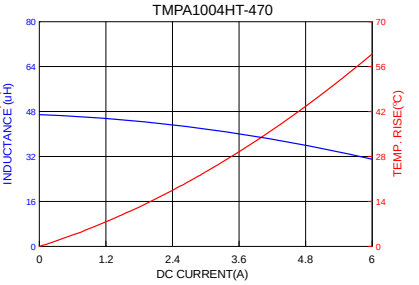
TMPA1004HT-220



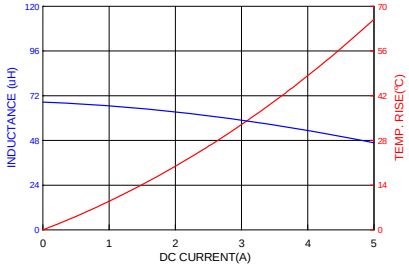
TMPA1004HT-330



TMPA1004HT-470



TMPA1004HT-680



SMD Power Inductor

TMPA1004SV-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℃(Including self - temperature rise)

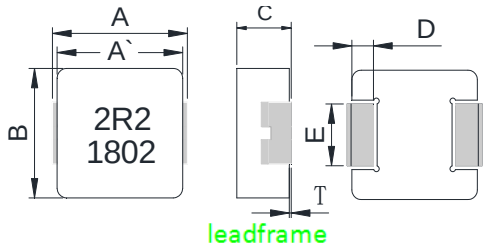
Halogen-free

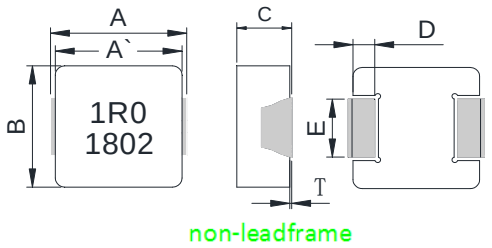
RoHS

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

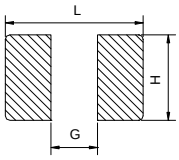




Series	A	A`	B	C	D	T	E	Inductance
TMPA1004	11.0±0.3	10.0±0.3	10.0±0.3	3.8±0.2	2.0±0.3	0~0.2	2.5±0.3	0.56~1.50uH among
							3.0±0.3	0.47uH and below 1.80uH and above

Unit: mm

Recommend PC Board Pattern



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

4. Part Numbering

TMPA	1004	SV	-	1R0	MN	-	D
A	B	C		D	E		F

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

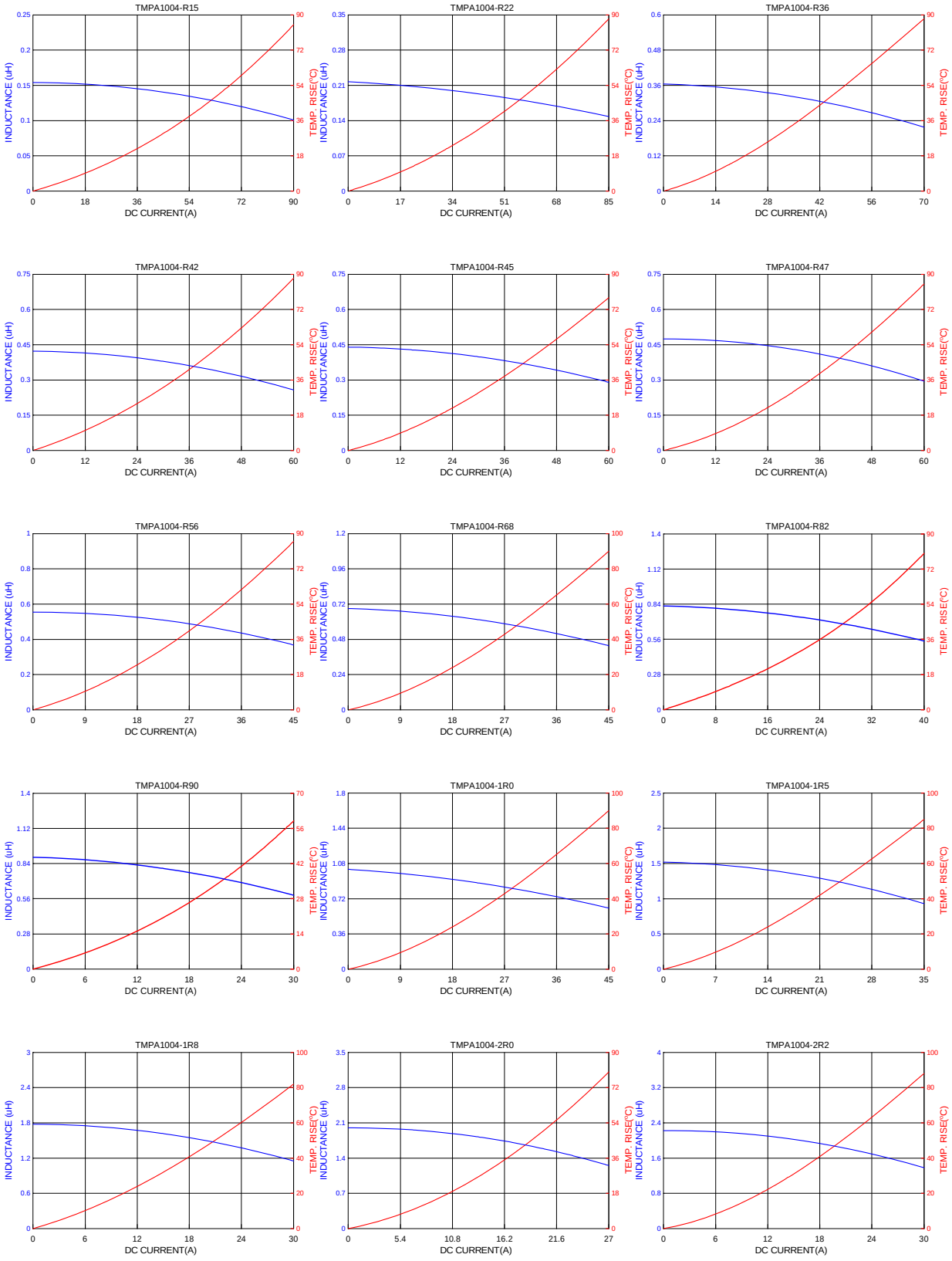
5. Specification

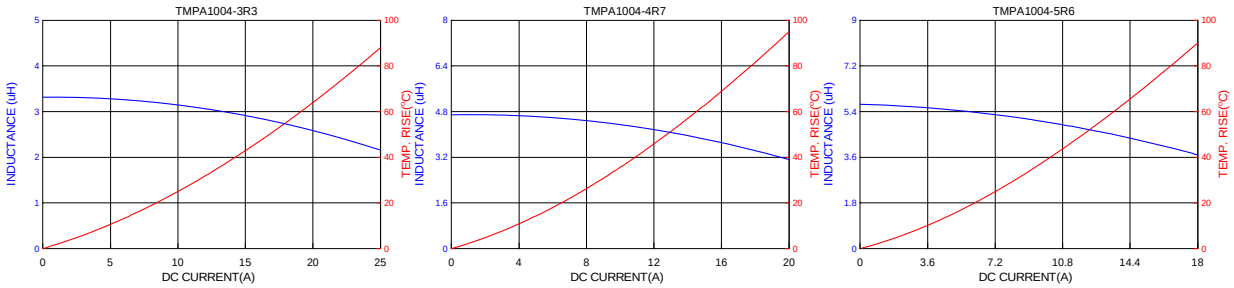
Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC I rms.(A)		Saturation Current DC I sat. (A)		DCR (mΩ)Typ	DCR (mΩ)Max	Type
		Typ	Max	Typ	Max			
TMPA1004SV-R15YN-D	0.15±30%	44.0	38.0	82.0	75.0	0.5	0.6	non-leadframe
TMPA1004SV-R22MN-D	0.22	36.0	33.0	70.0	60.0	0.72	0.83	non-leadframe
TMPA1004SV-R36MN-D	0.36	33.0	29.0	51.0	45.0	1.05	1.18	non-leadframe
TMPA1004SV-R42MN-D	0.42	32.5	28.5	50.0	42.0	1.15	1.3	non-leadframe
TMPA1004SV-R45MN-D	0.45	32.5	28.5	48.0	42.0	1.2	1.4	non-leadframe
TMPA1004SV-R47MN-D	0.47	32.0	28.0	46.0	40.0	1.3	1.5	non-leadframe
TMPA1004SV-R56MN-D	0.56	25.0	23.0	34.0	29.0	1.6	1.8	non-leadframe
TMPA1004SV-R68MN-D	0.68	23.0	20.0	31.0	28.0	1.9	2.2	non-leadframe
TMPA1004SV-R82MN-D	0.82	22.0	19.0	30.0	27.0	2.1	2.5	non-leadframe
TMPA1004SV-R90MN-D	0.90	21.0	19.0	29.5	27.0	2.2	2.6	non-leadframe
TMPA1004SV-1R0MN-D	1.00	20.0	18.0	29.0	26.0	2.9	3.25	non-leadframe
TMPA1004SV-1R5MN-D	1.50	17.5	16.0	26.0	22.0	3.7	4.2	non-leadframe
TMPA1004SV-1R8MN-D	1.80	16.5	15.0	23.0	20.5	5.1	5.7	leadframe
TMPA1004SV-2R0MN-D	2.00	16.0	14.5	21.0	18.0	5.3	6.1	leadframe
TMPA1004SV-2R2MN-D	2.20	15.0	13.0	20.0	16.0	5.8	6.7	leadframe
TMPA1004SV-3R3MN-D	3.30	11.0	10.0	17.5	14.0	10.5	11.8	leadframe
TMPA1004SV-4R7MN-D	4.70	8.8	8.0	15.2	13.0	15.8	19	leadframe
TMPA1004SV-5R6MN-D	5.60	8.0	7.2	14.1	11.5	19	22.8	leadframe
TMPA1004SV-6R8MN-D	6.80	7.8	6.8	12.2	11.0	22	24.5	leadframe
TMPA1004SV-8R2MN-D	8.20	7.6	6.5	9.5	8.5	25	28	leadframe
TMPA1004SV-100MN-D	10.0	7.5	6.1	8.6	7.5	27	30	leadframe
TMPA1004SV-150MN-D	15.0	6.25	5.0	7.0	6.0	41	45	leadframe
TMPA1004SV-220MN-D	22.0	5.0	4.1	6.2	5.5	58	66	leadframe
TMPA1004SV-330MN-D	33.0	4.4	3.5	5.5	5.0	84	91	leadframe
TMPA1004SV-470MN-D	47.0	3.5	3.0	4.0	3.7	125	143	leadframe
TMPA1004SV-680MN-D	68.0	2.6	2.4	3.2	3.0	184	210	leadframe
TMPA1004SV-820MN-D	82.0	2.3	2.1	3.0	2.8	240	270	leadframe
TMPA1004SV-101MN-D	100	2.0	1.8	2.7	2.4	270	310	leadframe

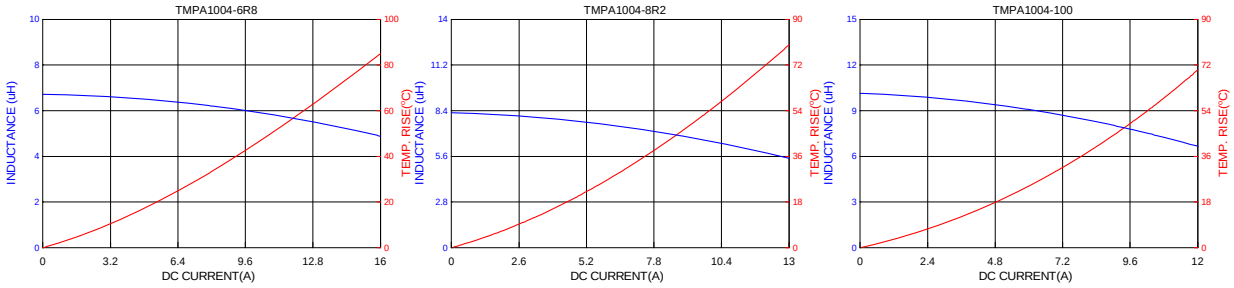
Note:

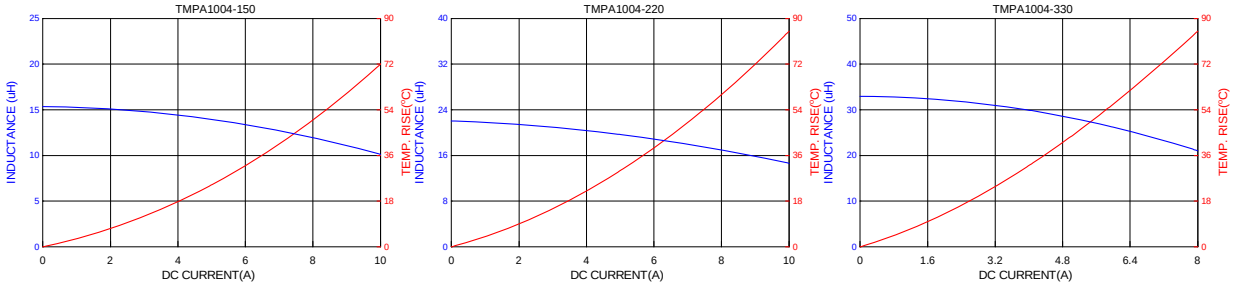
1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately △T of 40℃
5.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

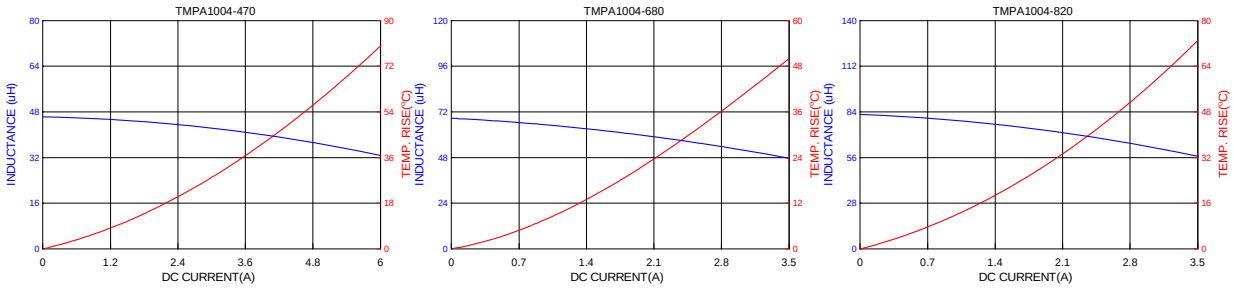
6. Typical Performance Curves

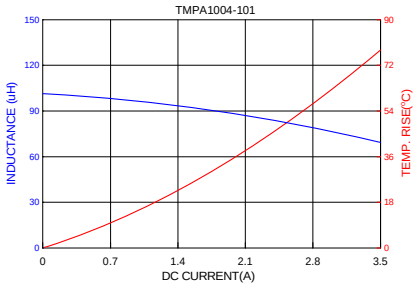



TMPA1004-3R3
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-4R7
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-5R6
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPA1004-6R8
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-8R2
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-100
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPA1004-150
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-220
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-330
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPA1004-470
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-680
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)
TMPA1004-820
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPA1004-101
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)

SMD Power Inductor

TMPA1005SV-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℃(Including self - temperature rise)

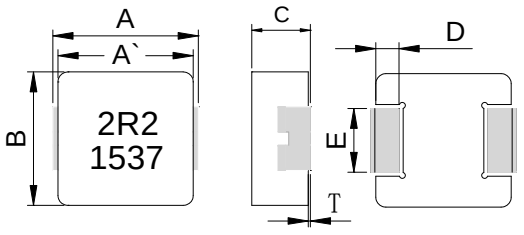
Halogen-free

RoHS

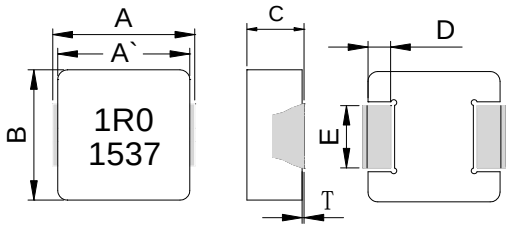
2. Applications

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

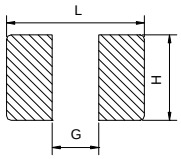


leadframe



non-leadframe

Recommend PC Board Pattern



Series	A	A`	B	C	D	T	E	Inductance
TMPA1005	11.0±0.5	10.0±0.5	10.0±0.3	4.8±0.2	2.0±0.3	0~0.2	2.5±0.3	0.68~1.50uH among
							3.0±0.3	0.47uH and below 2.20uH and above

Unit: mm

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.

4. Part Numbering

TMPA	1005	SV	-	1R0	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Standard. V: Vehicle
D: Inductance — 1R0=1.0uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.1R0 and 1537(15 YY, 37 WW,follow production date).

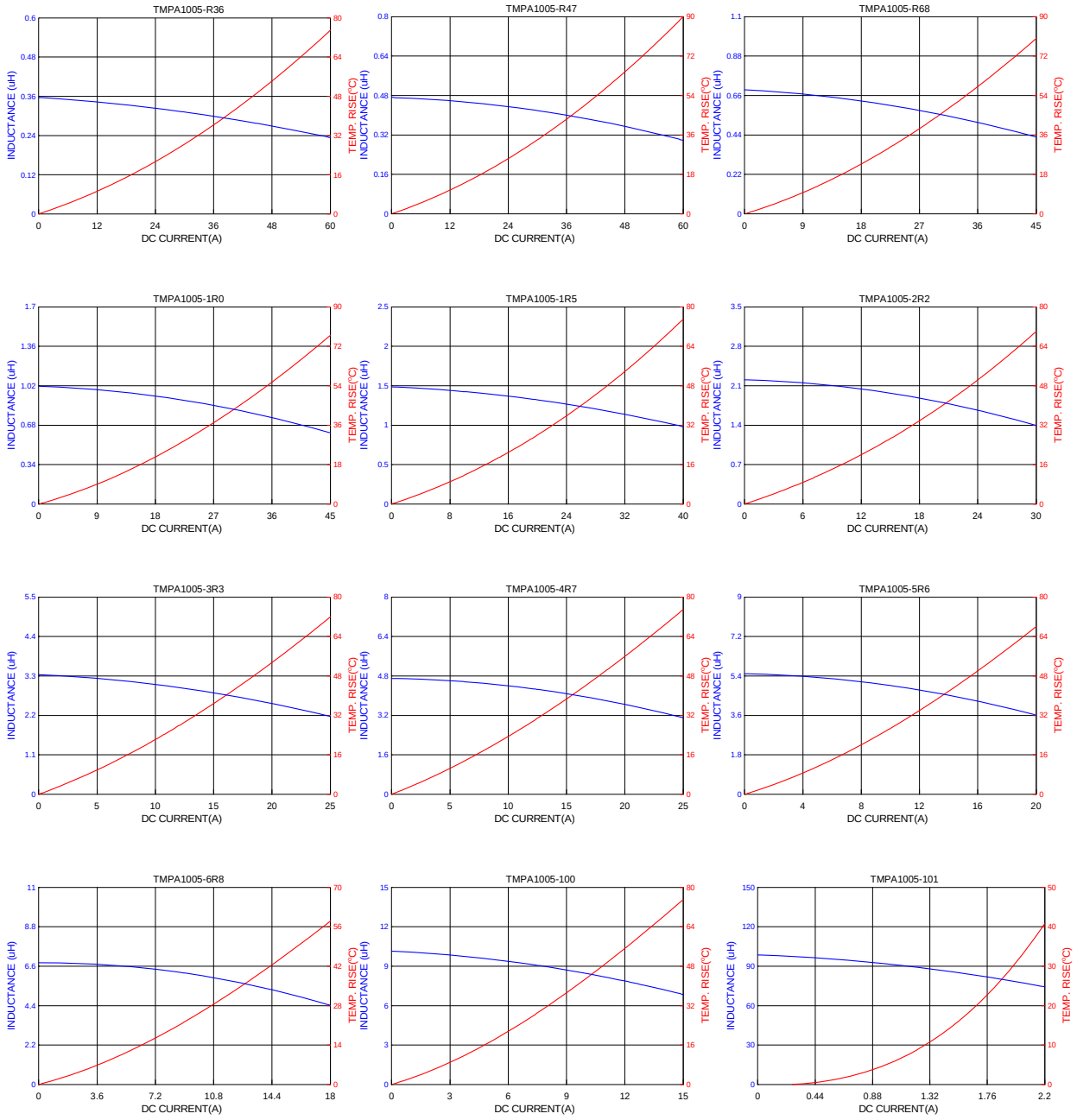
5. Specification

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			
TMPA1005SV-R36MN-D	0.36	34.0	30.0	52.0	46.0	0.82	0.92	non-leadframe
TMPA1005SV-R47MN-D	0.47	33.0	29.0	46.0	40.0	1.15	1.32	non-leadframe
TMPA1005SV-R68MN-D	0.68	28.0	25.0	35.0	32.0	1.6	1.9	non-leadframe
TMPA1005SV-1R0MN-D	1.00	25.0	23.0	33.0	30.0	2.6	3.0	non-leadframe
TMPA1005SV-1R5MN-D	1.50	23.0	21.0	27.0	24.0	3.4	3.8	non-leadframe
TMPA1005SV-2R2MN-D	2.20	19.5	17.5	20.0	18.0	5.1	5.6	leadframe
TMPA1005SV-3R3MN-D	3.30	17.0	15.0	17.5	15.5	8.1	9.1	leadframe
TMPA1005SV-4R7MN-D	4.70	15.0	13.0	16.0	14.0	9.3	10.5	leadframe
TMPA1005SV-5R6MN-D	5.60	13.0	11.0	15.0	12.5	12.8	14.4	leadframe
TMPA1005SV-6R8MN-D	6.80	12.0	10.0	14.0	12.0	15.0	17.3	leadframe
TMPA1005SV-100MN-D	10.0	7.6	7.2	13.0	11.0	18.9	21.8	leadframe
TMPA1005SV-101MN-D	100	2.2	2.0	2.8	2.4	242.0	290.0	leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ 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 △T of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155℃ 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

TMPA1205SPV-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℃(Including self - temperature rise)

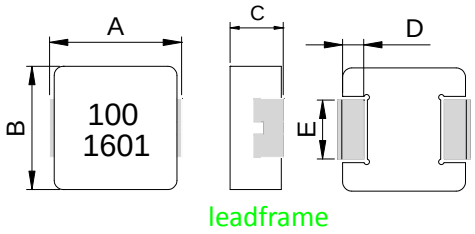
Halogen-free

RoHS

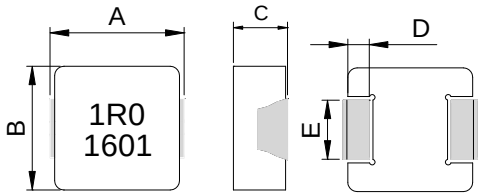
2. Applications

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

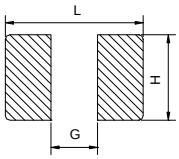


leadframe



non-leadframe

Recommend PC Board Pattern



Series	A	B	C	D	E	Inductance
TMPA1205	13.5±0.5	12.6±0.2	4.7±0.3	2.3±0.3	4.0±0.3	1.0uH and below
					4.7±0.3	1.5uH and above

Unit: mm

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.

4. Part Numbering

TMPA	1205	SPV	-	1R0	MN	-	D
A	B	C		D	E		F

A: Series	
B: Dimension	BxC.
C: Type	Standard. P:PAD broaden. V=Vehicle.
D: Inductance	1R0=1.0uH
E: Inductance Tolerance	M=±20%
F: Code	Marking: Black.100 and 1601(16 YY, 01 WW,follow production date).

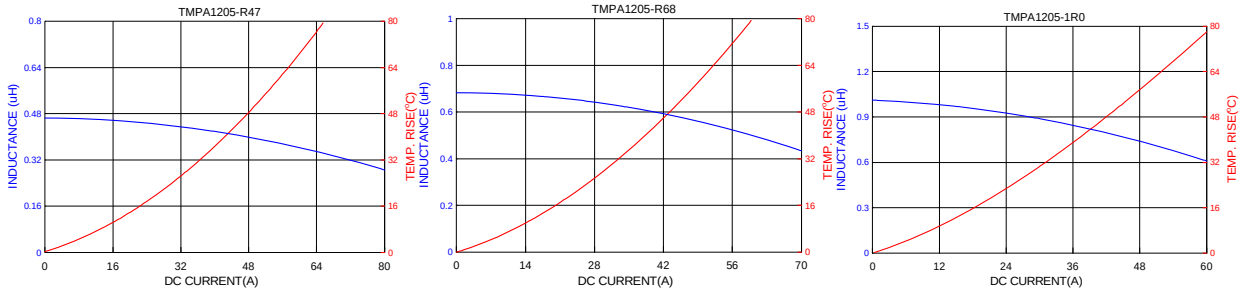
5. Specification

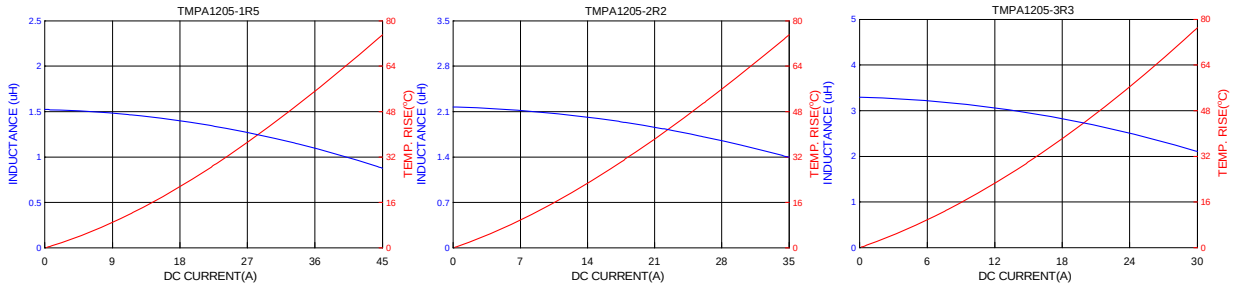
Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ) Typ	DCR (mΩ) Max	Type
		Typ	Max	Typ	Max			
TMPA1205SPV-R47MN-D	0.47	38	34	65	58	0.77	0.9	non-leadframe
TMPA1205SPV-R68MN-D	0.68	34	31	50	42	1.3	1.55	non-leadframe
TMPA1205SPV-1R0MN-D	1.00	30	27	40	34	1.6	1.9	non-leadframe
TMPA1205SPV-1R5MN-D	1.50	25	22	31	28	3.2	3.8	leadframe
TMPA1205SPV-2R2MN-D	2.20	17	15.5	26	23	4.1	4.8	leadframe
TMPA1205SPV-3R3MN-D	3.30	15.5	14	23	20.5	6.0	7.0	leadframe
TMPA1205SPV-4R7MN-D	4.70	14	12.5	18.5	16	8.8	10.2	leadframe
TMPA1205SPV-6R8MN-D	6.80	12	11	16.5	15	13	16	leadframe
TMPA1205SPV-100MN-D	10.0	10	9.0	13	10.5	19.2	22	leadframe
TMPA1205SPV-150MN-D	15.0	9.4	8.2	11	9.2	30	36	leadframe

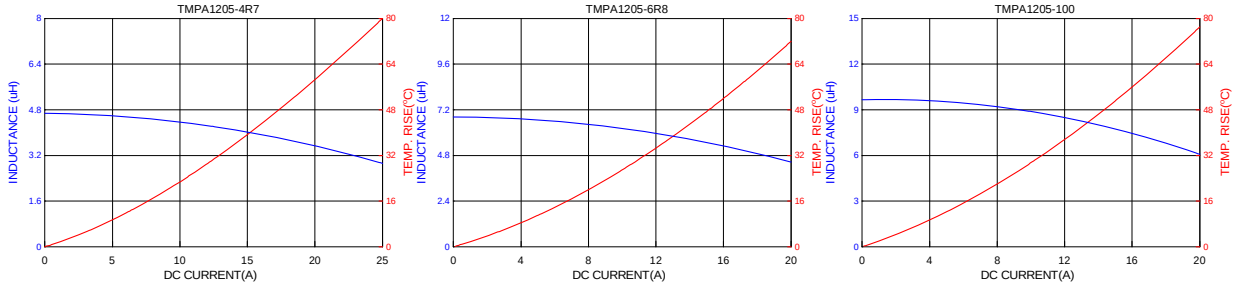
Note:

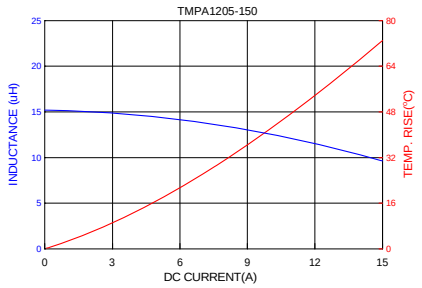
1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately △T of 40℃
5.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

TMPA1265SPV-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℃(Including self - temperature rise)

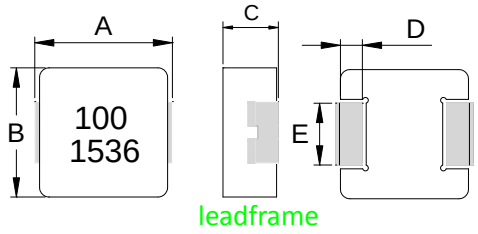
Halogen-free

RoHS

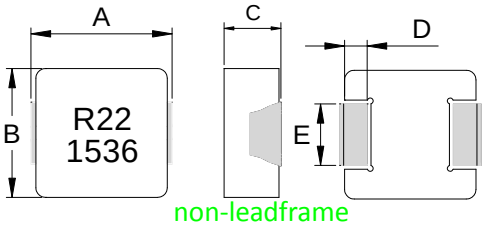
2. Applications

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



leadframe

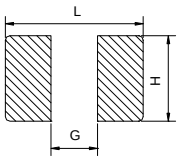


non-leadframe

Series	A	B	C	D	E	Inductance
TMPA1265	13.5±0.5	12.6±0.2	6.2±0.3	2.3±0.3	4.0±0.3	0.68~1.50uH among
					4.7±0.3	0.22uH and below 2.20uH and above

Unit: mm

Recommend PC Board Pattern



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.

4. Part Numbering

TMPA	1265	SPV	-	100	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC.
C: Type — Standard. P:PAD broaden. V=Vehicle.
D: Inductance — 100=10.0uH
E: Inductance Tolerance — M=±20%
F: Code — Marking: Black.100 and 1536(15 YY, 36 WW,follow production date).

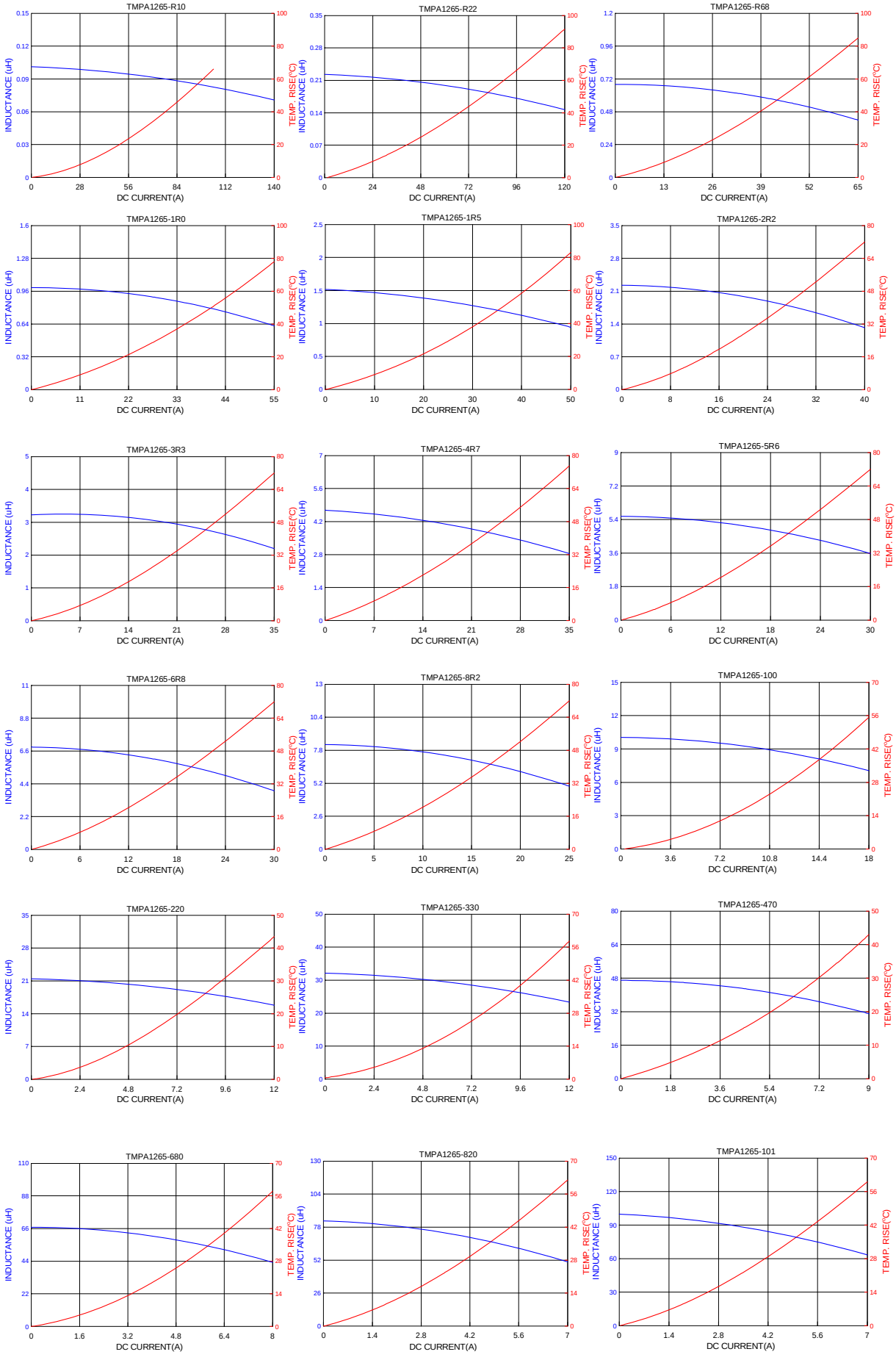
5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ) Typ	DCR (mΩ) Max	Type
		Typ	Max	Typ	Max			
TMPA1265SPV-R10YN-D	0.10±30%	65	60	120	115	0.2	0.25	non-leadframe
TMPA1265SPV-R22MN-D	0.22	53	42	112	105	0.4	0.46	non-leadframe
TMPA1265SPV-R68MN-D	0.68	36.5	33	55	46	1.25	1.5	non-leadframe
TMPA1265SPV-1R0MN-D	1.00	33	29	45	36	1.5	1.8	non-leadframe
TMPA1265SPV-1R5MN-D	1.50	29	25	35	30	2.2	2.53	non-leadframe
TMPA1265SPV-2R2MN-D	2.20	25	21	28.5	24	3.7	4.2	leadframe
TMPA1265SPV-3R3MN-D	3.30	22	19	27	22.5	5.3	6.2	leadframe
TMPA1265SPV-4R7MN-D	4.70	20	17	25	21	6.8	8.0	leadframe
TMPA1265SPV-5R6MN-D	5.60	18	15	23	19.5	8.3	9.8	leadframe
TMPA1265SPV-6R8MN-D	6.80	16.5	14	21	18	9.8	11.3	leadframe
TMPA1265SPV-8R2MN-D	8.20	15	12.5	19	17	12	13.8	leadframe
TMPA1265SPV-100MN-D	10.0	13	11	17	15	13	15.8	leadframe
TMPA1265SPV-220MN-D	22.0	10	8	10	9	31	35	leadframe
TMPA1265SPV-330MN-D	33.0	9	6.5	9	8	46	55	leadframe
TMPA1265SPV-470MN-D	47.0	8.0	5.7	7.6	6.8	58	67	leadframe
TMPA1265SPV-680MN-D	68.0	5.8	4.8	6.0	5.0	82	100	leadframe
TMPA1265SPV-820MN-D	82.0	5.0	4.0	5.0	4.2	110	132	leadframe
TMPA1265SPV-101MN-D	100	5.0	3.8	5.0	4.0	140	161	leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ 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℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155℃ 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

TMPA1707SPV-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℃(Including self - temperature rise)

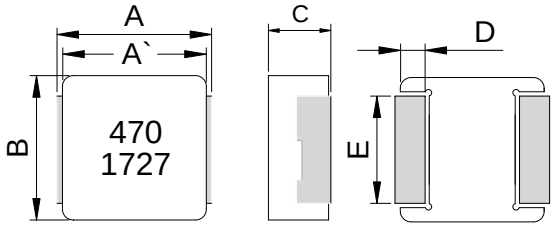
Halogen-free

RoHS

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.

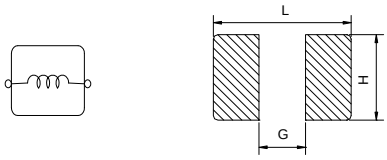
3. Dimensions



Series	A	A`	B	C	D	E
TMPA1707	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	12.0	12.5

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

4. Part Numbering

TMPA	1707	SPV	-	470	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC.
C: Type — Standard. V: Vehicle
D: Inductance — 470=47.0uH
E: Inductance Tolerance — M=±20%.
F: Code — Marking: Black.470 and 1727(17 YY, 27 WW,follow production date).

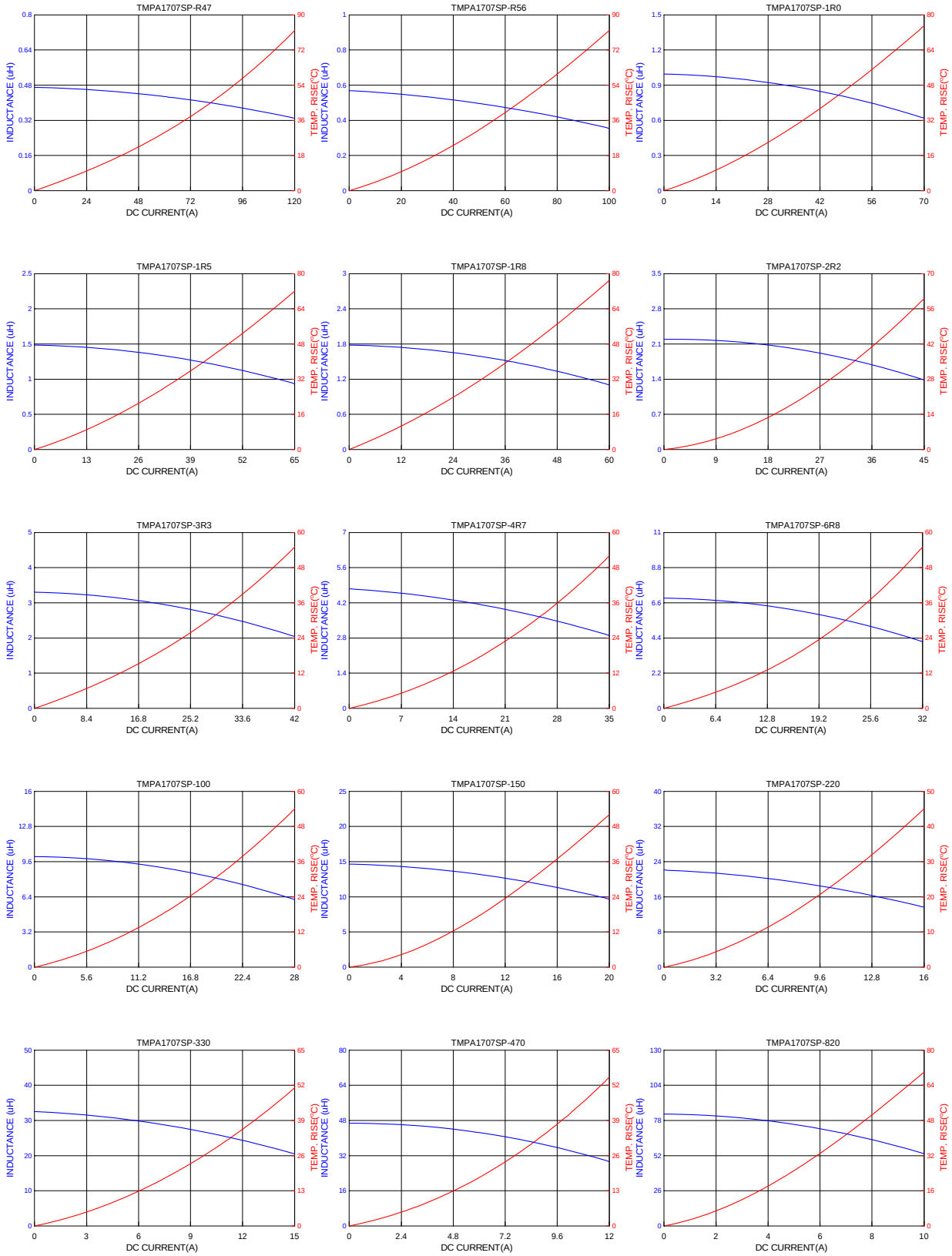
5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ) Typ	DCR (mΩ) Max
		Typ	Max	Typ	Max		
TMPA1707SPV-R47MN-D	0.47	60	55	110	100	0.7	0.9
TMPA1707SPV-R56MN-D	0.56	56	50	80	70	0.81	0.97
TMPA1707SPV-1R0MN-D	1.00	46	42	50	45	1.06	1.3
TMPA1707SPV-1R5MN-D	1.50	39	35	46	40	1.5	1.8
TMPA1707SPV-1R8MN-D	1.80	35	32	40	34	1.7	2.0
TMPA1707SPV-2R2MN-D	2.20	32	30	35	32	1.8	2.2
TMPA1707SPV-3R3MN-D	3.30	30	28	32	29	2.7	3.3
TMPA1707SPV-4R7MN-D	4.70	28	26	29	26	3.7	4.5
TMPA1707SPV-6R8MN-D	6.80	24	22	25	22	6.0	7.2
TMPA1707SPV-100MN-D	10.0	21	19	22	19	9.2	10.6
TMPA1707SPV-150MN-D	15.0	16	14	16	14	12.8	15.5
TMPA1707SPV-220MN-D	22.0	13.5	11.5	13.5	11.5	20.5	24
TMPA1707SPV-330MN-D	33.0	12	10	12	10	32	37
TMPA1707SPV-470MN-D	47.0	9.5	8.0	9.5	8.0	40	47
TMPA1707SPV-820MN-D	82.0	6.5	5.7	8.0	6.5	69	83

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ 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 △T of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 155℃ 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

TMPA2313SPV-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℃(Including self - temperature rise)

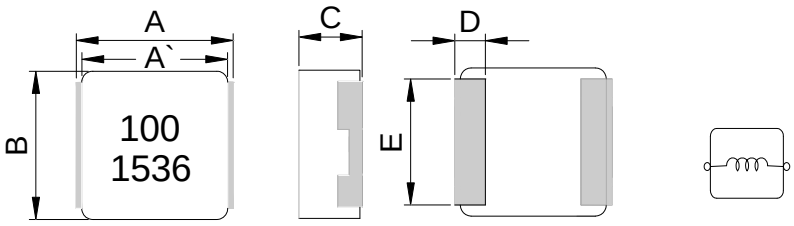
Halogen-free

RoHS

2. Applications

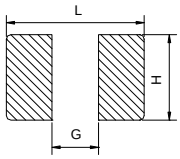
1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery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

3. Dimensions



Series	A(mm)	A`(mm)	B(mm)	C(mm)	D(mm)	E(mm)
TMPA2313	23.5±0.5	22.7±0.3	22.0±0.3	12.6±0.4	5.0±0.4	19.0±0.3

Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
24	12.5	19.6

Note: 1. The above PCB layout reference only.
2. Recommend solder paste thickness at 0.20mm and above.

4. Part Numbering

TMPA	2313	SPV	-	100	MN	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC.
C: Type — Standard. V: Vehicle
D: Inductance — 100=10.0uH
E: Inductance Tolerance — M=±20%.
F: Code — Marking: Black.100 and 1536(15 YY, 36 WW,follow production date).

5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC (A) Irms.		Saturation Current DC (A)I sat		DCR (mΩ) Typ	DCR (mΩ) Max
		Typ	Max	Typ	Max		
TMPA2313SPV-1R5MN-D	1.50	62	57	52	48	1.0	1.15
TMPA2313SPV-2R2MN-D	2.20	58	52	48	43	1.05	1.25
TMPA2313SPV-3R3MN-D	3.30	49	47	41	37	1.5	1.75
TMPA2313SPV-4R7MN-D	4.70	47	44	38	34	1.9	2.2
TMPA2313SPV-6R8MN-D	6.80	40	36	36	32	2.7	3.1
TMPA2313SPV-100MN-D	10.0	33	30	28	20	3.8	4.15
TMPA2313SPV-220MN-D	22.0	22	18	15	14	9.2	11
TMPA2313SPV-230MN-D	23.0	22	18	15	14	9.2	11
TMPA2313SPV-330MN-D	33.0	19	16	12	10.5	13.5	15.4
TMPA2313SPV-470MN-D	47.0	17	14	12	10	17.3	20.8
TMPA2313SPV-680MN-D	68.0	14	12	12	9.0	26.2	29.5
TMPA2313SPV-750MN-D	75.0	13	11	10.5	8.5	27.5	31.6
TMPA2313SPV-820MN-D	82.0	12	10	9.0	7.7	31	34.2
TMPA2313SPV-101MN-D	100	11	9.5	9.0	7.5	36	40

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
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6. Typical Performance Curves