

SPECIFICATION OF BSF-□NR□ SERIES

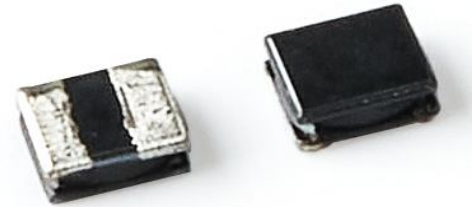
FEATURES

1. Low profile construction and miniature size.
2. High magnetic shield construction and acted high performance for EMC/EMI protection.
3. Low coil resistance with large current.
4. 100% lead (Pb) free meet RoHS standard.



APPLICATIONS

1. D/D converter unit design for mobile product, VRM for server.
2. DVD、HDD、STB、LCD display、IP CAM、GPS、USB connector、Smart phones、Face Recognition System、IoT application...etc.



ORDERING CODE

BSF2512SNR□
R47
M
T

(1)
(2)
(3)
(4)

- (1) PRODUCT TYPE CODE AND SIZE CODE
- (2) INDUCTANCE
- (3) INDUCTANCE TOLERANCE (M : ±20%, N : ±30%)
- (4) REEL TAPING

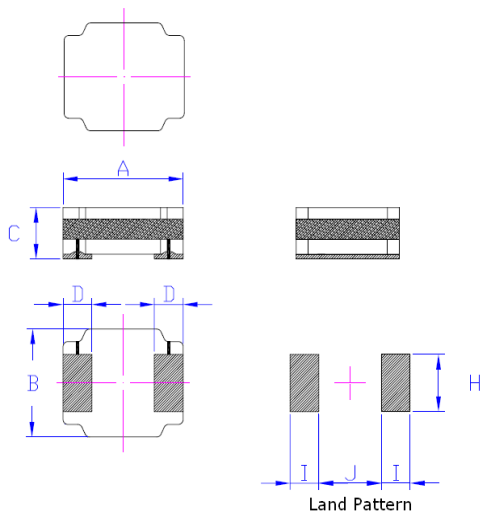


FIG 1

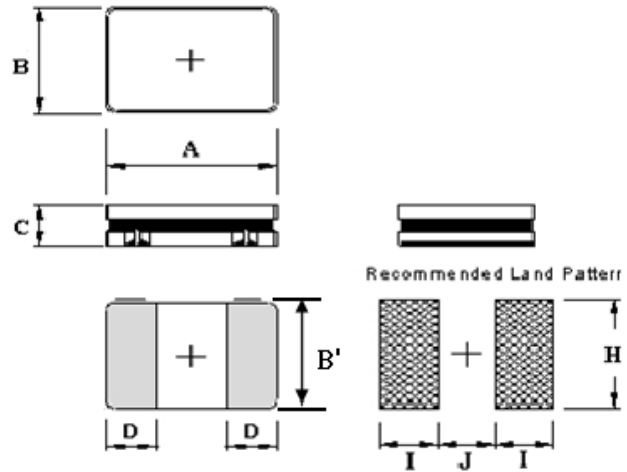


FIG 2

SHAPE & DIMENSIONS

UNIT:mm

SIZE CODE	A	B	B'	C	D	H	I	J	FIG
BSF2010BNR□	2.00±0.20	1.60±0.20	-	1.05max	0.60±0.20	1.10	1.00	0.90	1
BSF2510SNR□	2.50±0.25	2.10±0.20	2.25±0.20	1.00 max.	0.85±0.20	2.30	0.95	0.90	2
BSF2512SNR□	2.50±0.25	2.10±0.20	2.25±0.20	1.20 max.	0.85±0.20	2.30	0.95	0.90	2

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SMD POWER INDUCTORS → BSF2010BNRA SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance ($m\Omega$)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2010BNRAR47MT	0.47	62	170	2.30	2.20
BSF2010BNRAR68MT	0.68	80	140	2.00	1.80
BSF2010BNRA1R0MT	1.00	96	110	1.80	1.70
BSF2010BNRA1R5MT	1.50	150	95	1.40	1.40
BSF2010BNRA1R8MT	1.80	175	70	1.20	1.20
BSF2010BNRA2R2MT	2.20	210	70	1.10	1.10
BSF2010BNRA3R3MT	3.30	300	55	0.95	1.00
BSF2010BNRA4R7MT	4.70	384	45	0.76	0.85
BSF2010BNRA6R8MT	6.80	770	35	0.66	0.67
BSF2010BNRA8R2MT	8.20	840	30	0.63	0.65
BSF2010BNRA100MT	10.0	950	30	0.60	0.65
BSF2010BNRA150MT	15.0	1600	25	0.45	0.40

※Test Frequency: 1MHz/0.1V

※Tolerance: M \pm 20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40°C

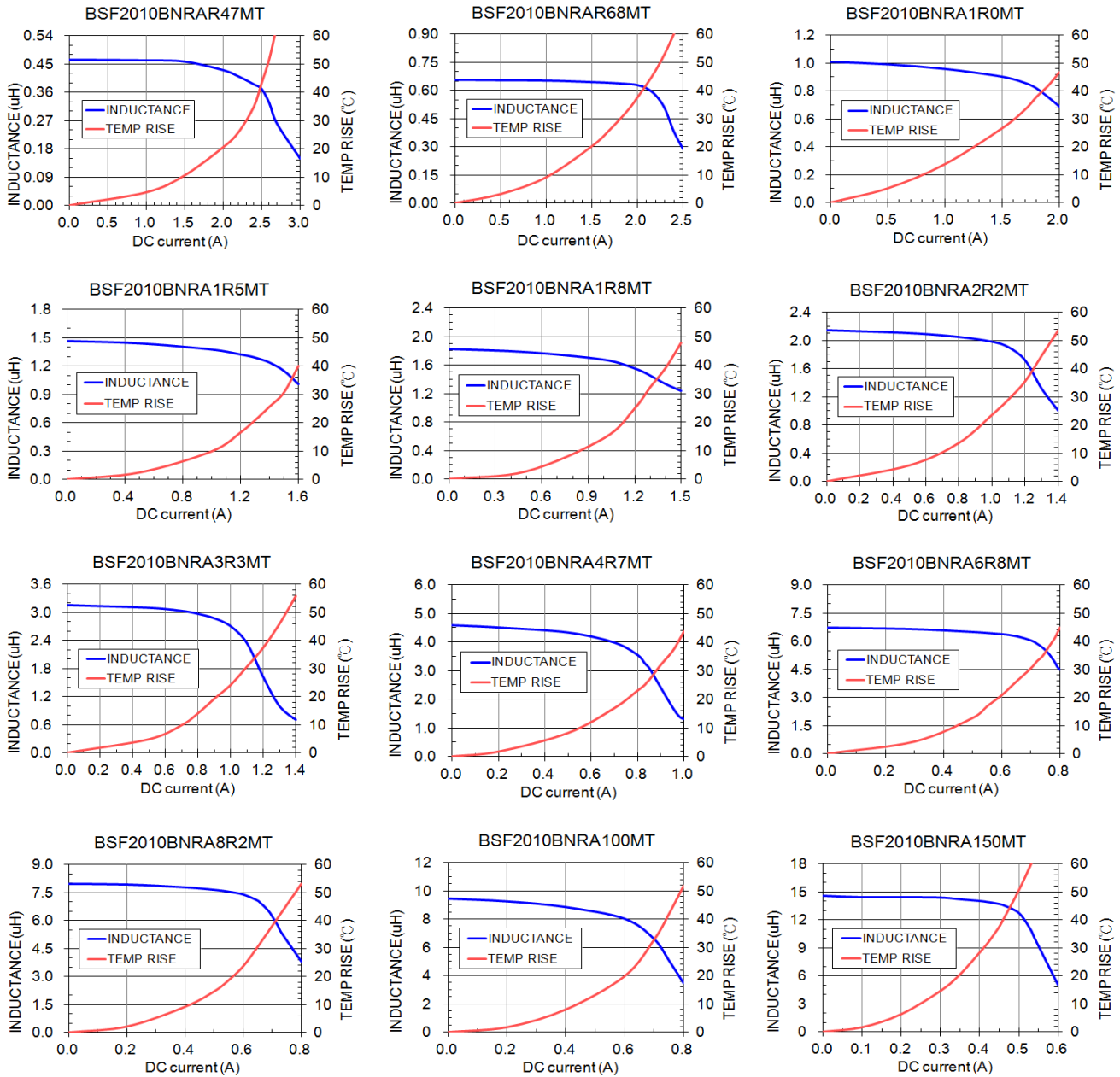
※Operating temperature range : -40 to +125°C (including self-heating)

※Storage Temp. : -40°C TO+85°C

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SMD POWER INDUCTORS → BSF2010BNRA SERIES

ELECTRICAL CHARACTERISTIC



※Test Frequency: 1MHz/0.1V

※Tolerance: M±20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40°C

※Operating temperature range : -40 to +125°C (including self-heating)

※Storage Temp. : -40°C TO+85°C

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SMD POWER INDUCTORS → BSF2010BNRB SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μH)	DC Resistance ($\text{m}\Omega$)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2010BNRBR24MT	0.24	25	200	2.20	3.40
BSF2010BNRBR33MT	0.33	35	180	2.10	3.00
BSF2010BNRBR47MT	0.47	50	170	2.00	2.60
BSF2010BNRB1R0MT	1.00	80	110	1.40	1.80
BSF2010BNRB1R5MT	1.50	120	90	1.10	1.50
BSF2010BNRB2R2MT	2.20	150	60	0.85	1.30
BSF2010BNRB3R3MT	3.30	187	55	0.70	1.20
BSF2010BNRB4R7MT	4.70	225	45	0.50	1.10
BSF2010BNRB100MT	10.0	540	30	0.39	0.75
BSF2010BNRB220MT	22.0	1500	20	0.26	0.38

※Test Frequency: 1MHz/0.1V

※Tolerance: M \pm 20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40°C

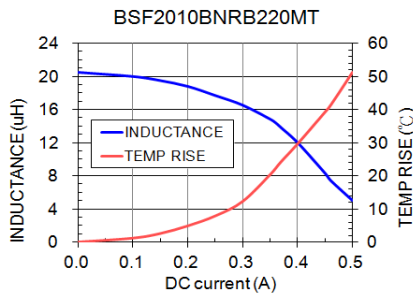
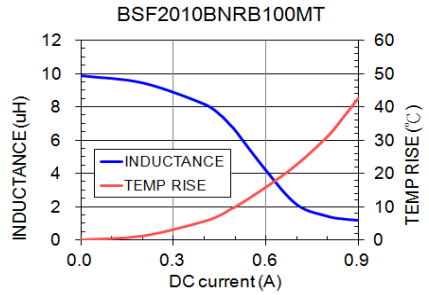
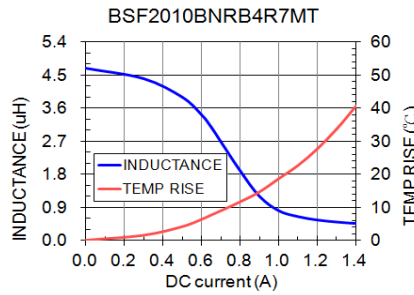
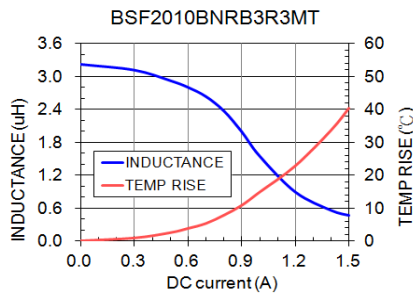
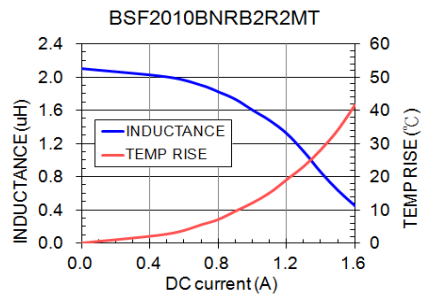
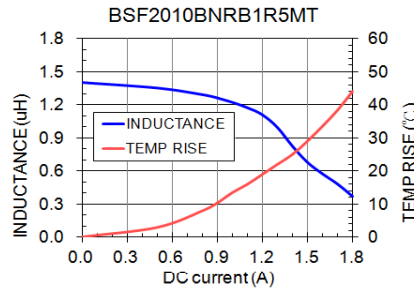
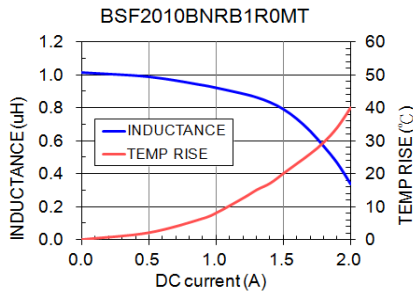
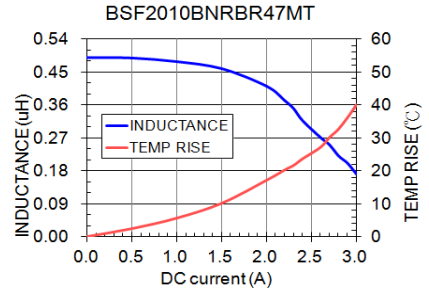
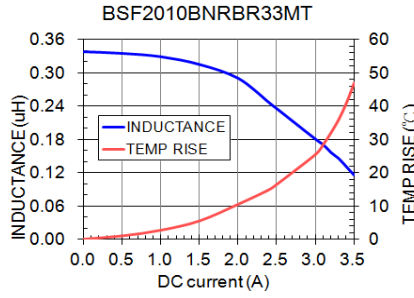
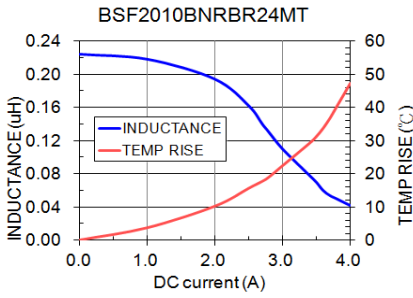
※Operating temperature range : -40 to +125°C (including self-heating)

※Storage Temp. : -40°C TO+85°C

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SMD POWER INDUCTORS → BSF2010BNRB SERIES

ELECTRICAL CHARACTERISTIC



※Test Frequency: 1MHz/0.1V

※Tolerance: M±20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40℃

※Operating temperature range : -40 to +125℃ (including self-heating)

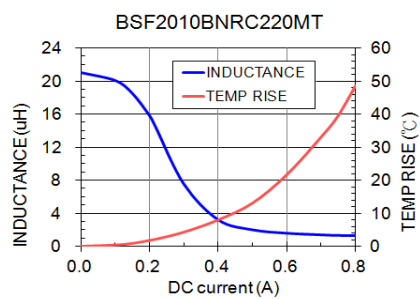
※Storage Temp. : -40℃ TO+85℃

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SMD POWER INDUCTORS → BSF2010BNRC SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance ($m\Omega$)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2010BNRC220MT	22.0	770	20	0.17	0.65



- ※Test Frequency: 1MHz/0.1V
- ※Tolerance: M \pm 20%
- ※Isat:Based on Inductance decrease 30%
- ※IDC:Based on Temperature increase 40°C
- ※Operating temperature range : -40 to +125°C (including self-heating)
- ※Storage Temp. : -40°C TO+85°C

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SMD POWER INDUCTORS → BSF2510SNRA SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance (m Ω)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2510SNRAR47MT	0.47	42	160	3.20	3.30
BSF2510SNRAR68MT	0.68	54	155	2.60	3.20
BSF2510SNRA1R0MT	1.00	80	130	2.20	2.60
BSF2510SNRA1R5MT	1.50	105	100	1.60	2.40
BSF2510SNRA2R2MT	2.20	150	80	1.40	1.80
BSF2510SNRA3R3MT	3.30	235	70	1.20	1.50
BSF2510SNRA4R7MT	4.70	310	50	1.10	1.20
BSF2510SNRA6R8MT	6.80	450	40	0.80	1.00
BSF2510SNRA8R2MT	8.20	500	35	0.75	0.90
BSF2510SNRA100MT	10.0	550	30	0.65	0.85
BSF2510SNRA220MT	22.0	1450	20	0.48	0.56

※Test Frequency: 1MHz/0.1V

※Tolerance: M \pm 20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40°C

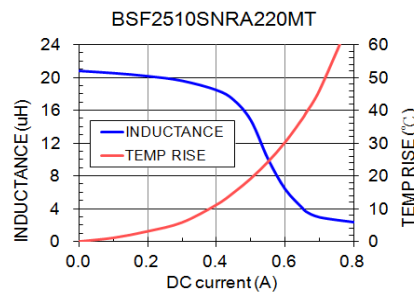
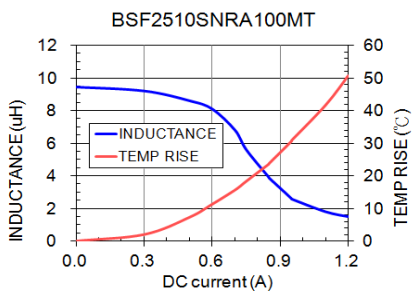
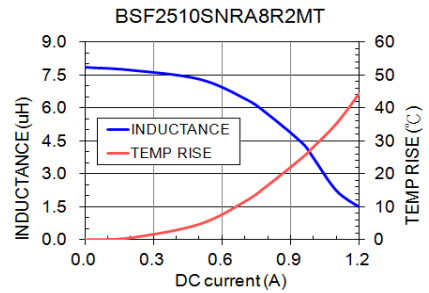
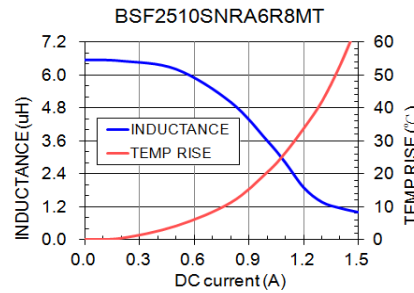
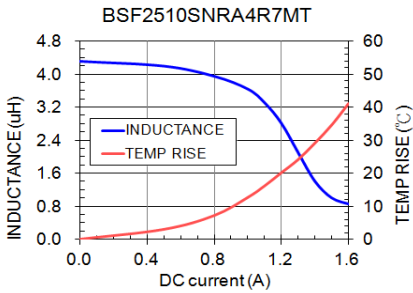
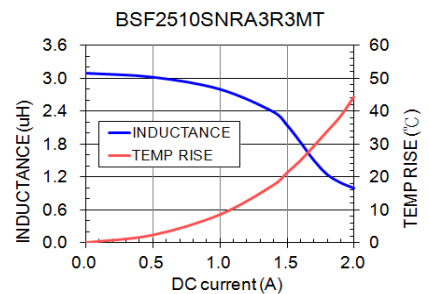
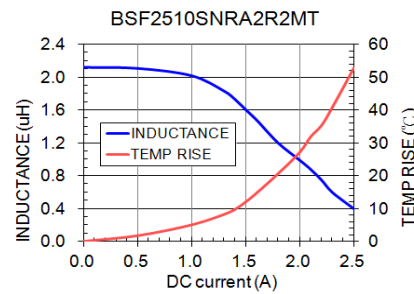
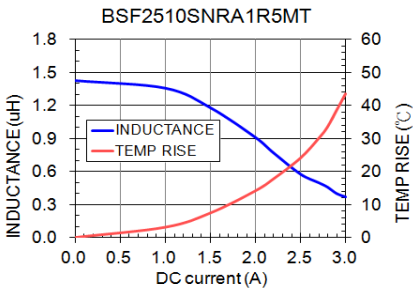
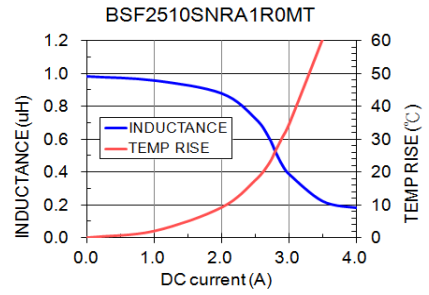
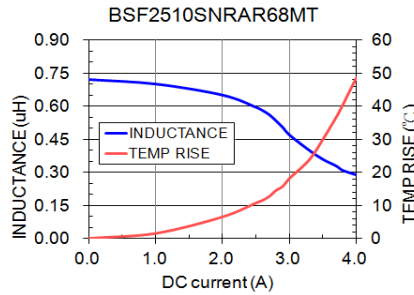
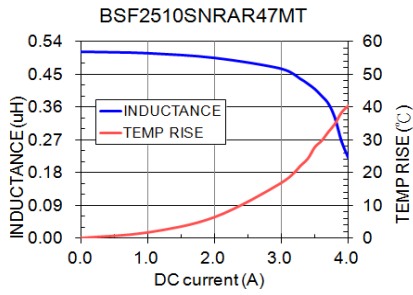
※Operating temperature range : -40 to +125°C (including self-heating)

※Storage Temp. : -40°C TO+85°C

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SMD POWER INDUCTORS → BSF2510SNRA SERIES

ELECTRICAL CHARACTERISTIC



※Test Frequency: 1MHz/0.1V

※Tolerance: M±20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40°C

※Operating temperature range : -40 to +125°C (including self-heating)

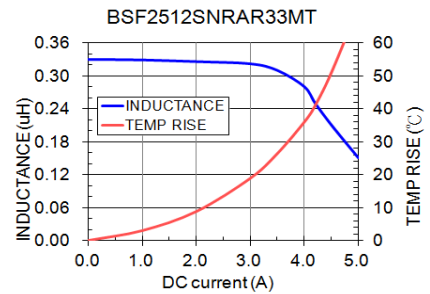
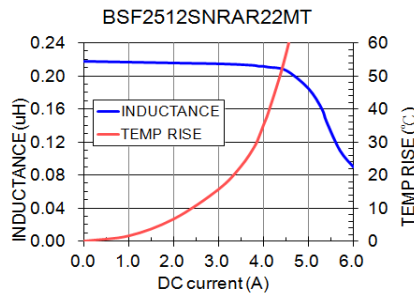
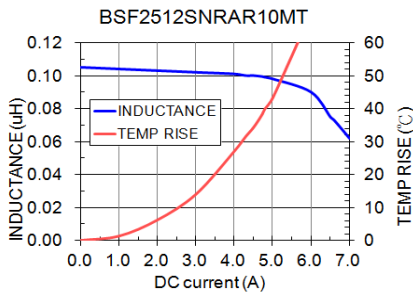
※Storage Temp. : -40°C TO+85°C

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SMD POWER INDUCTORS → BSF2512SNRA SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μH)	DC Resistance ($\text{m}\Omega$)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2512SNRAR10MT	0.10	32	350	6.00	4.20
BSF2512SNRAR22MT	0.22	40	250	5.00	3.90
BSF2512SNRAR33MT	0.33	42	240	4.10	3.80
BSF2512SNRAR47MT	0.47	45	190	4.00	3.70
BSF2512SNRAR68MT	0.68	50	150	3.30	3.60
BSF2512SNRA1R0MT	1.00	56	120	2.80	3.10
BSF2512SNRA1R5MT	1.50	78	100	2.10	2.40
BSF2512SNRA1R8MT	1.80	99	80	2.00	2.10
BSF2512SNRA2R2MT	2.20	109	75	1.90	2.10
BSF2512SNRA3R3MT	3.30	172	70	1.50	1.70
BSF2512SNRA4R7MT	4.70	227	45	1.20	1.40
BSF2512SNRA6R8MT	6.80	320	40	0.95	1.30
BSF2512SNRA8R2MT	8.20	415	35	0.85	1.10
BSF2512SNRA100MT	10.00	430	30	0.80	1.00
BSF2512SNRA150MT	15.0	730	25	0.63	0.80
BSF2512SNRA220MT	22.0	1020	20	0.55	0.60
BSF2512SNRA330MT	33.0	1400	15	0.40	0.50



※Test Frequency: 1MHz/0.1V

※Tolerance: M \pm 20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40 $^{\circ}\text{C}$

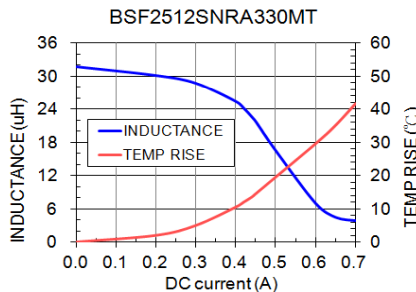
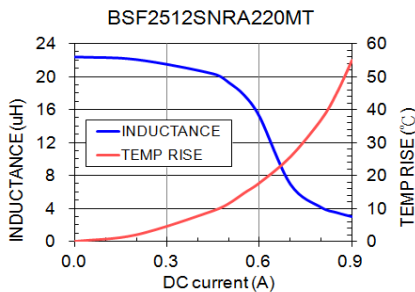
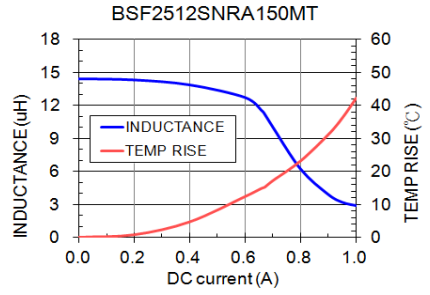
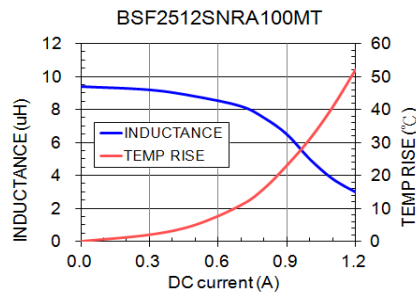
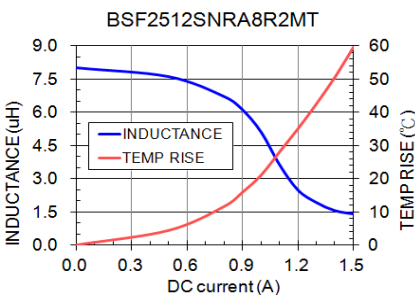
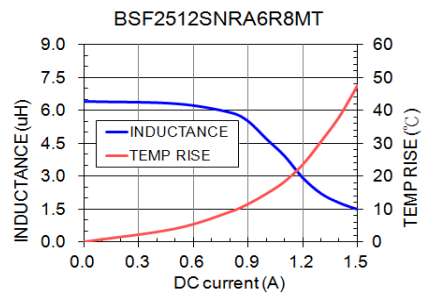
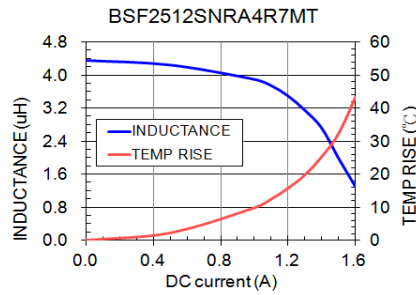
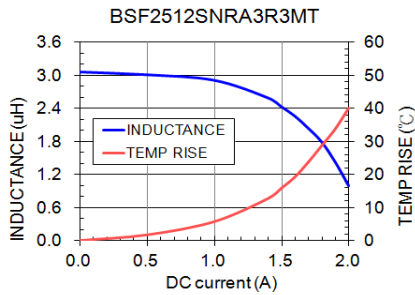
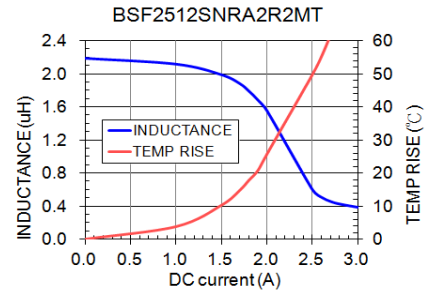
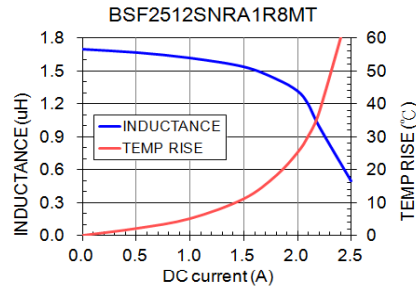
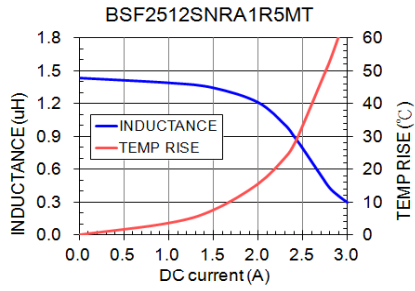
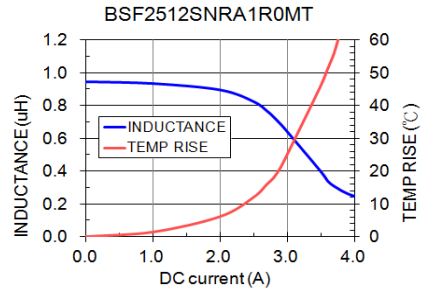
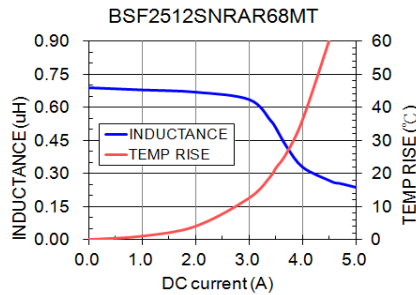
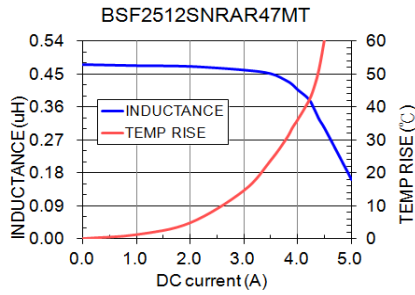
※Operating temperature range : -40 to +125 $^{\circ}\text{C}$ (including self-heating)

※Storage Temp. : -40 $^{\circ}\text{C}$ TO+85 $^{\circ}\text{C}$

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SMD POWER INDUCTORS → BSF2512SNRA SERIES

ELECTRICAL CHARACTERISTIC

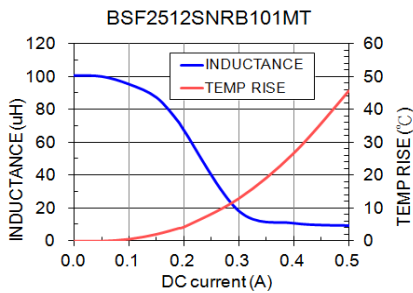
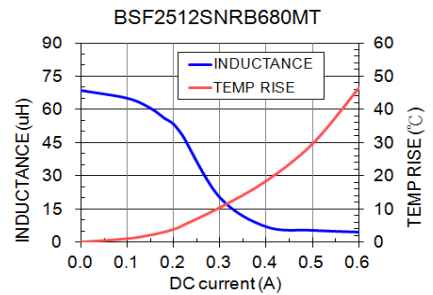
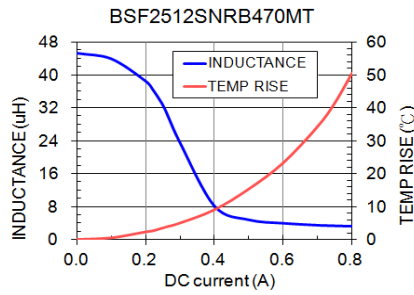
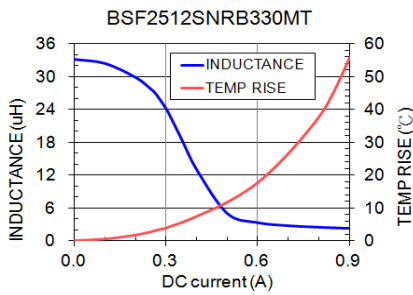


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SMD POWER INDUCTORS → BSF2512SNRB SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μH)	DC Resistance ($\text{m}\Omega$)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2512SNRB330MT	33.0	1000	15	0.27	0.70
BSF2512SNRB470MT	47.0	1250	10	0.22	0.55
BSF2512SNRB680MT	68.0	2200	7	0.20	0.45
BSF2512SNRB101MT	100.0	2800	7	0.16	0.35



※Test Frequency: 1MHz/0.1V

※Tolerance: M \pm 20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40 $^{\circ}\text{C}$

※Operating temperature range : -40 to +125 $^{\circ}\text{C}$ (including self-heating)

※Storage Temp. : -40 $^{\circ}\text{C}$ TO+85 $^{\circ}\text{C}$

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