

SPECIFICATION OF BSF□□□BNRM SERIES

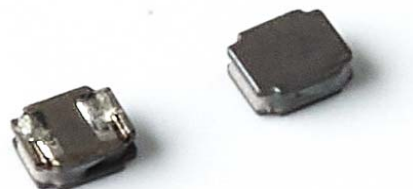
FEATURES

1. Low profile construction and miniature size.
2. Magnetic shielded construction.
3. High current saturation.
4. For new generation portable product D/D converter unit.



APPLICATIONS

DVD、DSC、PDA、LCD display、
Smart phones、HDD、etc.



ORDERING CODE

BSF2512BNRM R47 M T
(1) (2) (3) (4)

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

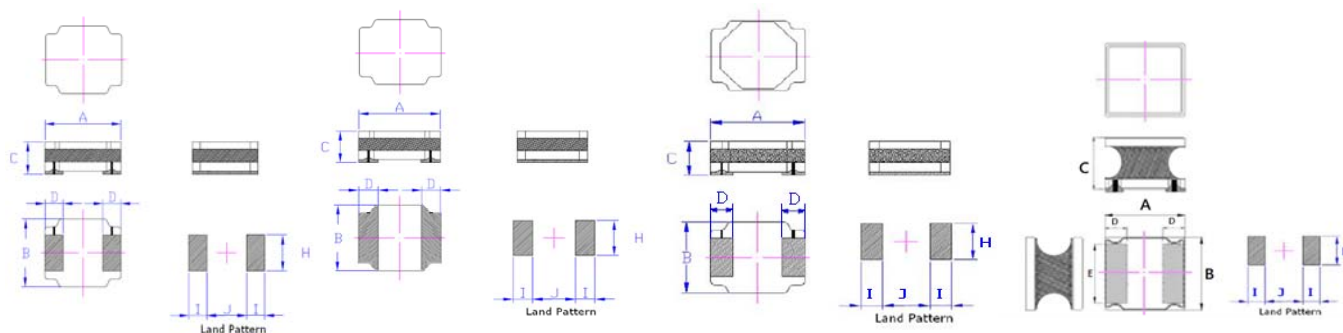


FIG 1

FIG 2

FIG 3

FIG 4

SHAPE & DIMENSIONS

SIZE CODE	A mm	B mm	C mm	D mm	E mm	H	I	J	FIG
BSF2010BNRM	2.0 $\pm$ 0.2	1.6 $\pm$ 0.2	1.05max	0.6 $\pm$ 0.2	—	1.10	1.00	0.90	1
BSF2512BNRM	2.5 $\pm$ 0.2	2.1 $\pm$ 0.2	1.25max	0.85 $\pm$ 0.20	—	1.40	0.95	0.90	1
BSF3010BNRM	3.0 $\pm$ 0.2	3.0 $\pm$ 0.2	1.05max	0.9 $\pm$ 0.2	—	2.90	1.00	1.20	2
BSF3012BNRM	3.0 $\pm$ 0.2	3.0 $\pm$ 0.2	1.25max	0.9 $\pm$ 0.2	—	2.90	1.00	1.20	2
BSF3015BNRM	3.0 $\pm$ 0.2	3.0 $\pm$ 0.2	1.55max	0.9 $\pm$ 0.2	—	2.90	1.00	1.20	2
BSF5040BNRM	5.4 $\pm$ 0.2	5.7 $\pm$ 0.2	4.0 $\pm$ 0.2	1.5 $\pm$ 0.3	4.5 $\pm$ 0.3	6.10	3.07	3.05	4
BSF6030BNRM	6.0 $\pm$ 0.2	6.0 $\pm$ 0.2	3.0 $\pm$ 0.2	1.9 $\pm$ 0.3	—	5.70	2.00	2.00	3

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.



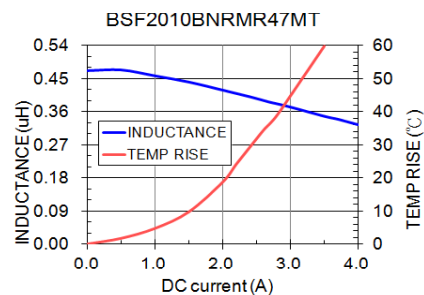
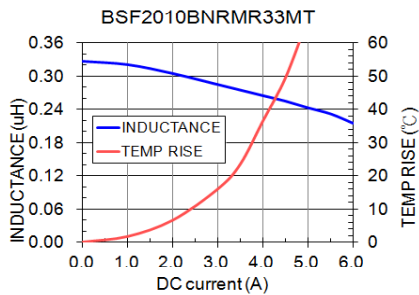
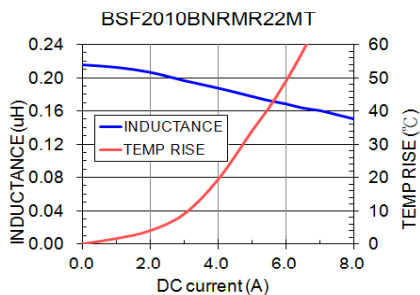
KING CORE ELECTRONICS INC.
Tel:886-3-4698855 Fax:886-3-4691395

No.269,Nanfong Rd.,Pingjhen City,Taoyuan County, Taiwan
E-mail:kc@mail.kingcore.com.tw Web Site:http://www.kingcore.com.tw

SMD POWER INDUCTORS → BSF2010BNRM SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance (m Ω)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2010BNRMR22MT	0.22	24	115	7.00	4.50
BSF2010BNRMR33MT	0.33	34	90	5.00	3.50
BSF2010BNRMR47MT	0.47	57	70	3.30	2.40
BSF2010BNRMR68MT	0.68	66	55	2.80	2.30
BSF2010BNRMR82MT	0.82	85	45	2.50	2.10
BSF2010BNRM1R0MT	1.00	90	40	2.30	2.10
BSF2010BNRM1R2MT	1.20	100	35	2.20	1.60
BSF2010BNRM1R5MT	1.50	148	35	1.90	1.50
BSF2010BNRM1R8MT	1.80	170	30	1.70	1.40
BSF2010BNRM2R2MT	2.20	185	30	1.60	1.40
BSF2010BNRM3R3MT	3.30	290	20	1.30	1.00
BSF2010BNRM4R7MT	4.70	350	20	1.10	0.90
BSF2010BNRM6R8MT	6.80	470	20	0.95	0.88
BSF2010BNRM100MT	10.00	850	20	0.80	0.77
BSF2010BNRM150MT	15.00	1400	7.0	0.60	0.46



※Test Frequency: 1MHz/0.1V

※Tolerance: M $\pm$ 20%

※Isat:Based on Inductance decrease 30%

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

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

※Storage Temp. : -40 $^{\circ}$ C T0+85 $^{\circ}$ C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.

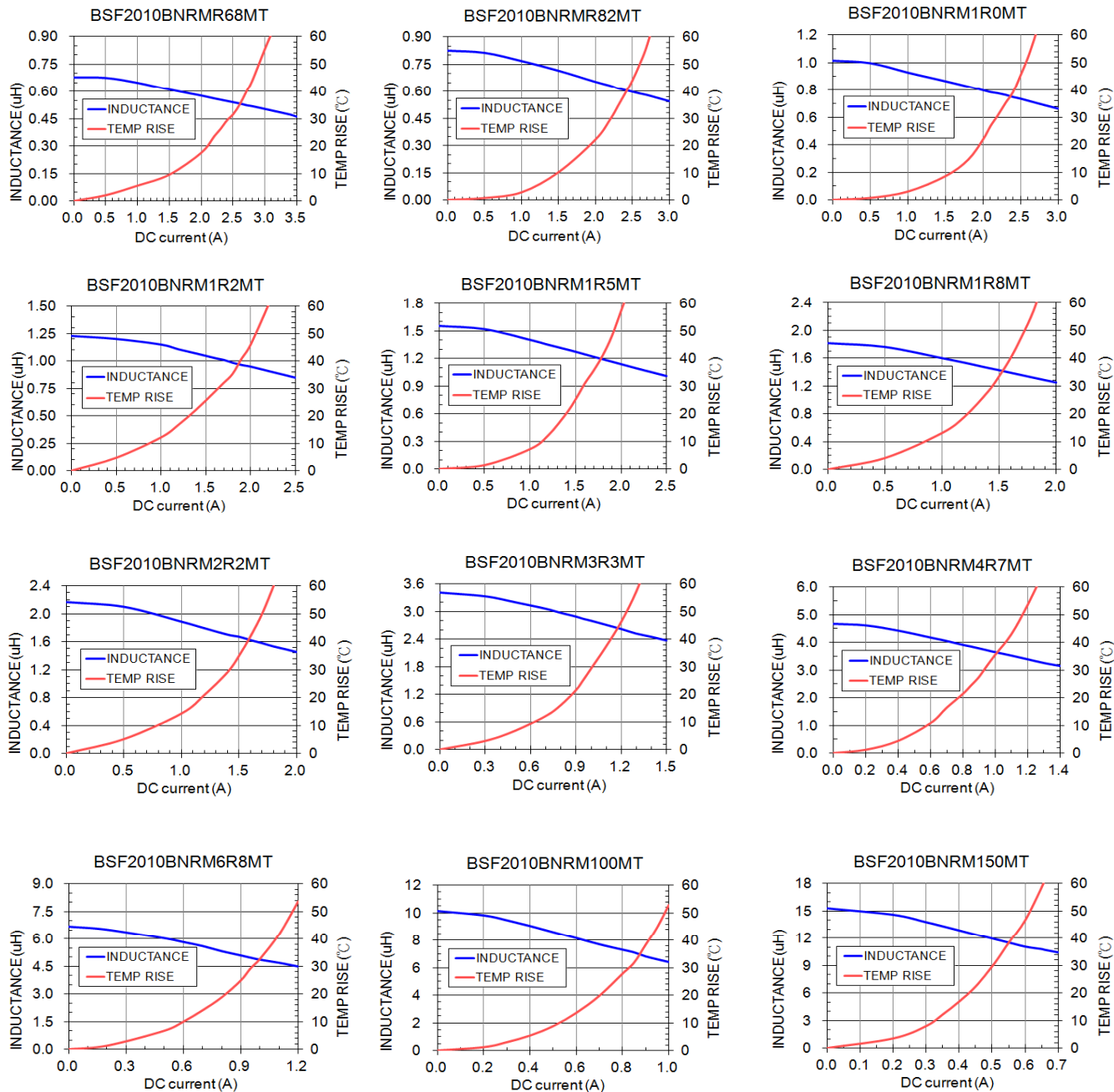


KING CORE ELECTRONICS INC.
Tel:886-3-4698855 Fax:886-3-4691395

No.269,Nanfong Rd.,Pingjhen City,Taoyuan County, Taiwan
E-mail:kc@mail.kingcore.com.tw Web Site:http://www.kingcore.com.tw

SMD POWER INDUCTORS → BSF2010BNRM SERIES

ELECTRICAL CHARACTERISTIC



※All the data listed in this catalogue are for reference only. King Core reserves the right to alter or revise the specifications without prior notification.



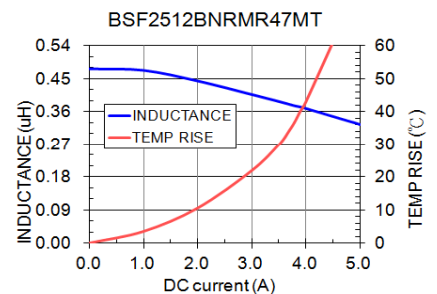
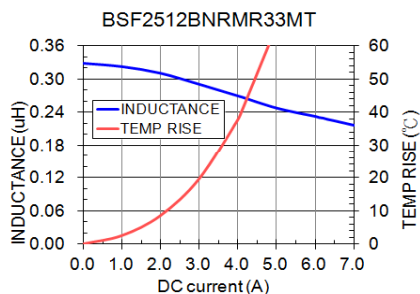
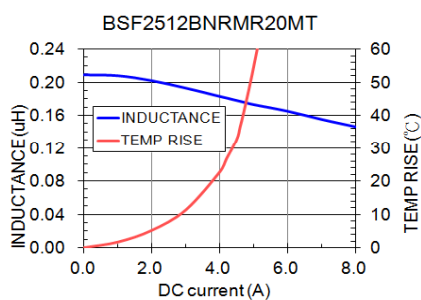
KING CORE ELECTRONICS INC.
Tel: 886-3-4698855 Fax: 886-3-4691395

No. 269, Nanfong Rd., Pingjhen City, Taoyuan County, Taiwan
E-mail: kc@mail.kingcore.com.tw Web Site: <http://www.kingcore.com.tw>

SMD POWER INDUCTORS → BSF2512BNRM SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance (m Ω)max	SRF(MHz) min	Isat (A)max	IDC (A)max
BSF2512BNRMR20MT	0.20	24	120	7.00	4.20
BSF2512BNRMR33MT	0.33	28	85	5.70	3.80
BSF2512BNRMR47MT	0.47	34	80	4.50	3.60
BSF2512BNRMR68MT	0.68	43	70	4.10	3.60
BSF2512BNRM1R0MT	1.00	55	55	3.50	3.20
BSF2512BNRM1R2MT	1.20	56	40	3.00	3.10
BSF2512BNRM1R5MT	1.50	70	40	2.70	2.50
BSF2512BNRM2R2MT	2.20	95	35	2.30	2.10
BSF2512BNRM3R3MT	3.30	150	25	1.70	1.70
BSF2512BNRM4R7MT	4.70	230	20	1.40	1.40
BSF2512BNRM6R8MT	6.80	350	15	1.30	1.20
BSF2512BNRM100MT	10.00	450	15	1.00	1.00
BSF2512BNRM150MT	15.00	620	10	0.80	0.70
BSF2512BNRM220MT	22.00	790	7	0.65	0.65



※Test Frequency: 1MHz/0.1V

※Tolerance: M $\pm$ 20%

※Isat:Based on Inductance decrease 30%

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

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

※Storage Temp. : -40 $^{\circ}$ C T0+85 $^{\circ}$ C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.

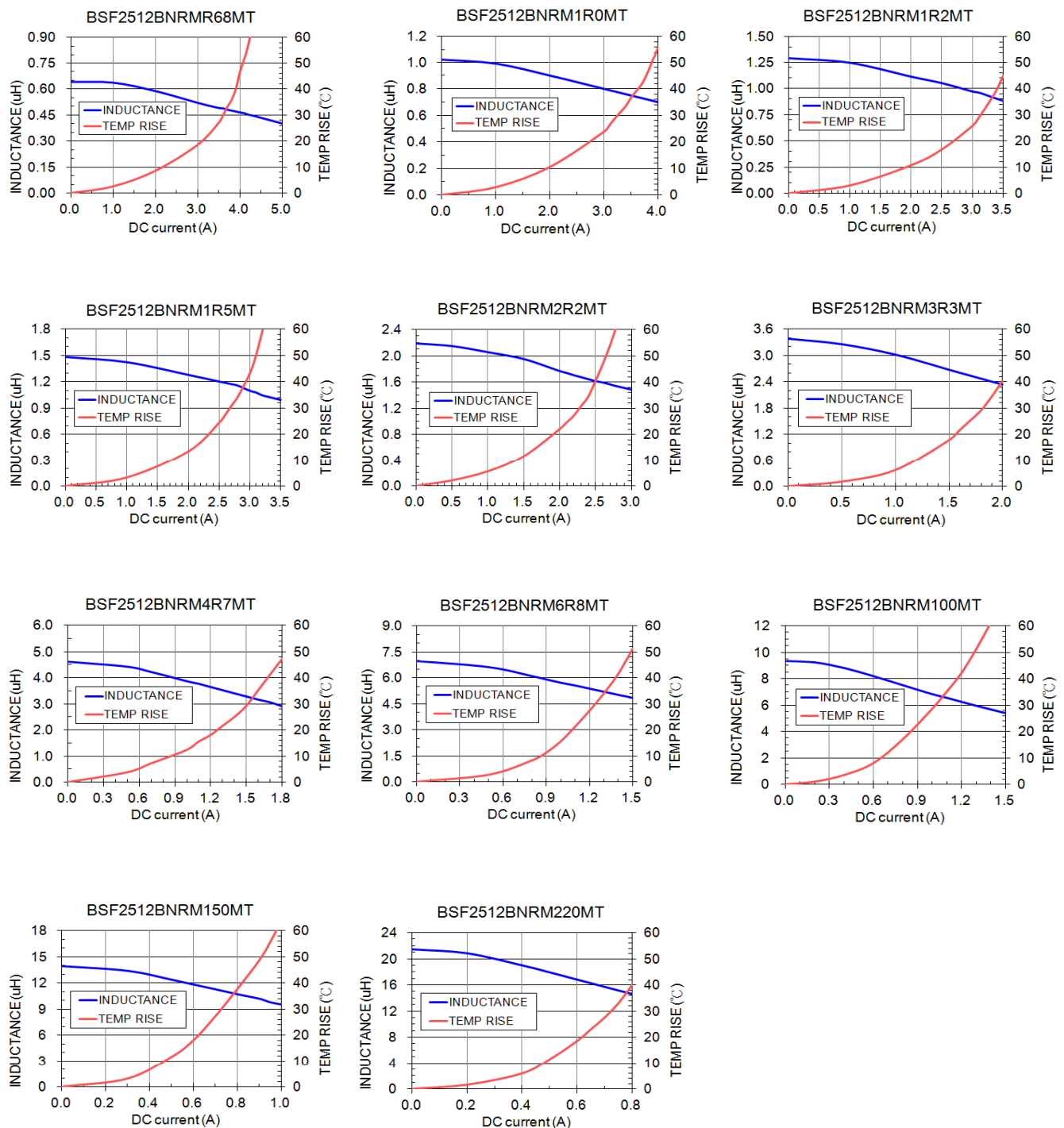


KING CORE ELECTRONICS INC.
Tel:886-3-4698855 Fax:886-3-4691395

No.269,Nanfong Rd.,Pingjhen City,Taoyuan County, Taiwan
E-mail:kc@mail.kingcore.com.tw Web Site:http://www.kingcore.com.tw

SMD POWER INDUCTORS → BSF2512BNRM 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)

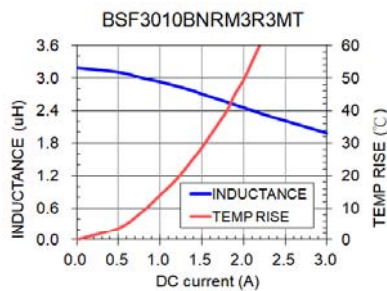
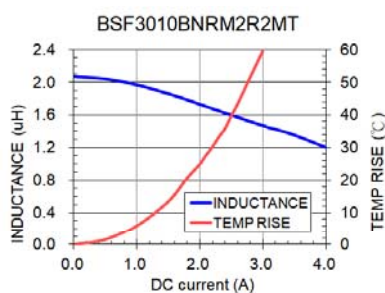
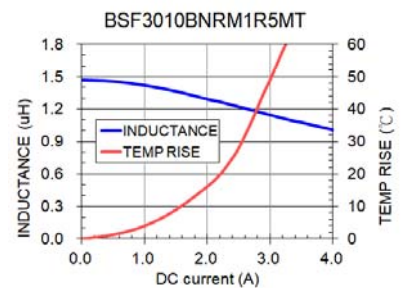
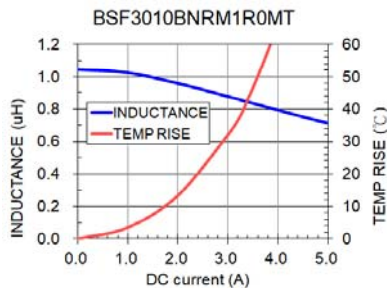
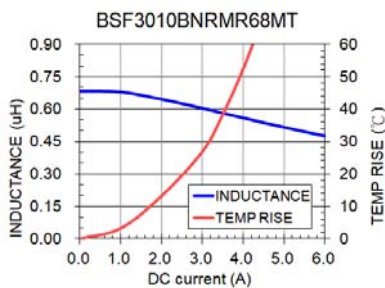
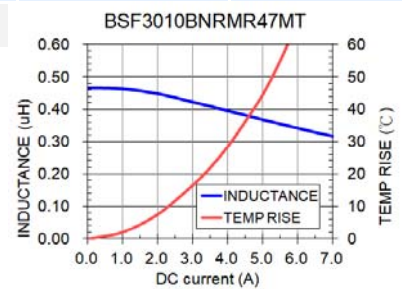
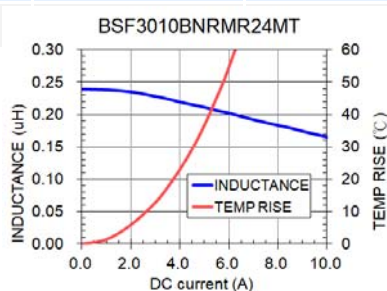
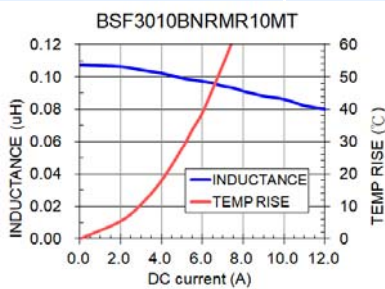
※Storage Temp. : -40°C T0+85°C

※All the data listed in this catalogue are for reference only. King Core reserves the right to alter or revise the specifications without prior notification.

SMD POWER INDUCTORS → BSF3010BNRM SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μH)	DC Resistance ($\text{m}\Omega$)max	SRF(MHz) min	Isat (A)Typ	IDC (A)Typ
BSF3010BNRMR10MT	0.10	25	200	10.0	5.70
BSF3010BNRMR24MT	0.24	32	120	9.00	5.00
BSF3010BNRMR47MT	0.47	39	80	6.60	4.50
BSF3010BNRMR68MT	0.68	65	70	5.70	3.50
BSF3010BNRM1R0MT	1.00	85	55	4.70	3.30
BSF3010BNRM1R5MT	1.50	115	40	3.80	2.70
BSF3010BNRM2R2MT	2.20	140	35	2.80	2.40
BSF3010BNRM3R3MT	3.30	215	25	2.40	1.75



※Test Frequency: 1MHz/1V

※Tolerance: $M \pm 20\%$

※Isat: Based on Inductance decrease 30%

※IDC: Based on Temperature increase 40°C

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

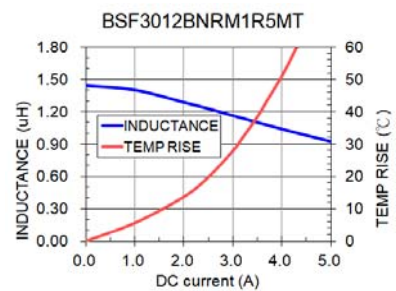
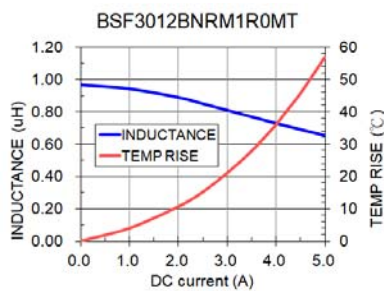
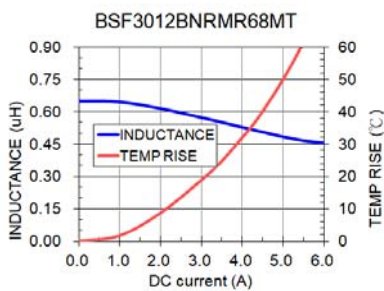
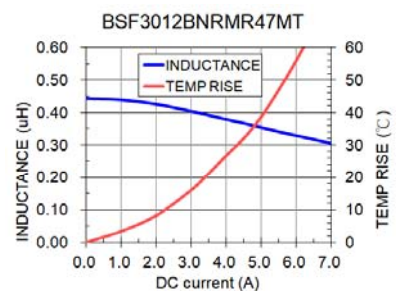
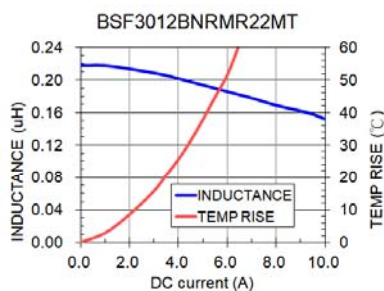
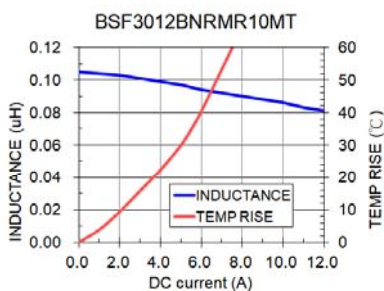
※Storage Temp. : -40°C to $+85^{\circ}\text{C}$

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.

SMD POWER INDUCTORS → BSF3012BNRM SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance (m Ω)max	SRF(MHz) min	Isat (A)Typ	IDC (A)Typ
BSF3012BNRMR10MT	0.10	24	200	10.5	5.70
BSF3012BNRMR22MT	0.22	26	120	9.50	5.00
BSF3012BNRMR47MT	0.47	34	85	6.70	4.50
BSF3012BNRMR68MT	0.68	40	70	6.00	4.10
BSF3012BNRM1R0MT	1.00	50	50	4.80	3.90
BSF3012BNRM1R5MT	1.50	74	40	4.20	3.20
BSF3012BNRM2R2MT	2.20	100	35	3.40	2.80
BSF3012BNRM3R3MT	3.30	165	30	2.90	2.00
BSF3012BNRM4R7MT	4.70	250	20	2.30	1.70
BSF3012BNRM6R8MT	6.80	290	18	1.90	1.60
BSF3012BNRM100MT	10.00	400	15	1.55	1.45



※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 T0+85°C

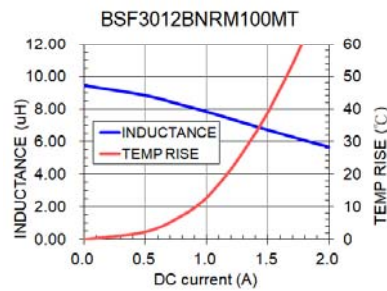
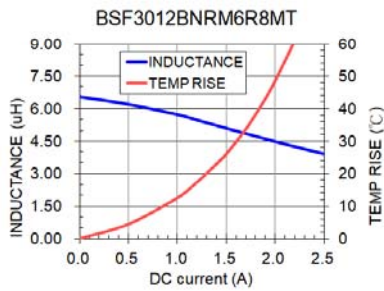
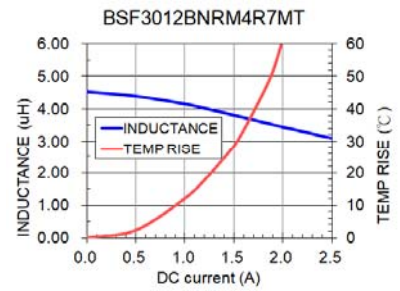
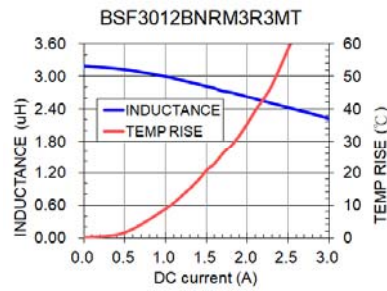
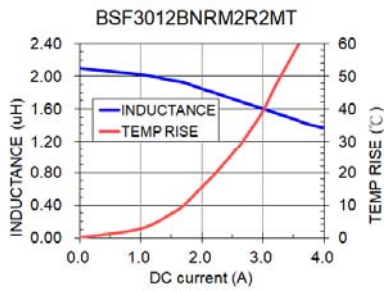
※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.



KING CORE ELECTRONICS INC.
Tel:886-3-4698855 Fax:886-3-4691395

No.269,Nanfong Rd.,Pingjhen City,Taoyuan County, Taiwan
E-mail:kc@mail.kingcore.com.tw Web Site:http://www.kingcore.com.tw

SMD POWER INDUCTORS → BSF3012BNRM SERIES



※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 T0+85°C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.



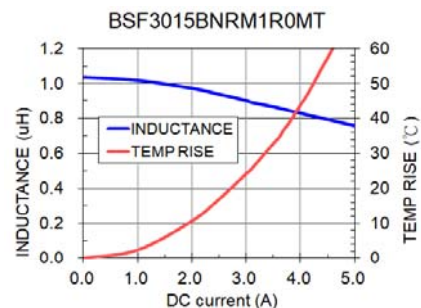
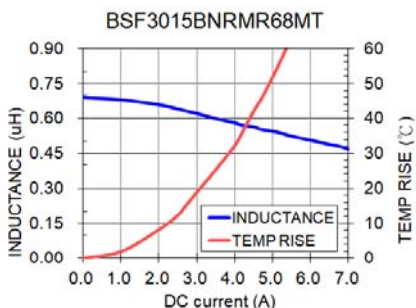
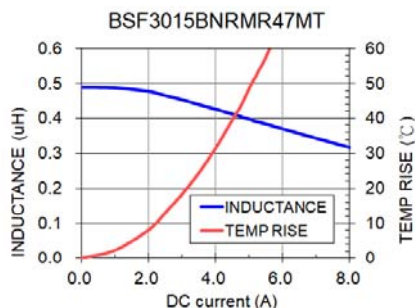
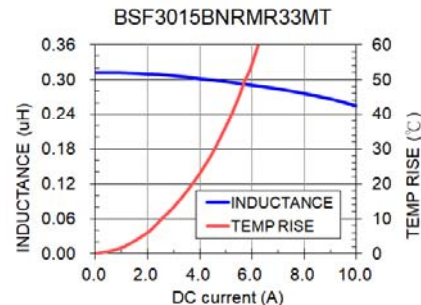
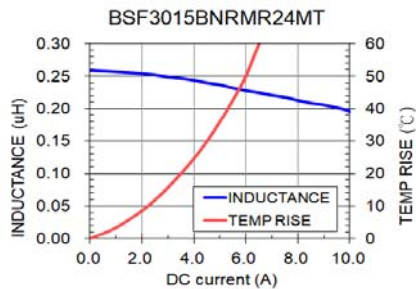
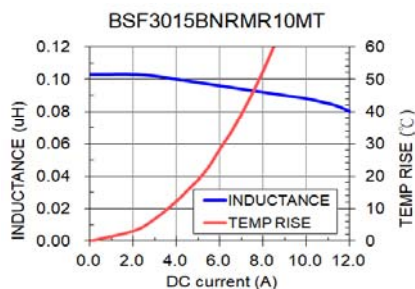
KING CORE ELECTRONICS INC.
Tel:886-3-4698855 Fax:886-3-4691395

No.269,Nanfong Rd.,Pingjhen City,Taoyuan County, Taiwan
E-mail:kc@mail.kingcore.com.tw Web Site:http://www.kingcore.com.tw

SMD POWER INDUCTORS → BSF3015BNRM SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance ($m\Omega$)max	SRF(MHz) min	Isat (A)Typ	IDC (A)Typ
BSF3015BNRMR10MT	0.10	23	200	11.0	7.00
BSF3015BNRMR24MT	0.24	30	110	10.0	5.20
BSF3015BNRMR33MT	0.33	37	85	9.00	5.10
BSF3015BNRMR47MT	0.47	37	75	7.20	4.50
BSF3015BNRMR68MT	0.68	43	65	6.50	4.40
BSF3015BNRM1R0MT	1.00	49	45	5.00	3.80
BSF3015BNRM1R5MT	1.50	62	35	4.50	3.50
BSF3015BNRM2R2MT	2.20	70	30	3.50	3.50
BSF3015BNRM3R3MT	3.30	100	20	2.80	3.00
BSF3015BNRM4R7MT	4.70	190	20	2.40	2.00



※Test Frequency: 100KHz/1V

※Tolerance: M $\pm$ 20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40°C

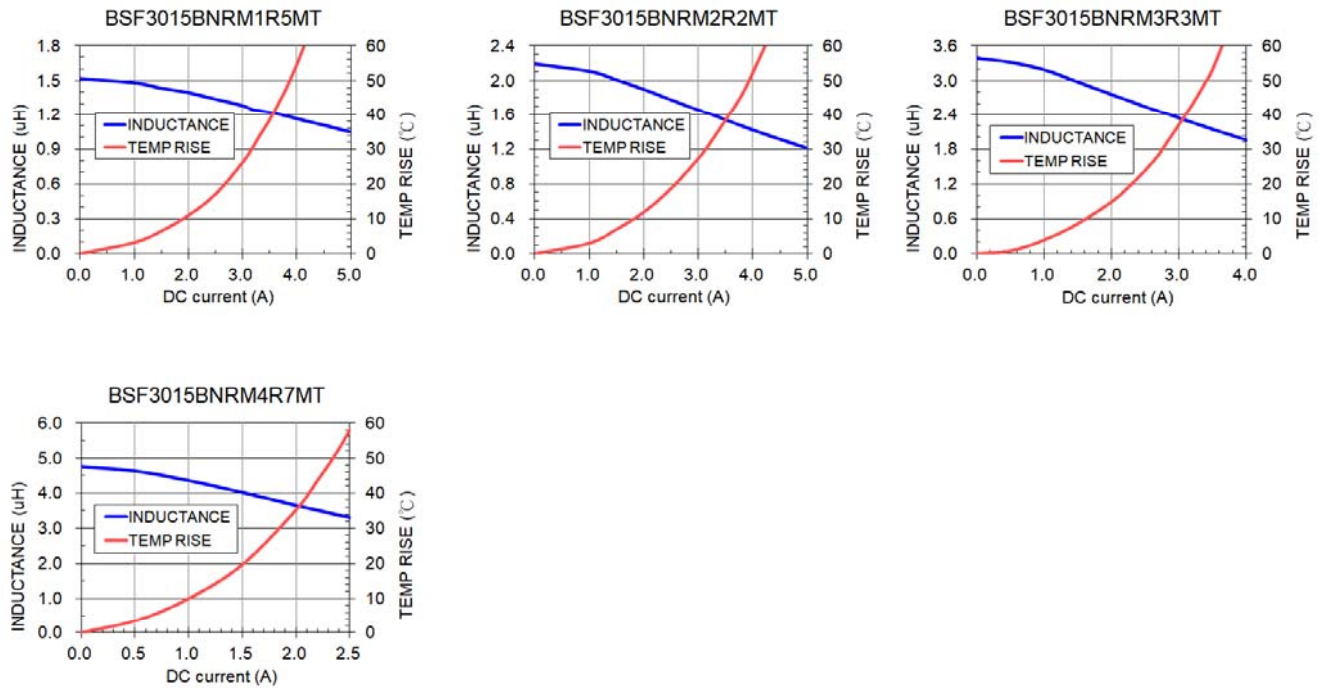
※Operating temperature range : -40 to +125°C (including self-heating)

※Storage Temp. : -40°C T0+85°C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.

SMD POWER INDUCTORS → BSF3015BNRM SERIES

ELECTRICAL CHARACTERISTIC



※Test Frequency: 100KHz/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 T0+85°C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.



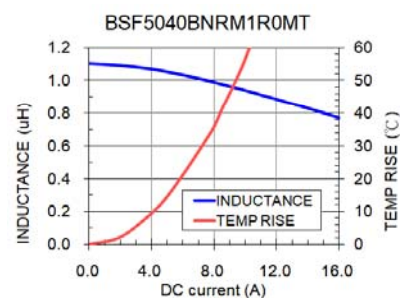
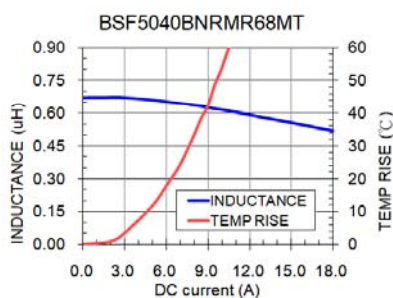
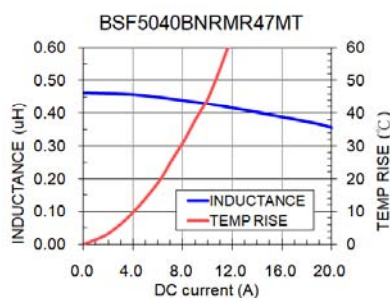
KING CORE ELECTRONICS INC.
Tel: 886-3-4698855 Fax: 886-3-4691395

No. 269, Nanfong Rd., Pingjhen City, Taoyuan County, Taiwan
E-mail: kc@mail.kingcore.com.tw Web Site: <http://www.kingcore.com.tw>

SMD POWER INDUCTORS → BSF5040BNRM SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μ H)	DC Resistance (m Ω)max	SRF(MHz) min	Isat (A)Typ	IDC (A)Typ
BSF5040BNRMR47MT	0.47	13	60	17.0	9.20
BSF5040BNRMR68MT	0.68	16	50	15.0	8.20
BSF5040BNRM1R0MT	1.0	17	40	14.5	8.10
BSF5040BNRM1R5MT	1.5	19	27	13.0	7.50
BSF5040BNRM2R2MT	2.2	23	22	11.5	7.00
BSF5040BNRM3R3MT	3.3	35	18	9.50	5.00
BSF5040BNRM4R7MT	4.7	40	15	8.00	4.50
BSF5040BNRM5R6MT	5.6	56	13	6.30	3.60
BSF5040BNRM6R8MT	6.8	64	10	6.20	3.50
BSF5040BNRM100MT	10.0	78	7	5.70	3.10
BSF5040BNRM220MT	22.0	150	5	3.70	2.20
BSF5040BNRM330MT	33.0	235	5	2.90	1.80
BSF5040BNRM470MT	47.0	300	2.5	2.50	1.70
BSF5040BNRM680MT	68.0	450	2.5	2.10	1.30
BSF5040BNRM101MT	100.0	700	1	1.70	1.10
BSF5040BNRM121MT	120.0	780	1	1.50	1.05
BSF5040BNRM151MT	150.0	1100	1	1.35	0.97
BSF5040BNRM221MT	220.0	1500	1	1.20	0.80



※Test Frequency: 100KHz/1V

※Tolerance: M $\pm$ 20%

※Isat:Based on Inductance decrease 30%

※IDC:Based on Temperature increase 40°C

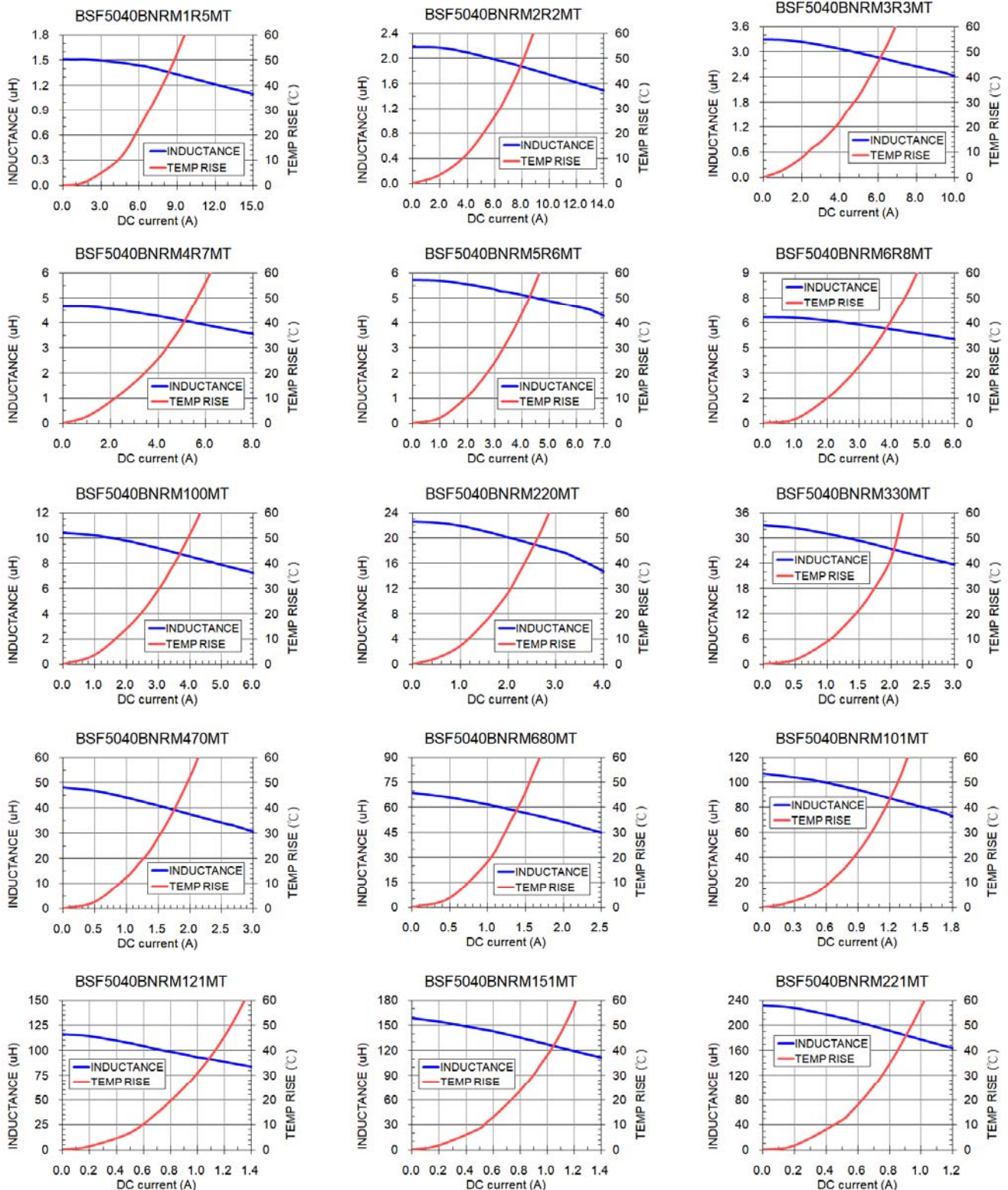
※Operating temperature range : -40 to +125°C (including self-heating)

※Storage Temp. : -40°C T0+85°C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.

SMD POWER INDUCTORS → BSF5040BNRM SERIES

ELECTRICAL CHARACTERISTIC



※Test Frequency: 100KHz/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)

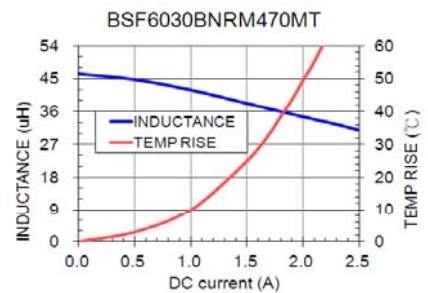
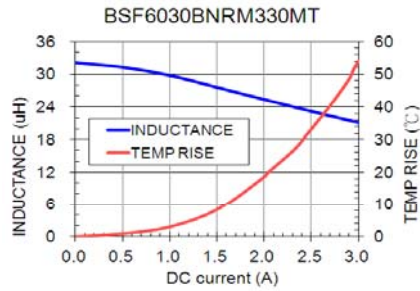
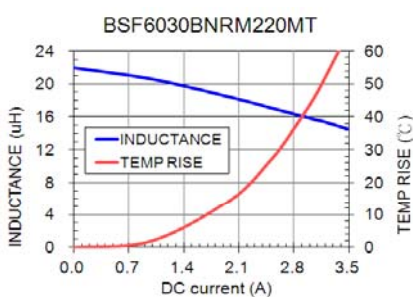
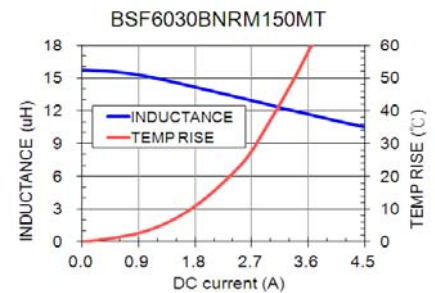
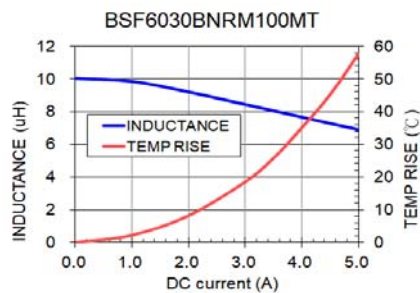
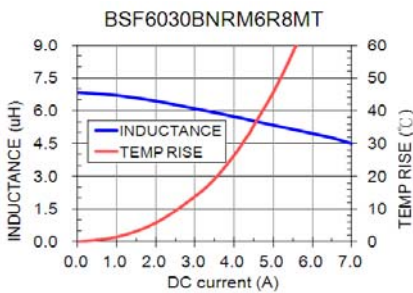
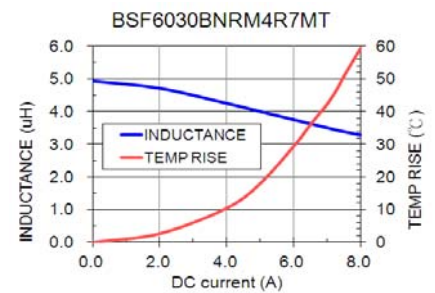
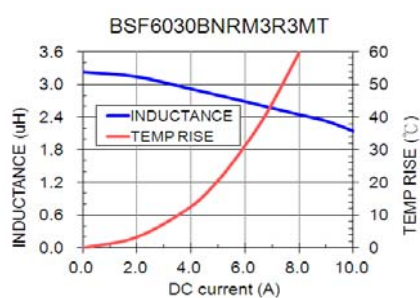
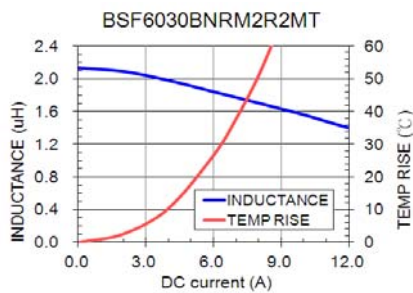
※Storage Temp. : -40°C T0+85°C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.

SMD POWER INDUCTORS → BSF6030BNRM SERIES

ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance (μH)	DC Resistance ($\text{m}\Omega$)max	SRF(MHz) min	Isat (A)Typ	IDC (A)Typ
BSF6030BNRM2R2MT	2.20	27	20	10.3	7.20
BSF6030BNRM3R3MT	3.30	35	20	9.00	6.80
BSF6030BNRM4R7MT	4.70	45	15	7.20	6.60
BSF6030BNRM6R8MT	6.80	65	13	6.40	4.60
BSF6030BNRM100MT	10.0	82	7	4.80	4.10
BSF6030BNRM150MT	15.0	150	7	4.00	3.00
BSF6030BNRM220MT	22.0	170	5	3.20	2.90
BSF6030BNRM330MT	33.0	250	2.5	2.60	2.60
BSF6030BNRM470MT	47.0	360	2.5	2.30	1.80



※Test Frequency: 100KHz/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 T0+85°C

※All the data listed in this catalogue are for reference only, King Core reserves the right to alter or revise the specifications without prior notification.