

# SPECIFICATION OF BSF□□□□CDKC ,CRKC SERIES

## FEATURES

1. High saturation current inductor with ferrite core and magnetic shielding design.
2. Low profile : Surface mounting(SMT) type and thickness with 2.0 to 5.0 mm for different size.
3. Low loss realized with low DCR.
4. Halogen free, lead free, RoHS compliant



## APPLICATIONS

1. D/D converter unit design for 3C products, VRM for server.
2. DVD, HDD, STB, LCD display, IP CAM, GPS, USB connector, Smart phones, Face Recognition System, IoT application...etc

## ORDERING CODE

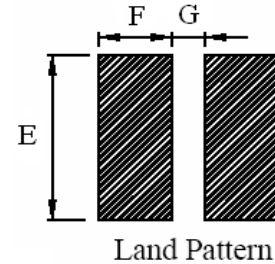
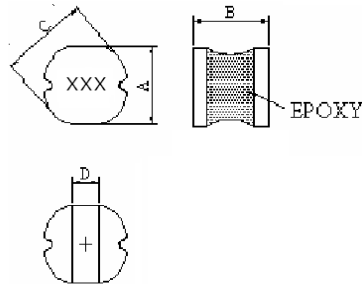
BSF0302CDKC 2R2 M T  
 (1) (2) (3) (4)

(1) PRODUCT TYPE CODE AND SIZE CODE(CRKC with lower resistance and CDKC with high saturation current design)

(2) INDUCTANCE

(3) INDUCTANCE TOLERANCE ( K : ±10%, M : ±20% )

(4) REEL TAPING



## SHAPE & DIMENSIONS

UNIT:mm

SIZE CODE	A	B	C	D Typ.	E	F	G		
BSF0318CDKC	3.0±0.3	1.9(max)	3.5±0.3	1.2	3.5	1.60	0.8		
BSF0302CDKC	3.0±0.3	2.3(max)	3.5±0.3	1.2	3.5	1.60	0.8		
BSF0302CRKC	3.0±0.3	2.3(max)	3.5±0.3	1.2	3.5	1.60	0.8		
BSF0402CDKC	4.0±0.3	2.2±0.3	4.5±0.3	1.5	4.5	2.10	0.8		
BSF0402CRKC	4.0±0.3	2.2±0.3	4.5±0.3	1.5	4.5	2.10	0.8		
BSF0403CDKC	4.0±0.3	3.2±0.3	4.5±0.3	1.5	4.5	2.10	0.8		
BSF0403CRKC	4.0±0.3	3.2±0.3	4.5±0.3	1.5	4.5	2.10	0.8		
BSF0502CDKC	5.2±0.3	2.5±0.3	5.8±0.3	2.0	5.5	2.25	1.5		
BSF0503CDKC	5.2±0.3	3.0±0.3	5.8±0.3	2.0	5.5	2.25	1.5		
BSF0504CDKC	5.2±0.3	4.5±0.3	5.8±0.3	2.0	5.5	2.25	1.5		
BSF0504CRKC	5.2±0.3	4.5±0.3	5.8±0.3	2.0	5.5	2.25	1.5		
BSF0703CDKC	7.0±0.3	3.5±0.3	7.8±0.3	2.5	7.5	3.05	1.9		
BSF0705CDKC	7.0±0.3	5.0±0.3	7.8±0.3	2.5	7.5	3.05	1.9		
BSF0705CRKC	7.0±0.3	5.0±0.3	7.8±0.3	2.5	7.5	3.05	1.9		

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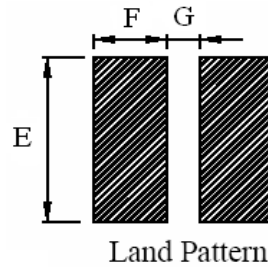
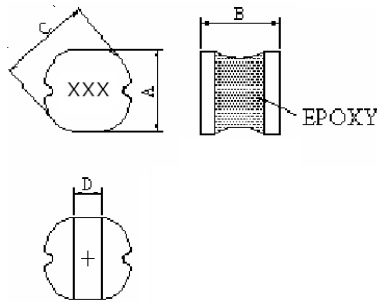
## APPLICATIONS

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BSF0302CDKC   2R2   M   T  
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- (2) INDUCTANCE
- (3) INDUCTANCE TOLERANCE ( K : ±10%, M : ±20% )
- (4) REEL TAPING



## SHAPE & DIMENSIONS

UNIT:mm

SIZE CODE	A	B	C	D Typ.	E	F	G		
BSF1004CDKC	9.0±0.3	4.0±0.3	10.0±0.3	2.9	9.5	3.65	2.5		
BSF1005CDKC	9.0±0.3	5.4±0.3	10.0±0.3	2.9	9.5	3.65	2.5		
BSF1006CDKC	9.0±0.3	6.8±0.3	10.0±0.3	2.9	9.5	3.65	2.5		

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# SMD POWER INDUCTORS → BSF0302CDKC SERIES

## ELECTRICAL CHARACTERISTIC

ORDERING CODE	Inductance ( $\mu$ H)	DC Resistance ( $m\Omega$ )max	SRF (MHz)min	Isat (A)max	IDC (A)max
BSF0302CDKC1R0MT	1.0	40	85	2.90	2.50
BSF0302CDKC1R2MT	1.2	45	80	2.90	2.30
BSF0302CDKC1R5MT	1.5	50	75	2.40	2.10
BSF0302CDKC1R8MT	1.8	60	60	2.20	2.00
BSF0302CDKC2R2MT	2.2	70	55	2.10	1.90
BSF0302CDKC2R7MT	2.7	95	40	1.90	1.80
BSF0302CDKC3R3MT	3.3	110	40	1.90	1.80
BSF0302CDKC3R9MT	3.9	120	40	1.70	1.60
BSF0302CDKC4R7MT	4.7	125	35	1.60	1.55
BSF0302CDKC5R6MT	5.6	140	30	1.40	1.50
BSF0302CDKC6R8MT	6.8	160	25	1.35	1.50
BSF0302CDKC8R2MT	8.2	230	25	1.10	1.20
BSF0302CDKC100MT	10	300	20	1.10	1.15
BSF0302CDKC120MT	12	320	20	0.93	1.00
BSF0302CDKC150MT	15	400	15	0.85	0.90
BSF0302CDKC180MT	18	470	15	0.84	0.80
BSF0302CDKC220MT	22	630	15	0.71	0.67
BSF0302CDKC270MT	27	720	10	0.66	0.66
BSF0302CDKC330MT	33	880	10	0.60	0.65
BSF0302CDKC390MT	39	950	7	0.55	0.60
BSF0302CDKC470MT	47	1150	7	0.51	0.55
BSF0302CDKC560MT	56	1400	7	0.47	0.50
BSF0302CDKC680MT	68	1700	7	0.42	0.48
BSF0302CDKC820MT	82	2100	7	0.38	0.39
BSF0302CDKC101MT	100	2400	7	0.36	0.37
BSF0302CDKC121MT	120	3400	5	0.33	0.32
BSF0302CDKC151MT	150	3800	2.5	0.29	0.27
BSF0302CDKC181MT	180	4500	2.5	0.28	0.26
BSF0302CDKC221MT	220	5000	2.5	0.25	0.23
BSF0302CDKC271MT	270	8000	2.5	0.23	0.22
BSF0302CDKC331MT	330	9000	2.5	0.19	0.21
BSF0302CDKC391MT	390	10000	1.0	0.18	0.18

Test Freq.: 100KHz/0.1V

Tolerance: K $\pm$ 10%,M $\pm$ 20%

※Isat: Based on Inductance decrease 30%

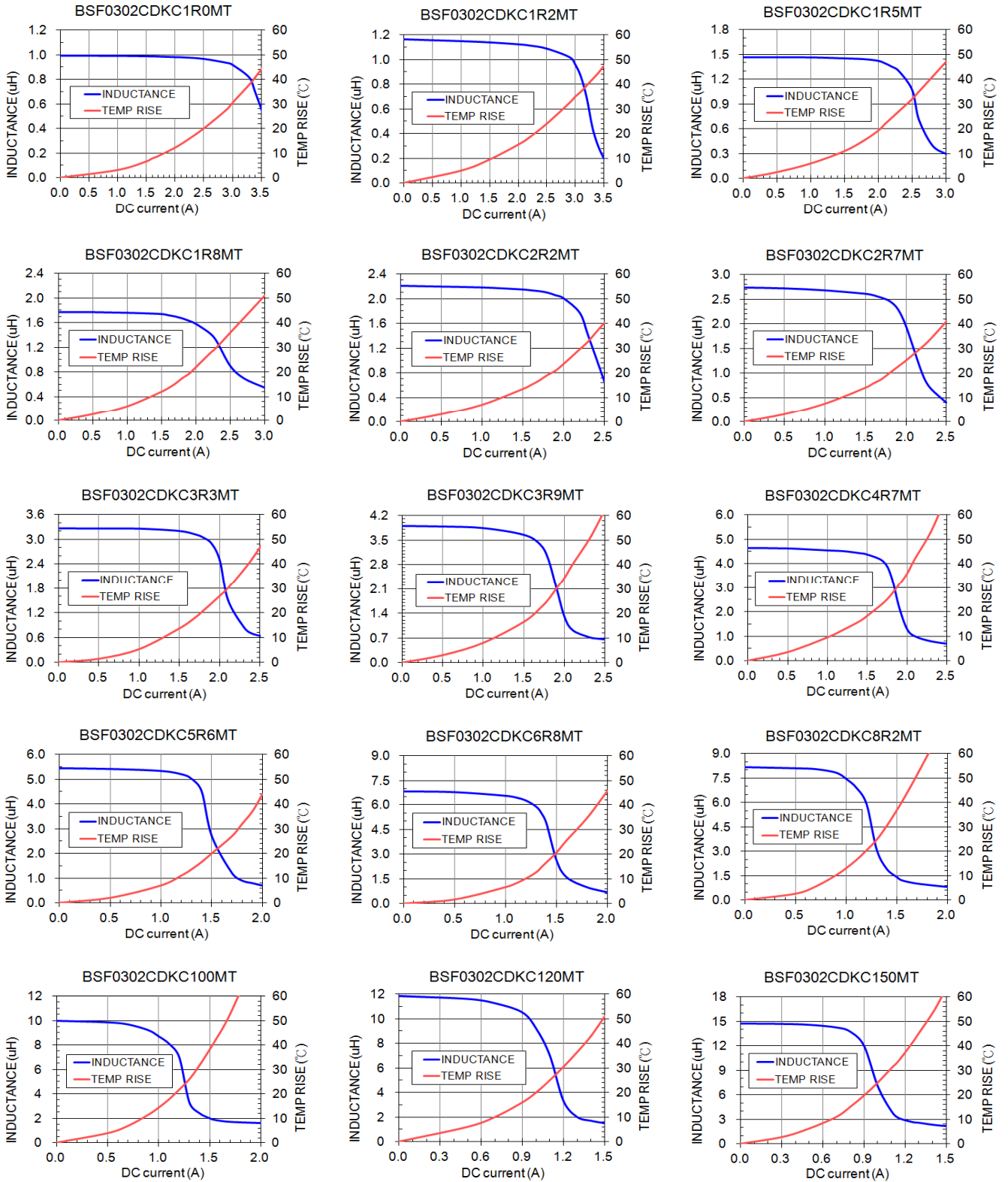
※IDC: Based on Temperature increase 40°C

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

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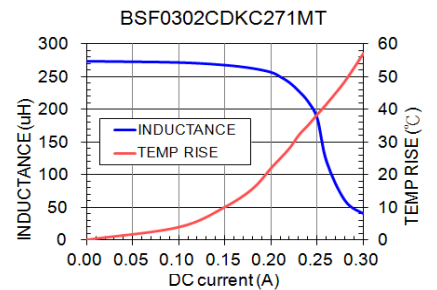
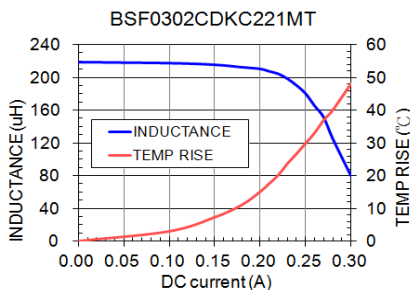
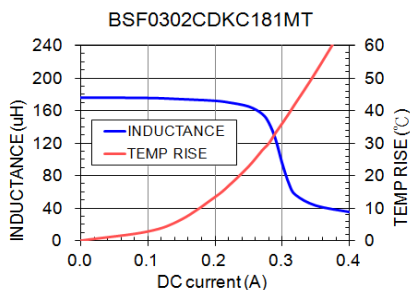
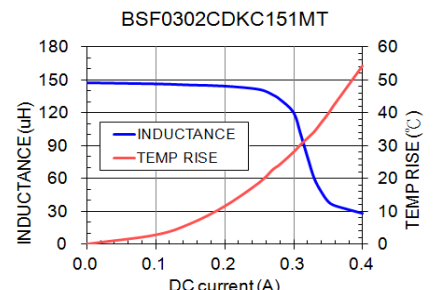
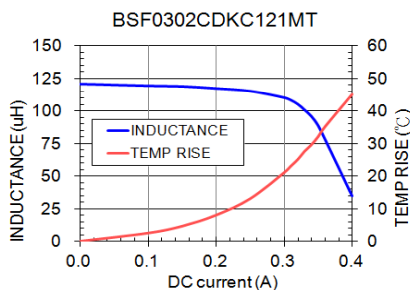
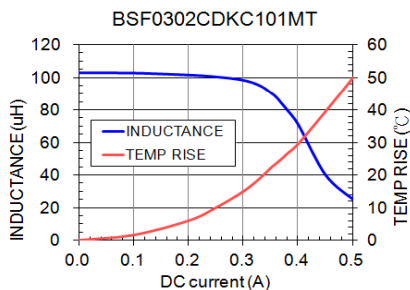
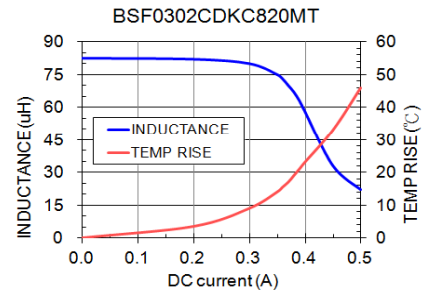
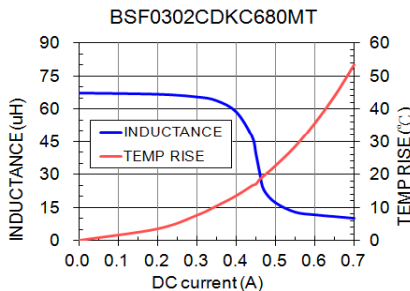
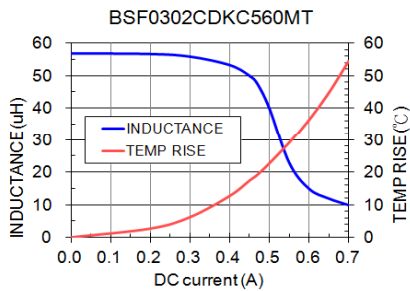
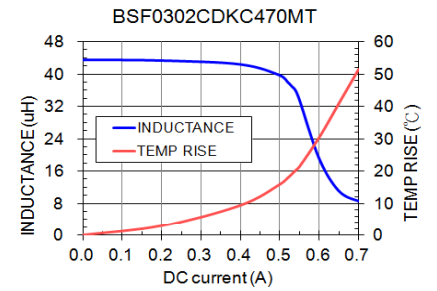
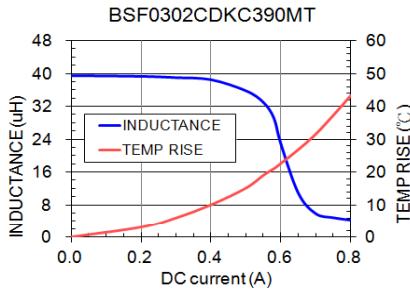
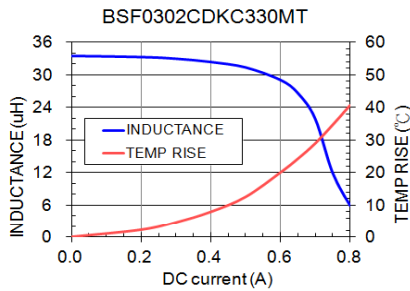
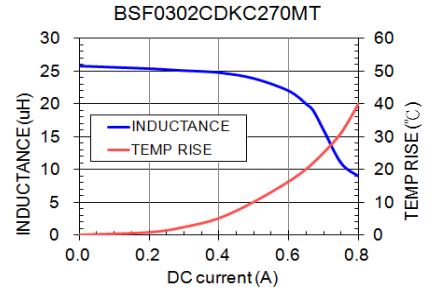
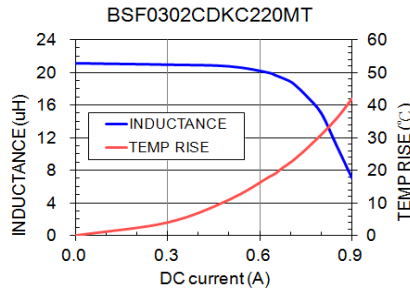
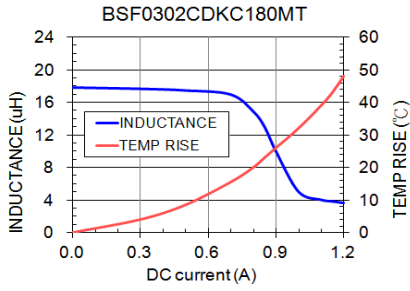
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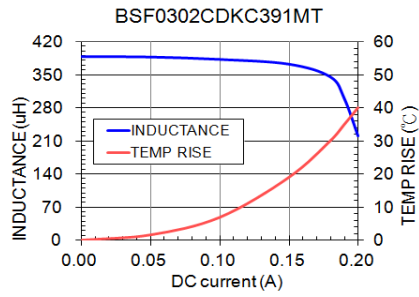
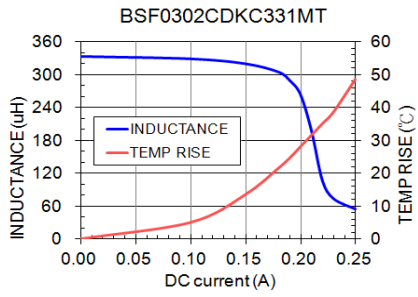
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