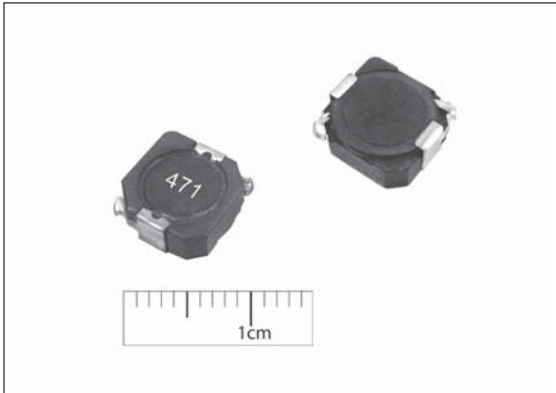


# SMD POWER INDUCTORS (EB-XXN SERIES)

**trio**

EB  
45



## ● PART NUMBERING

EB - □□□ □ □□ □ □□  
(1) (2) (3) (4) (5) (6)

- (1) Series
- (2) Inductance
- (3) Tolerance
- (4) Dimension
- (5) Material
- (6) Internal Serial No.

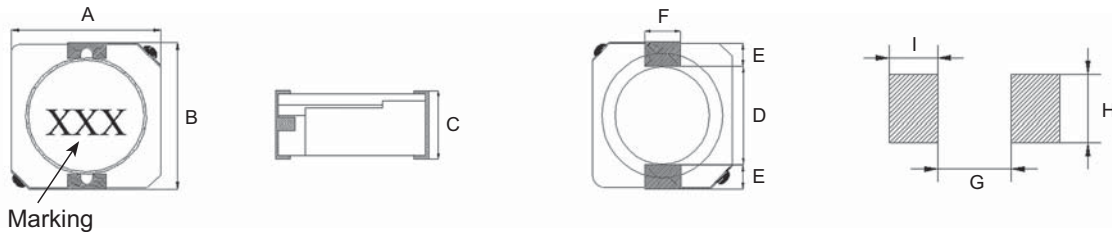
## ● FEATURES

- Low profile.
- Various footprint in difference sizes for board designs.
- Magnetic shielded drum core construction with minimal power loss.
- Excellent solderability and high heat resistance.
- Low EMI and high current rating.

## ● APPLICATIONS

- DC/DC converters
- Computers and PDAs
- Mobile phones
- PCMCIA cards
- GPS systems
- Digital cameras and DVD players

## ● CONFIGURATIONS & DIMENSIONS



Unit : mm

SERIES	A	B	C	D	E	F	G	H	I
EB-17N	10.3 Max.	10.5 Max.	3.1 Max.	7.7 Typ.	1.2 Typ.	3.0 Typ.	7.3 Typ.	3.2 Typ.	1.6 Typ.
EB-18N	10.3 Max.	10.5 Max.	4.0 Max.	7.7 Typ.	1.2 Typ.	3.0 Typ.	7.3 Typ.	3.2 Typ.	1.6 Typ.
EB-19N	10.3 Max.	10.5 Max.	5.1 Max.	7.7 Typ.	1.2 Typ.	3.0 Typ.	7.3 Typ.	3.2 Typ.	1.6 Typ.

• For packaging information, please refer to page P.96. & P.100.

● ELECTRICAL CHARACTERISTICS

New Part No.	Old Part No.	L ( $\mu$ H)	FREQ. (KHz/0.1V)	DCR ( $\Omega$ , Max.)	Isat (A, Max.)	Irms (A, Max.)
EB-80B□17N□□	SDSG103P-R80□	0.8	100	0.0057	11.20	8.30
EB-15A□17N□□	SDSG103P-1R5□	1.5	100	0.0110	8.00	5.80
EB-22A□17N□□	SDSG103P-2R2□	2.2	100	0.0169	6.70	5.10
EB-33A□17N□□	SDSG103P-3R3□	3.3	100	0.0210	5.56	4.70
EB-47A□17N□□	SDSG103P-4R7□	4.7	100	0.030	4.65	4.00
EB-68A□17N□□	SDSG103P-6R8□	6.8	100	0.035	3.84	3.60
EB-82A□17N□□	SDSG103P-8R2□	8.2	100	0.050	3.54	3.00
EB-100□17N□□	SDSG103P-100□	10	100	0.059	3.18	2.80
EB-150□17N□□	SDSG103P-150□	15	100	0.091	2.60	2.05
EB-220□17N□□	SDSG103P-220□	22	100	0.143	2.16	1.60
EB-330□17N□□	SDSG103P-330□	33	100	0.202	1.74	1.35
EB-470□17N□□	SDSG103P-470□	47	100	0.299	1.43	1.20
EB-560□17N□□	SDSG103P-560□	56	100	0.325	1.36	1.15
EB-680□17N□□	SDSG103P-680□	68	100	0.429	1.22	0.95
EB-820□17N□□	SDSG103P-820□	82	100	0.494	1.14	0.80
EB-101□17N□□	SDSG103P-101□	100	100	0.683	1.02	0.70
EB-121□17N□□	SDSG103P-121□	120	100	0.754	0.89	0.65
EB-151□17N□□	SDSG103P-151□	150	100	0.871	0.84	0.51
EB-15A□18N□□	SDSG104P-1R5□	1.5	100	0.0081	10.00	6.50
EB-25A□18N□□	SDSG104P-2R5□	2.5	100	0.0105	7.50	6.10
EB-38A□18N□□	SDSG104P-3R8□	3.8	100	0.0130	6.00	5.50
EB-52A□18N□□	SDSG104P-5R2□	5.2	100	0.0220	5.50	5.40
EB-70A□18N□□	SDSG104P-7R0□	7.0	100	0.027	4.80	4.50
EB-100□18N□□	SDSG104P-100□	10	100	0.035	4.40	3.90
EB-150□18N□□	SDSG104P-150□	15	100	0.050	3.60	3.10
EB-220□18N□□	SDSG104P-220□	22	100	0.073	2.90	2.50
EB-330□18N□□	SDSG104P-330□	33	100	0.093	2.30	2.20
EB-470□18N□□	SDSG104P-470□	47	100	0.128	2.10	1.90
EB-680□18N□□	SDSG104P-680□	68	100	0.213	1.50	1.42
EB-101□18N□□	SDSG104P-101□	100	100	0.304	1.35	1.25
EB-151□18N□□	SDSG104P-151□	150	100	0.506	1.15	0.85
EB-221□18N□□	SDSG104P-221□	220	100	0.756	0.92	0.70
EB-331□18N□□	SDSG104P-331□	330	100	1.090	0.70	0.52

- Tested at 25°C.
- Temperature rise : 40°C Typ. at Irms
- Inductance drop : 35% Typ. at Isat
- Operating temperature : -55°C to +105°C
- Storage temperature : -40°C to +85°C

## ● ELECTRICAL CHARACTERISTICS

New Part No.	Old Part No.	L ( $\mu$ H)	FREQ. (KHz/0.1V)	DCR ( $\Omega$ , Max.)	Isat (A, Max.)	Irms (A, Max.)
EB-80B□19N□□	SDSG105P-R80□	0.8	100	0.0043	13.50	9.50
EB-15A□19N□□	SDSG105P-1R5□	1.5	100	0.0058	10.50	8.30
EB-22A□19N□□	SDSG105P-2R2□	2.2	100	0.0072	9.25	7.50
EB-33A□19N□□	SDSG105P-3R3□	3.3	100	0.0104	7.80	6.50
EB-47A□19N□□	SDSG105P-4R7□	4.7	100	0.0123	6.40	6.10
EB-68A□19N□□	SDSG105P-6R8□	6.8	100	0.018	5.40	5.40
EB-82A□19N□□	SDSG105P-8R2□	8.2	100	0.020	4.85	5.00
EB-100□19N□□	SDSG105P-100□	10	100	0.026	4.45	4.50
EB-120□19N□□	SDSG105P-120□	12	100	0.033	4.00	3.80
EB-150□19N□□	SDSG105P-150□	15	100	0.041	3.60	3.40
EB-180□19N□□	SDSG105P-180□	18	100	0.046	3.20	3.10
EB-220□19N□□	SDSG105P-220□	22	100	0.061	2.95	2.90
EB-270□19N□□	SDSG105P-270□	27	100	0.069	2.70	2.60
EB-330□19N□□	SDSG105P-330□	33	100	0.084	2.40	2.50
EB-390□19N□□	SDSG105P-390□	39	100	0.106	2.30	2.25
EB-470□19N□□	SDSG105P-470□	47	100	0.130	2.00	2.00
EB-560□19N□□	SDSG105P-560□	56	100	0.149	1.90	1.90
EB-680□19N□□	SDSG105P-680□	68	100	0.201	1.65	1.60
EB-820□19N□□	SDSG105P-820□	82	100	0.227	1.50	1.45
EB-101□19N□□	SDSG105P-101□	100	100	0.253	1.35	1.35
EB-121□19N□□	SDSG105P-121□	120	100	0.303	1.28	1.18
EB-151□19N□□	SDSG105P-151□	150	100	0.370	1.12	1.10
EB-181□19N□□	SDSG105P-181□	180	100	0.419	1.04	1.00
EB-221□19N□□	SDSG105P-221□	220	100	0.500	0.94	0.94
EB-271□19N□□	SDSG105P-271□	270	100	0.672	0.84	0.80
EB-331□19N□□	SDSG105P-331□	330	100	0.812	0.75	0.73
EB-391□19N□□	SDSG105P-391□	390	100	0.953	0.70	0.70
EB-471□19N□□	SDSG105P-471□	470	100	1.29	0.60	0.54
EB-561□19N□□	SDSG105P-561□	560	100	1.43	0.54	0.52
EB-681□19N□□	SDSG105P-681□	680	100	1.60	0.52	0.51
EB-821□19N□□	SDSG105P-821□	820	100	1.77	0.50	0.48
EB-102□19N□□	SDSG105P-102□	1000	100	1.99	0.48	0.12

- Tested at 25°C.
- Temperature rise : 40°C Typ. at Irms
- Inductance drop : 35% Typ. at Isat
- Operating temperature : -55°C to +105°C
- Storage temperature : -40°C to +85°C