

## Surface Mount Shielded Power Inductors BS Series

### FEATURES

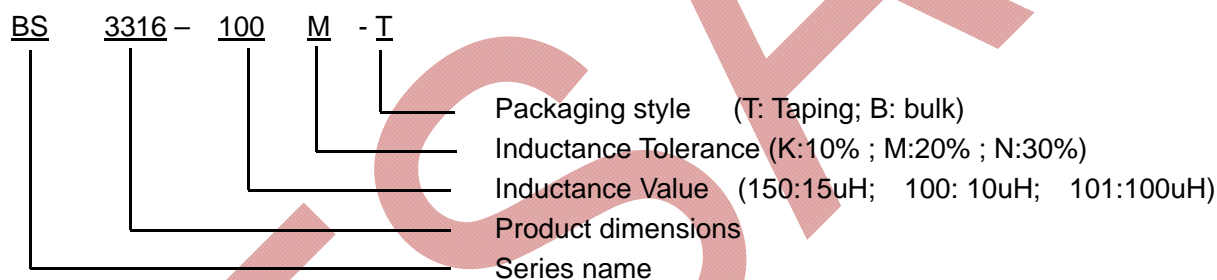
- Surface mount inductor with high current rating.
- Low resistance and high energy storage.
- Packed in embossed carrier tape and can be used by automatic mounting machine.



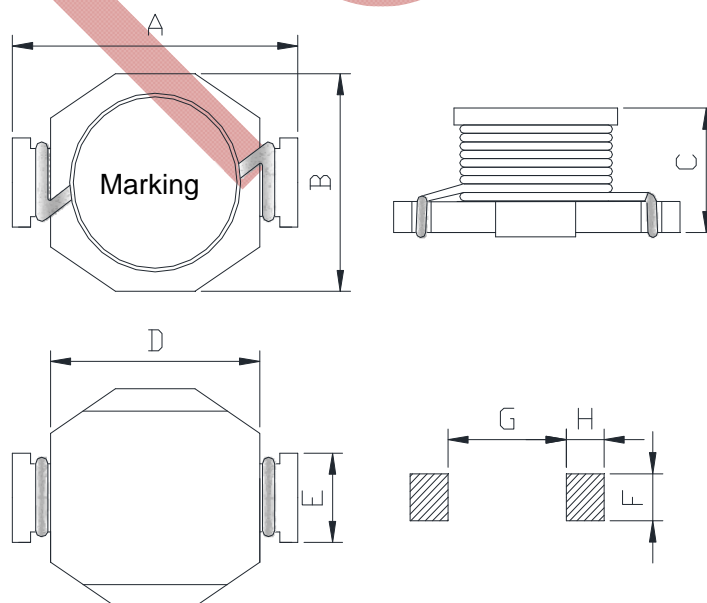
### APPLICATIONS

- Excellent as DC-DC converter used in notebook computer, PDA and mobile hand phone, step-down converter, flash memory, etc.

### PRODUCT IDENTIFICATION



### SHAPES AND DIMENSIONS



Series	Dimensions(mm)							
	A	B	C	D	E	F	G	H
BS1813	8.89 Max.	6.10 Max.	5.00 Max.	6.35	3.00	4.00	5.00	2.00
BS3316	11.68 Max.	9.91 Max.	6.35 Max.	9.14	4.50	6.50	9.00	2.50
BS5022	22.35 Max.	16.26 Max.	8.00 Max.	14.25	8.64	10.00	13.50	4.30

## ELECTRICAL CHARACTERISTICS

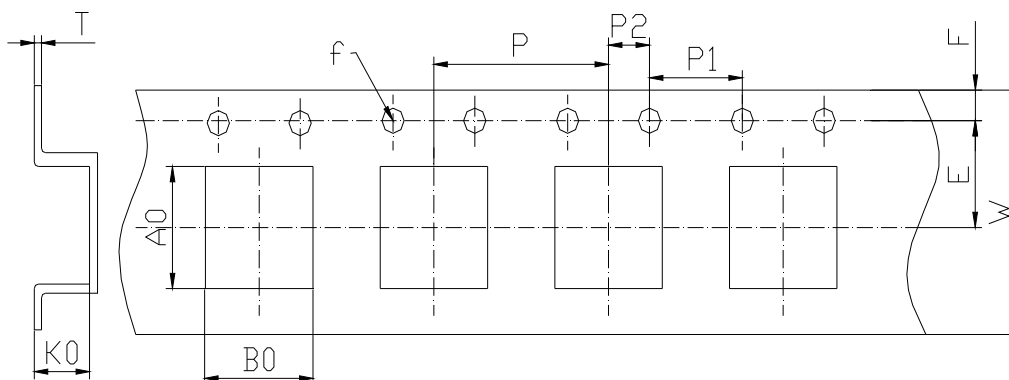
- **Isat**: DC current at which the inductance drops 30% from its value without current.
- **Irms**: Current that causes a 40°C temperature rise from 25°C ambient.

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)	SRF(MHz)
BS1813-R18NT	0.18	100	0.003	14.00	10.00	880
BS1813-R33NT	0.33	100	0.006	10.00	7.00	600
BS1813-R56NT	0.56	100	0.010	7.70	6.00	200
BS1813-1R2MT	1.2	100	0.017	5.30	4.40	140
BS1813-2R2MT	2.2	100	0.035	3.50	3.10	100
BS1813-3R3MT	3.3	100	0.040	3.00	2.70	80
BS1813-4R7MT	4.7	100	0.054	2.60	2.20	50
BS1813-6R8MT	6.8	100	0.080	2.20	1.80	45
BS1813-100MT	10	100	0.110	1.90	1.50	40
BS1813-150MT	15	100	0.170	1.50	1.20	30
BS1813-220MT	22	100	0.250	1.20	1.00	25
BS1813-330MT	33	100	0.350	0.99	0.82	20
BS1813-470MT	47	100	0.470	0.87	0.72	15

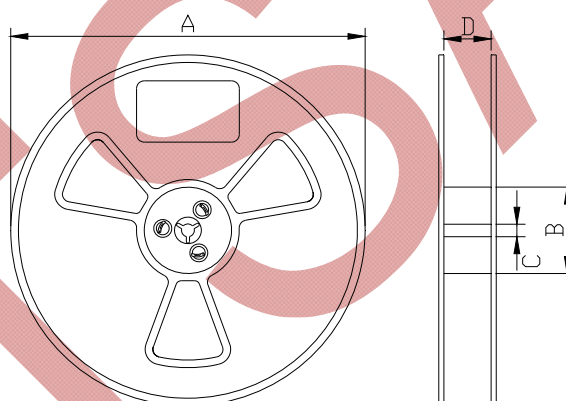
Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)	SRF(MHz)
BS3316-R12NT	0.12	100	0.001	28.00	17.00	300
BS3316-R33NT	0.33	100	0.002	20.00	16.00	300
BS3316-R68NT	0.68	100	0.005	13.00	12.00	200
BS3316-1R0MT	1.0	100	0.006	11.00	10.00	100
BS3316-1R5MT	1.5	100	0.008	9.00	9.00	90
BS3316-2R2MT	2.2	100	0.011	7.80	7.40	90
BS3316-2R7MT	2.7	100	0.012	7.00	6.60	65
BS3316-3R3MT	3.3	100	0.014	6.40	5.90	65
BS3316-4R7MT	4.7	100	0.018	5.40	5.30	45
BS3316-6R8MT	6.8	100	0.035	3.60	5.00	35
BS3316-100MT	10	100	0.040	3.30	4.30	26
BS3316-150MT	15	100	0.060	2.40	3.50	21
BS3316-220MT	22	100	0.080	2.00	2.80	17
BS3316-330MT	33	100	0.150	1.70	2.10	14
BS3316-470MT	47	100	0.280	1.40	1.70	12
BS3316-680MT	68	100	0.300	1.20	1.50	9
BS3316-101MT	100	100	0.400	0.95	1.20	7

Part Number	L(uH)	Test Freq.(KHz)	DCR max.(Ω)	Isat(A)	Irms(A)	SRF(MHz)
BS5022-R78NT	0.78	100	0.003	30.00	15.00	156
BS5022-1R5MT	1.5	100	0.004	25.00	15.00	100
BS5022-2R2MT	2.2	100	0.006	20.00	12.00	75
BS5022-3R3MT	3.3	100	0.009	17.00	10.00	60
BS5022-3R9MT	3.9	100	0.010	15.00	9.00	55
BS5022-4R7MT	4.7	100	0.014	13.00	8.40	40
BS5022-6R0MT	6.0	100	0.017	12.00	7.50	35
BS5022-7R8MT	7.8	100	0.018	11.00	7.50	35
BS5022-100MT	10	100	0.026	10.00	6.00	28
BS5022-150MT	15	100	0.032	8.00	4.40	20

## DS Series Packaging



SIZE	A0	B0	E	F	f	P	P1	P2	W	T	K0
BS1813	9.30	6.30	7.50	1.75	1.50	12.0	4.00	2.00	16.0	0.35	5.40
BS3316	13.5	10.2	11.5	1.75	1.50	12.0	4.00	2.00	24.0	0.35	6.50
BS5022	22.6	15.4	14.2	1.75	1.50	20.0	4.00	2.00	32.0	0.35	8.20



SIZE	A	B	C	D	Reel/PCS
BS1813	330	100	13	16.5	1500
BS3316	330	100	13	24.5	750
BS5022	330	100	13	32.5	350