

Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BPSY Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

Note: Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

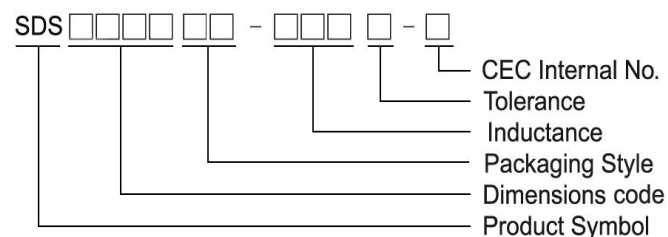
SDS Series



Features

- RoHS, Halogen Free and REACH Compliance
- Magnetic shielded
- Good Q factor, good energy storage and low resistance

Product Identification



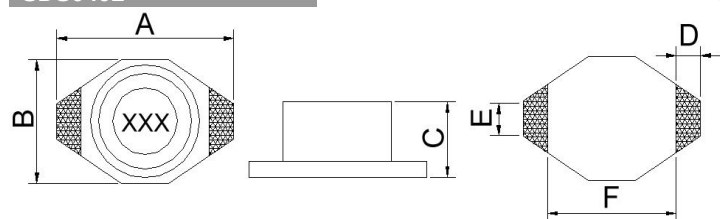
Applications

- Flash memory programmers
- Electric motors
- DC/DC converters

- Packaging: T: Tape and Reel

Shape and Dimensions

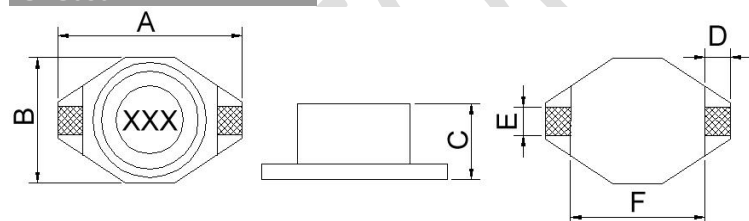
SDS0402



Dimensions in mm

TYPE	A	B	C	D	E	F	G
SDS0402	6.60 ⁺⁰	4.45 ⁺⁰	2.92 ⁺⁰	1.02	3.05	1.27	4.32

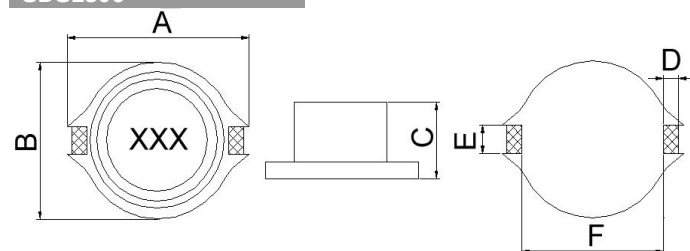
SDS0804



Dimensions in mm

TYPE	A	B	C	D	E	F
SDS0804	12.95 ⁺⁰	9.40 ⁺⁰	5.08 ⁺⁰	2.54	2.54	7.62

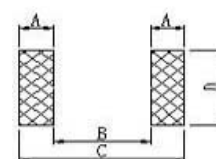
SDS1306



Dimensions in mm

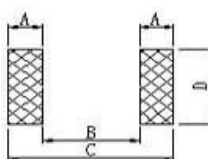
TYPE	A	B	C	D	E	F
SDS1306	18.54 ⁺⁰	15.24 ⁺⁰	7.62 ⁺⁰	2.54	2.54	12.7

Recommended Pattern



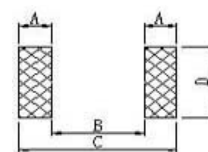
Dimensions in mm

TYPE	A	B	C	D
SDS0402	1.27	1.27	1.27	3.56



Dimensions in mm

TYPE	A	B	C	D
SDS0804	2.92	7.37	13.21	2.79



Dimensions in mm

TYPE	A	B	C	D
SDS1306	2.92	7.37	13.21	2.79



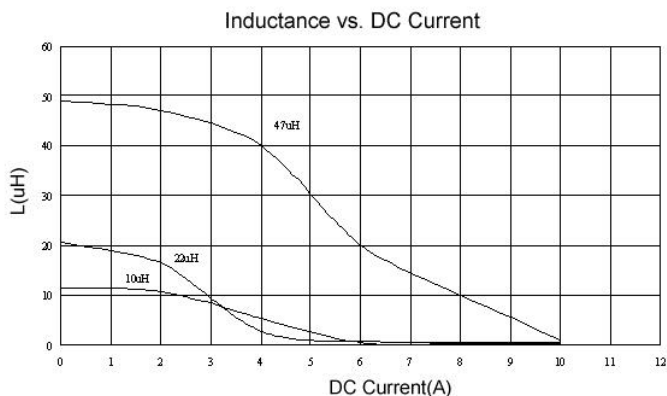
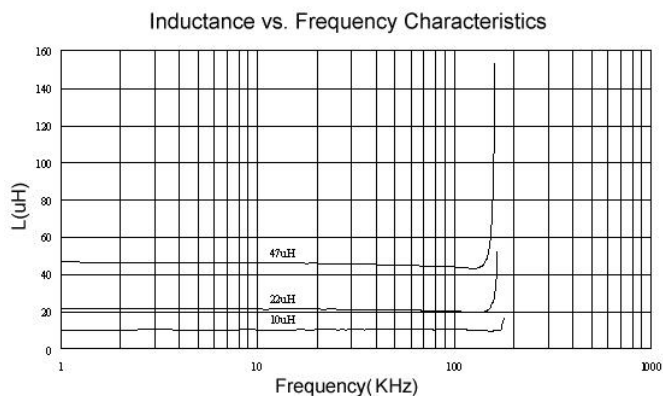
Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance ($\pm\%$)	Q Min	Q Frequency (kHz)	DC Resistance (Ω) Max	SRF (MHz) Typ.	I _{rms} (A)
SDS0402T-1R0M-N	1.0	20	30	200	0.040	200	3.0
SDS0402T-1R5M-N	1.5	20	30	200	0.045	100	2.8
SDS0402T-2R2M-N	2.2	20	40	200	0.050	90	1.8
SDS0402T-3R3M-N	3.3	20	40	200	0.060	90	1.6
SDS0402T-4R7M-N	4.7	20	40	200	0.065	80	1.4
SDS0402T-6R8M-N	6.8	20	40	200	0.070	40	1.2
SDS0402T-100M-N	10	20	40	200	0.075	30	1.0
SDS0402T-150M-N	15	20	40	100	0.090	25	0.80
SDS0402T-220M-N	22	20	40	100	0.110	20	0.70
SDS0402T-330M-N	33	20	40	100	0.190	15	0.60
SDS0402T-470M-N	47	20	40	100	0.230	15	0.50
SDS0402T-680M-N	68	20	40	100	0.290	10	0.40
SDS0402T-101M-N	100	20	40	100	0.480	8	0.30
SDS0402T-151M-N	150	20	40	100	0.590	7	0.26
SDS0402T-221M-N	220	20	40	100	0.770	4	0.22
SDS0402T-331M-N	330	20	40	100	1.4	4	0.20
SDS0402T-471M-N	470	20	40	100	1.8	3	0.19
SDS0402T-681M-N	680	20	40	100	2.2	2	0.18
SDS0402T-102M-N	1000	20	40	100	3.4	1	0.15

Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I_{rms} for a 30°C temperature rise from 25°C ambient with current
- Measure Equipment :
L : E4980 or HP4284A , 100kHz/ 0.1V
RDC : Chroma 16502
Isat : HP4284A+HP42841A or WK3260B+WK3265B

Test Instruments : HP4294A Impedance / Material Analyzer



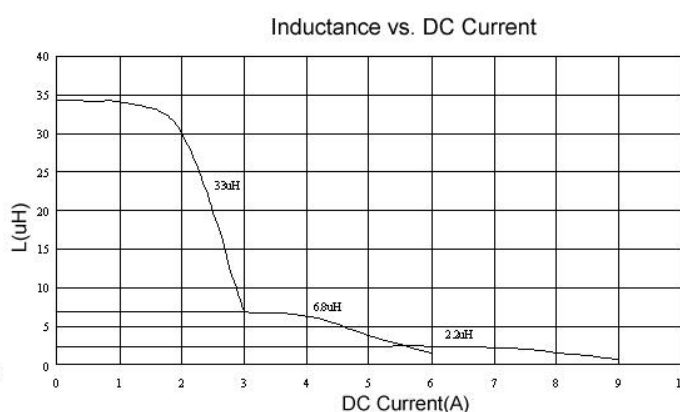
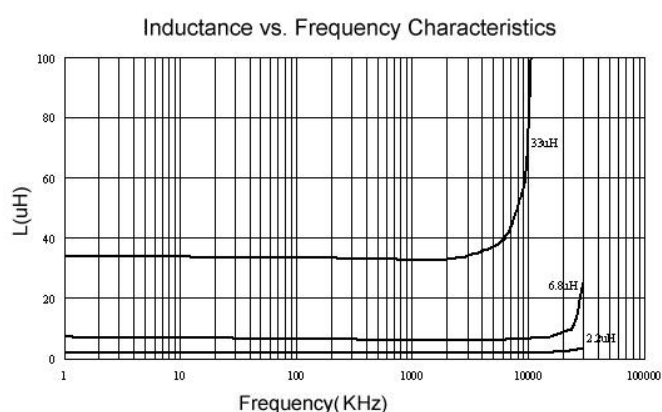
Electrical Characteristics

Part Number	Inductance (μH)	Tolerance (±%)	Q Min	Q Frequency (kHz)	DC Resistance (Ω) Max	SRF (MHz) Typ.	Isat (A)	Irms (A)
SDS0804T-1R0M-N	1.0	20	3	100	0.021	110	5.6	5.0
SDS0804T-1R5M-N	1.5	20	5	100	0.022	90	5.2	4.5
SDS0804T-2R2M-N	2.2	20	5	100	0.032	60	5.0	3.8
SDS0804T-3R3M-N	3.3	20	5	100	0.039	55	3.9	3.3
SDS0804T-4R7M-N	4.7	20	10	100	0.054	30	3.2	2.7
SDS0804T-6R8M-N	6.8	20	10	100	0.075	30	2.8	2.2
SDS0804T-100M-N	10	20	10	100	0.101	28	2.4	2.0
SDS0804T-150M-N	15	20	15	100	0.15	20	2.0	1.5
SDS0804T-220M-N	22	20	20	100	0.207	15	1.6	1.3
SDS0804T-330M-N	33	20	20	100	0.334	12	1.4	1.1
SDS0804T-470M-N	47	20	20	100	0.472	10	1.0	0.8
SDS0804T-680M-N	68	20			0.660	10	0.9	0.7
SDS0804T-101M-N	100	20			1.110	7	0.8	0.6
SDS0804T-151M-N	150	20			1.550	6	0.6	0.5
SDS0804T-221M-N	220	20			2.000	5	0.5	0.37
SDS0804T-102M-N	1000	20			8.300	2	0.32	0.17

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
L : E4980 or HP4284A , 100kHz/ 0.1V
RDC : Chroma 16502
Isat : HP4284A+HP42841A or WK3260B+WK3265B

Test Instruments : HP4294A Impedance / Material Analyzer



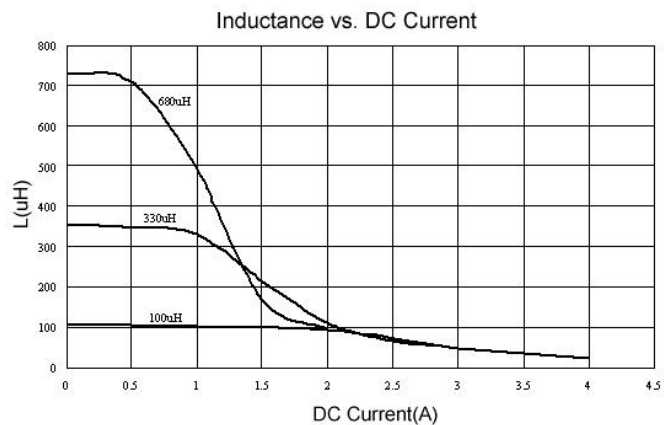
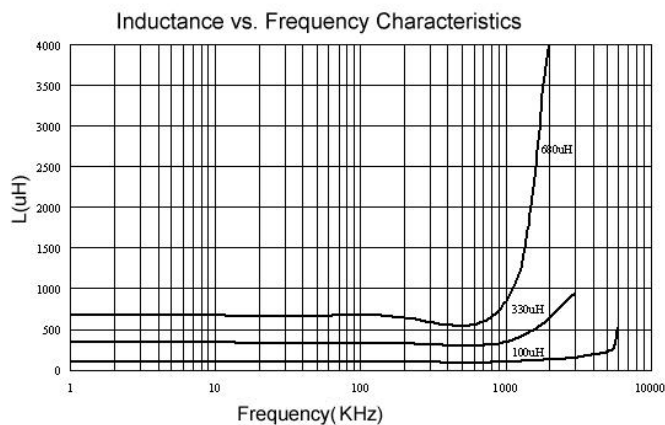
Electrical Characteristics

Part Number	Inductance (μH)	Tolerance (±%)	Q Min	Q Frequency (kHz)	DC Resistance (Ω) Max	Isat (A)	Irms (A)	SRF (MHz) Typ.
SDS1306T-100M-N	10	20	40	100	0.040	5.5	3.9	24
SDS1306T-150M-N	15	20	40	100	0.048	4.5	3.4	16
SDS1306T-220M-N	22	20	30	100	0.059	3.5	3.1	14
SDS1306T-330M-N	33	20	40	100	0.075	3.3	2.8	11
SDS1306T-470M-N	47	20	40	100	0.097	2.7	2.4	8.0
SDS1306T-680M-N	68	20	40	100	0.140	2.2	2.0	7.0
SDS1306T-101M-N	100	20	40	100	0.210	1.7	1.7	5.5
SDS1306T-151M-N	150	20	50	100	0.300	1.3	1.3	4.8
SDS1306T-221M-N	220	20	50	100	0.470	1.1	1.1	4.0
SDS1306T-331M-N	330	20	50	100	0.780	0.86	0.86	3.0
SDS1306T-471M-N	470	20	50	100	1.08	0.73	0.73	2.4
SDS1306T-681M-N	680	20	60	100	1.40	0.64	0.64	2.0
SDS1306T-102M-N	1000	20	60	100	2.01	0.53	0.53	1.0

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

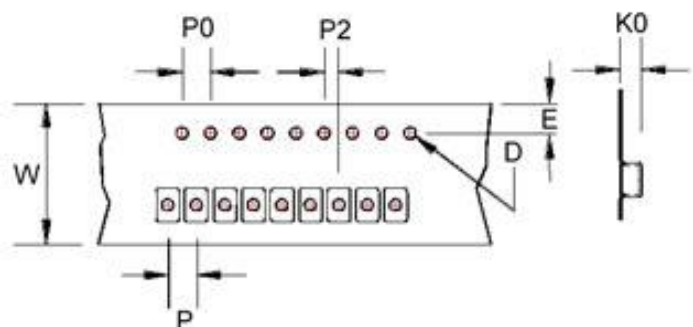
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RDC : Chroma 16502
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Test Instruments : HP4294A Impedance / Material Analyzer

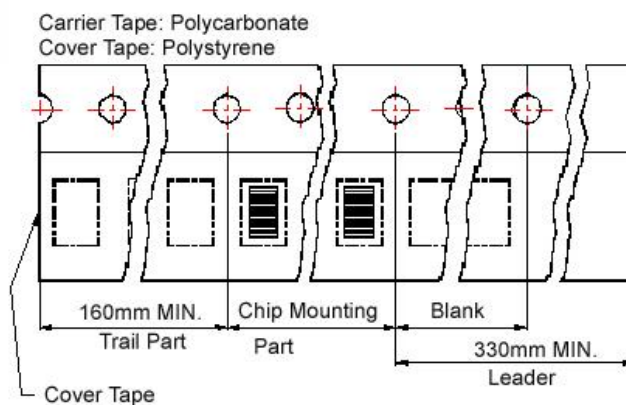


Packaging Specifications

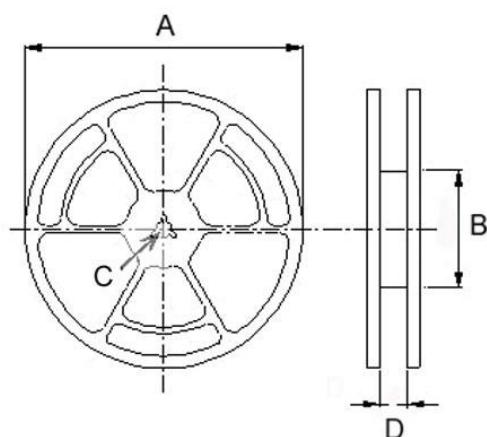
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions

TYPE	Tape Dimensions							Reel Dimensions				Quantity (PCS /	
	K0	D	E	W	P	P0	P2	A	B	C	D	178mm	330mm
SDS 0402	3.2	1.55	1.75	12	8	4	2	330	100	13	13.4	-	2500
								178	60		13.2	750	-
SDS 0804	5.4	1.55	1.75	24	12	4	2	330	100	13	24.4	-	1000
SDS 1306	7.5	1.55	1.75	32	20	4	2	330	100	13	33.4	-	250