SDS Series



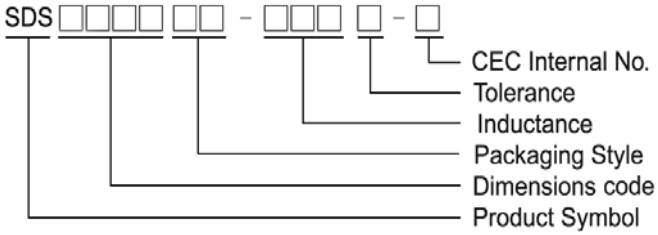
Features

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

Applications

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

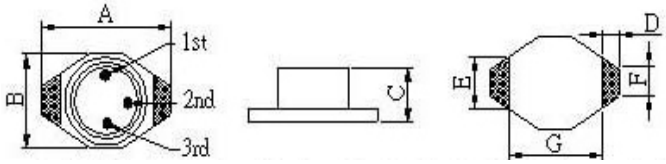
Product Identification



- Packaging: T: Tape and Reel

Shape and Dimensions

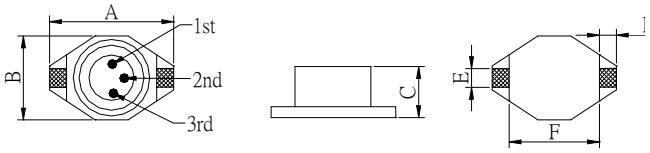
SDS0402



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

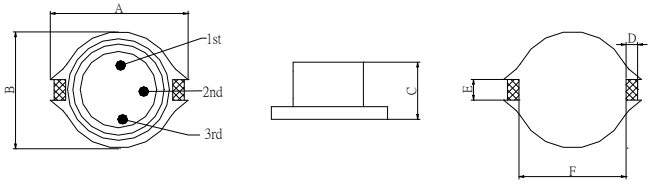
SDS0804



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

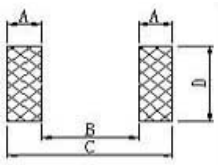
SDS1306



Dimensions in mm

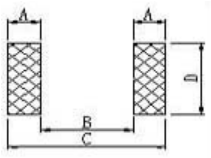
TYPE	A	B	C	D	E	F
SDS1306	18.54^{+0}	15.24^{+0}	7.62^{+0}	2.54	2.54	12.7

Recommended Pattern



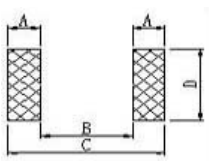
Dimensions in mm

TYPE	A	B	C	D
SDS0402	1.4	4.06	6.86	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	12.45	18.29	2.79

CHILISIN ELECTRONICS CORP.

Electrical Characteristics

Part Number	Inductance (μH)	Tolerance (±%)	Q Min	Q Frequency (kHz)	DC Resistance (Ω) Max	SRF (MHz) Typ.	Irms (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=±20%

- Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 30℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

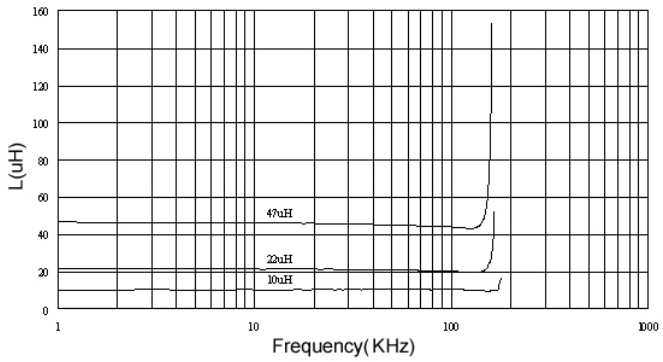
  L：E4980 or HP4284A , 100kHz/ 0.1V

  RDC：CHEN HWA 502

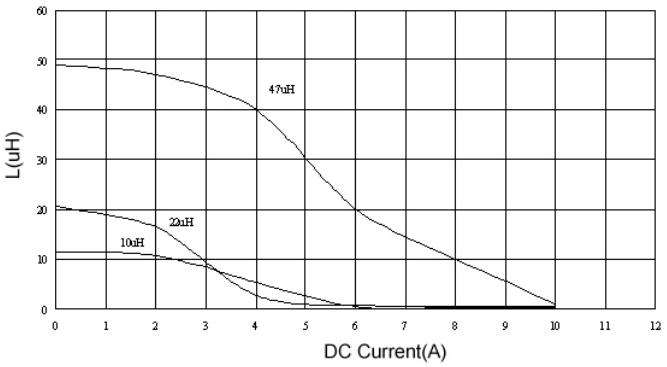
  Isat：HP4284A+HP42841A or WK3260B+WK3265B

Test Instruments：HP4294A Impedance / Material Analyzer

Inductance vs. Frequency Characteristics



Inductance vs. DC Current



CHILISIN ELECTRONICS CORP.

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%

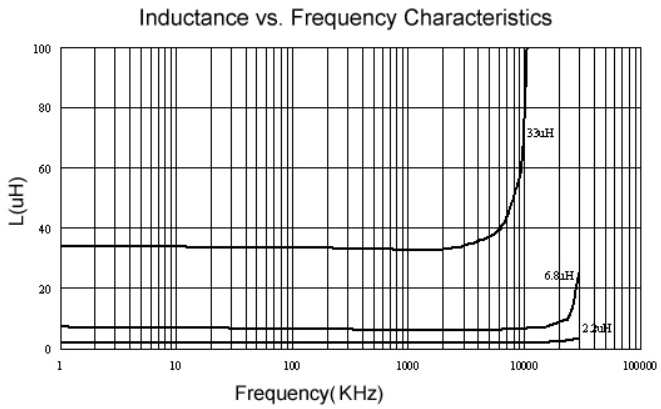
- Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 10% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

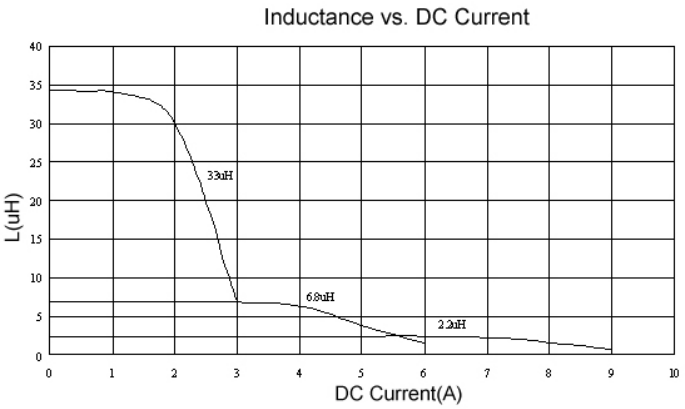
  L：E4980 or HP4284A , 100kHz/ 0.1V

  RDC：CHEN HWA 502

  Isat：HP4284A+HP42841A or WK3260B+WK3265B

Test Instruments：HP4294A Impedance / Material Analyzer





CHILISIN ELECTRONICS CORP.

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%

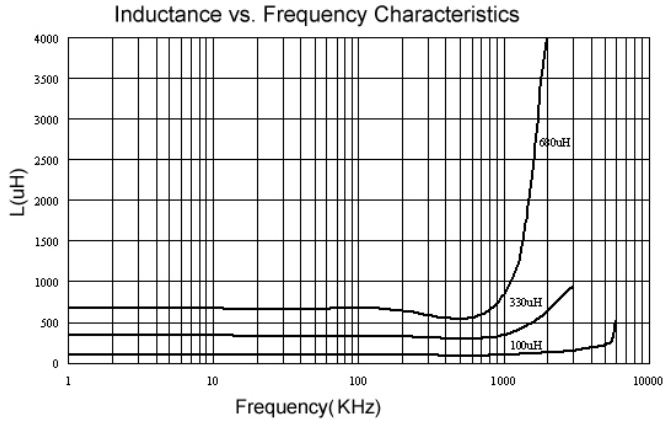
- Operating temperature range - 40℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 10% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

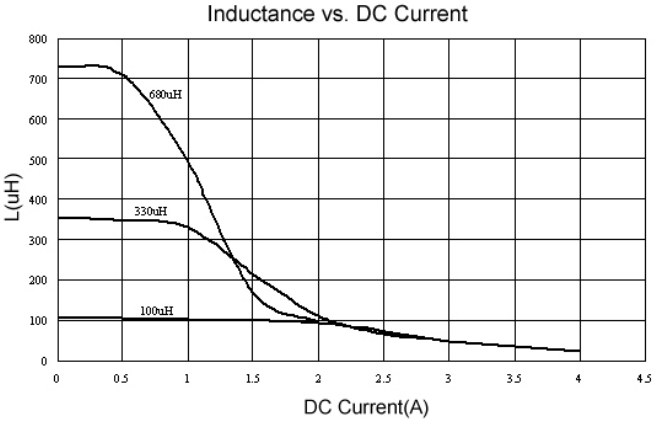
  L：E4980 or HP4284A , 100kHz/ 0.1V

  RDC：CHEN HWA 502

  Isat：HP4284A+HP42841A or WK3260B+WK3265B

Test Instruments：HP4294A Impedance / Material Analyzer

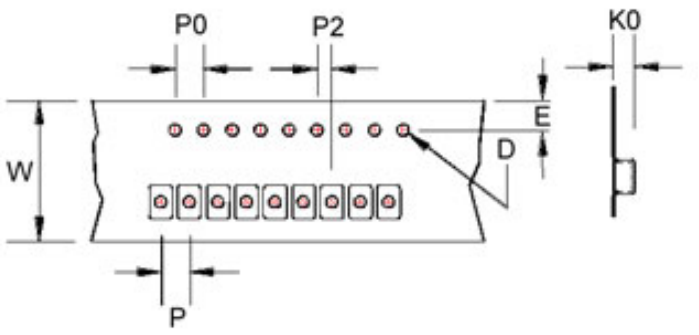




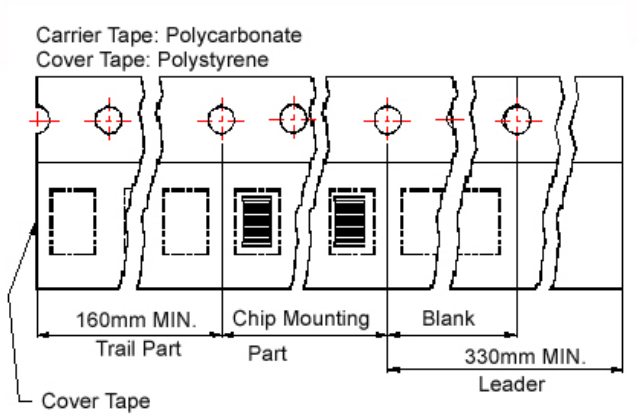
CHILISIN ELECTRONICS CORP.

Packaging Specifications

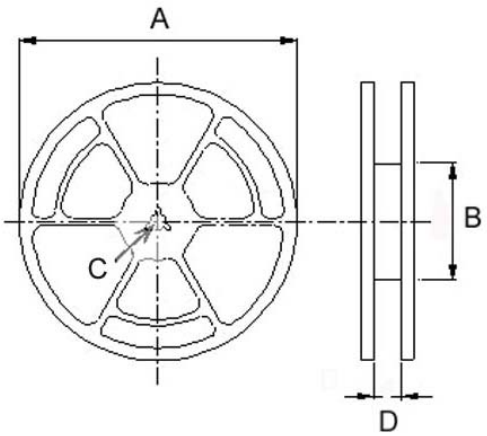
Tape Dimensions



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	330 178	100 60	13	13.4 13.2	- 750	2500 -
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