

SDT Series



Its feature of "swinging" inductance vs. current characteristics, the SSL0402 Series supports used as ultra high inductance at zero or low current.

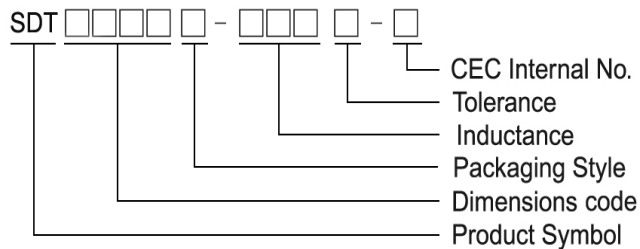
Features

- RoHS, Halogen Free and REACH Compliance
- Magnetic shielded
- Functions equally well in filter and smoothing circuit applications

Applications

- Electric motors
- DC/DC converters

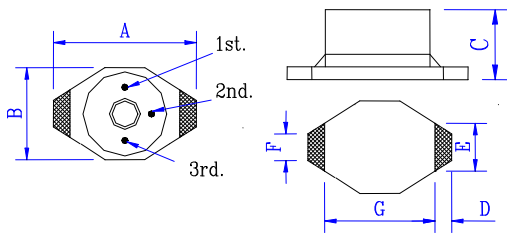
Product Identification



- Packaging: T : Tape and Reel

Shape and Dimensions

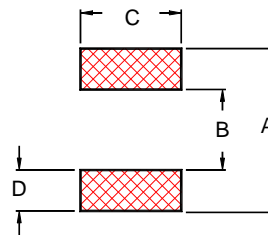
SDT 0402



Dimensions in mm

A	B	C	D	E	F	G
6.60 ⁺⁰	4.54 ⁺⁰	2.92 ⁺⁰	1.02	3.05	1.27	4.32

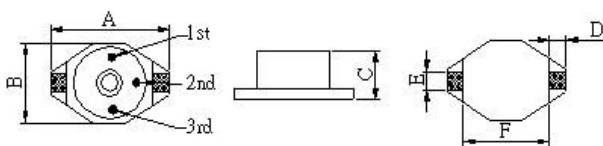
Recommended Pattern



Dimensions in mm

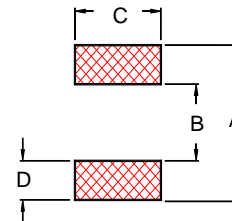
A	B	C	D
6.86	4.06	3.56	1.40

SDT 0804



Dimensions in mm

A	B	C	D	E	F
12.95 ⁺⁰	9.4 ⁺⁰	5.08 ⁺⁰	2.54	2.54	7.62



Dimensions in mm

A	B	C	D
13.21	7.37	2.79	2.92

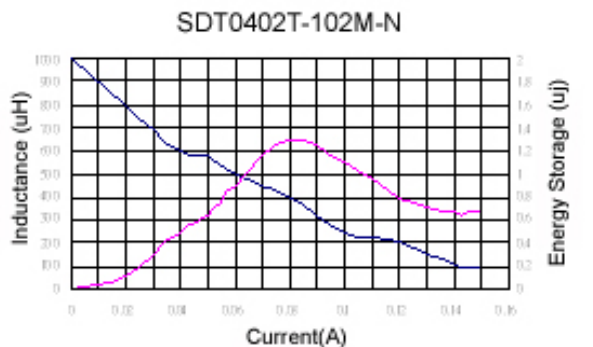
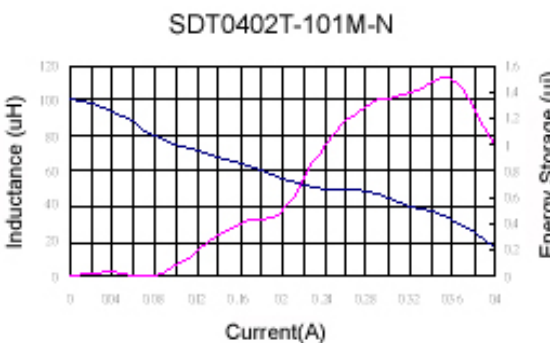
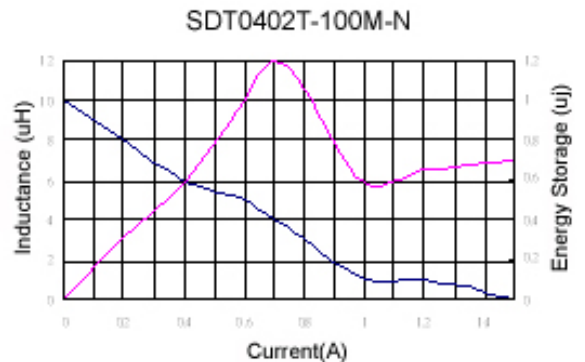
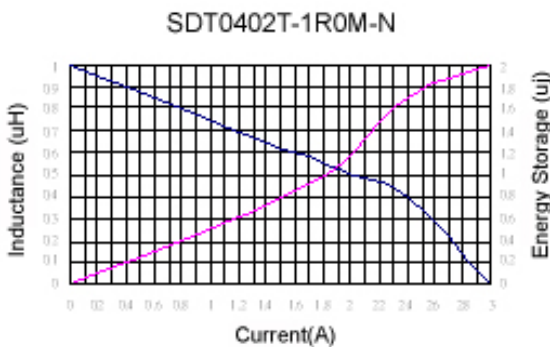
Electrical Characteristics

Specifications				Operating Parameters				
Part Number	Inductance (μH)	Tolerance (±%)	DC Resistance (Ω) Max	Self Resonant Frequency (MHz) Typ.	Inductance Rating (μH)	Current Rating (A)	Energy Storage (μ Joules) Max	Switching Frequency Max
SDT0402T-1R0M-N	1.0	20	0.045	157	0.60	2.0	1.8	1 MHz
SDT0402T-1R5M-N	1.5	20	0.050	108	0.80	1.9	1.8	1 MHz
SDT0402T-2R2M-N	2.2	20	0.060	92	0.90	1.5	1.8	1 MHz
SDT0402T-3R3M-N	3.3	20	0.070	69	1.5	1.2	1.4	1 MHz
SDT0402T-4R7M-N	4.7	20	0.080	59	2.0	1.2	1.6	1 MHz
SDT0402T-6R8M-N	6.8	20	0.085	51	3.0	1.0	1.9	1 MHz
SDT0402T-100M-N	10	20	0.095	33	5.0	0.7	1.2	1 MHz
SDT0402T-150M-N	15	20	0.135	26	6.0	0.6	1.1	1 MHz
SDT0402T-220M-N	22	20	0.160	20	10	0.5	1.2	1 MHz
SDT0402T-330M-N	33	20	0.275	17	12	0.45	1.5	1 MHz
SDT0402T-470M-N	47	20	0.340	12	20	0.34	1.3	1 MHz
SDT0402T-680M-N	68	20	0.575	11	30	0.29	1.4	1 MHz
SDT0402T-101M-N	100	20	1.100	9.4	40	0.24	1.5	1 MHz
SDT0402T-151M-N	150	20	1.400	6.7	60	0.20	1.4	500 kHz
SDT0402T-221M-N	220	20	2.250	6.1	90	0.17	1.6	500 kHz
SDT0402T-331M-N	330	20	2.900	4.7	100	0.16	1.4	500 kHz
SDT0402T-471M-N	470	20	3.600	3.85	150	0.14	1.5	500 kHz
SDT0402T-681M-N	680	20	4.550	3.1	200	0.12	1.4	500 kHz
SDT0402T-102M-N	1000	20	8.100	2.3	400	0.08	1.4	500 kHz

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Measured at the rated current. Refer to curves below for more detail.
- Average maximum allowable current. SDT Series inductors are designed for current spikes as high as 2X the current rating
- Measure Equipment :
 - L : E4980 or HP4284A, 100kHz 0.1V
 - RDC : CHEN HWA 502
 - SRF : HP4291A or HP4192A
 - Rated Current : HP4284A+HP42841A or WK3260B+WK3265B

Typical Inductance Energy Storage VS. Current



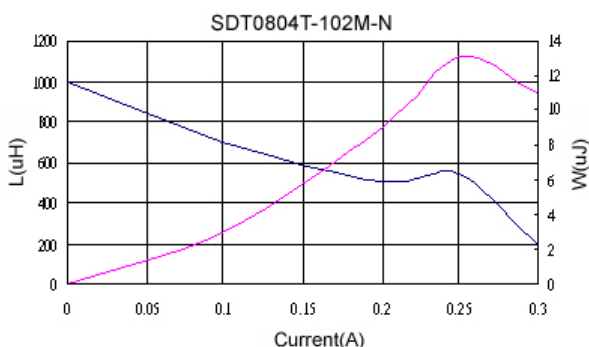
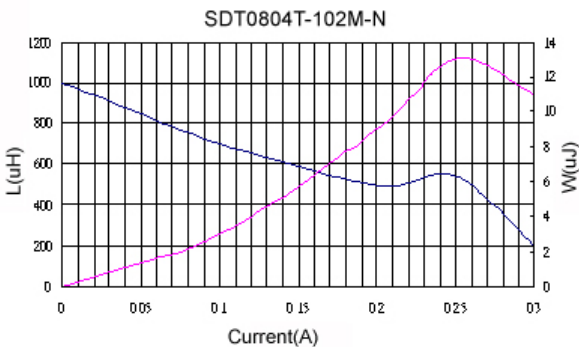
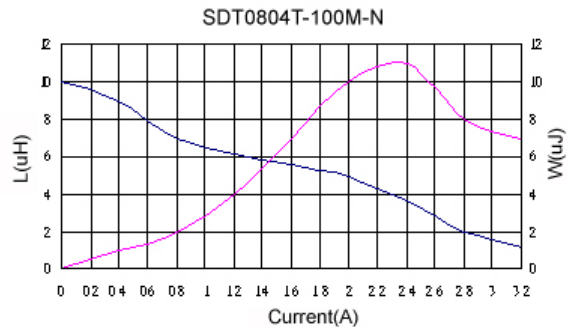
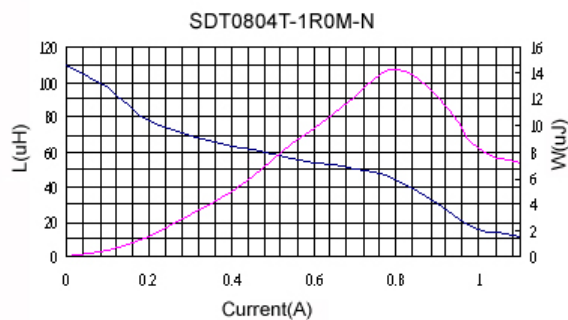
Electrical Characteristics

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SDT0804T-1R0M-N	1.0	20	0.025	60	0.50	5.0	9	1 MHz
SDT0804T-1R5M-N	1.5	20	0.030	55	0.70	5.0	12	1 MHz
SDT0804T-2R2M-N	2.2	20	0.035	55	1.00	5.0	15	1 MHz
SDT0804T-3R3M-N	3.3	20	0.040	50	1.50	5.0	16	1 MHz
SDT0804T-4R7M-N	4.7	20	0.045	45	2.00	3.0	10	1 MHz
SDT0804T-6R8M-N	6.8	20	0.050	40	4.00	2.5	14	1 MHz
SDT0804T-100M-N	10	20	0.055	35	5.00	2.0	11	1 MHz
SDT0804T-150M-N	15	20	0.060	25	6.00	1.8	12	1 MHz
SDT0804T-220M-N	22	20	0.084	22	10	1.5	11	1 MHz
SDT0804T-330M-N	33	20	0.090	18	12	1.3	13	1 MHz
SDT0804T-470M-N	47	20	0.11	16	27	1.0	13	1 MHz
SDT0804T-680M-N	68	20	0.15	12	40	0.90	17	1 MHz
SDT0804T-101M-N	100	20	0.29	9	50	0.80	15	1 MHz
SDT0804T-151M-N	150	20	0.36	8	80	0.60	15	500 kHz
SDT0804T-221M-N	220	20	0.39	6	90	0.50	10	500 kHz
SDT0804T-331M-N	330	20	0.73	5	150	0.40	13	500 kHz
SDT0804T-471M-N	470	20	0.88	4	200	0.35	13	500 kHz
SDT0804T-681M-N	680	20	1.15	3	300	0.30	13	500 kHz
SDT0804T-102M-N	1000	20	1.45	2.5	420	0.25	13	500 kHz

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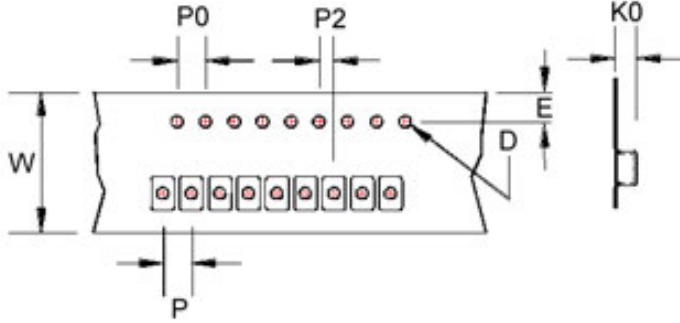
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Typical Inductance Energy Storage VS. Current

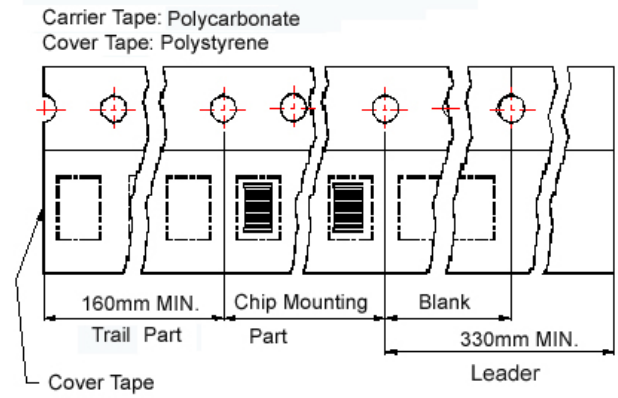


Packaging Specifications

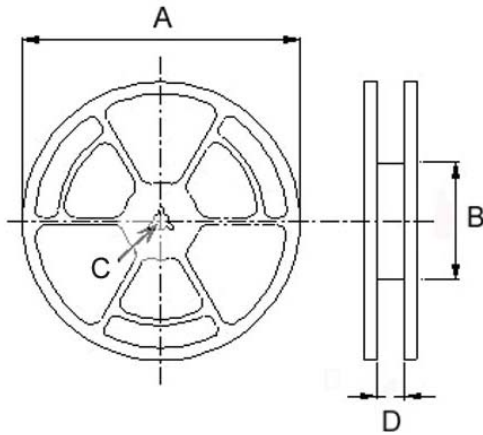
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity (PCS / REEL)	
	K0	D	E	W	P	P0	P2	A	B	C	D	178mm	330mm
SDT 0402	3.2	1.55	1.75	12	8	4	2	330	100	13	13.4	-	2500
								178	60	13	13.2	750	-
SDT 0804	5.4	1.55	1.75	24	16	4	2	330	100	13	24.4	-	750