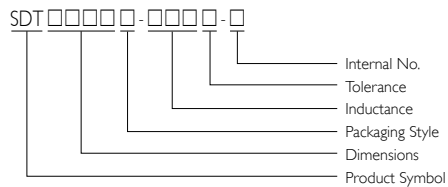


SMD Power Inductors

SDT0402 Series

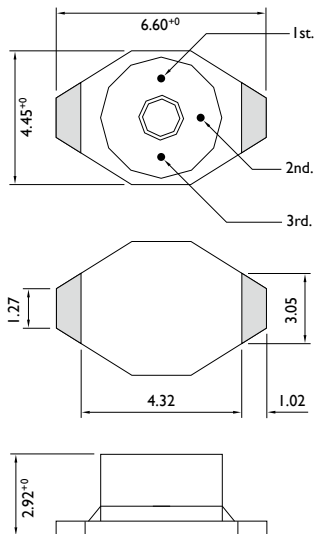


PRODUCT IDENTIFICATION



- Packaging: T = Tape and Reel
- Internal No.: N = Lead-Free

SHAPES AND DIMENSIONS



Dimensions: mm

APPLICATIONS

Board mounted DC-DC converters

Miniature power supplies, and voltage multiplying circuits.

FEATURES

Ultra High L and low current

Functions equally well in filter and smoothing circuit applications.

ELECTRICAL CHARACTERISTICS

SPECIFICATIONS

PART NO.	INDUCTANCE at 100KHz ($\mu\text{H} \pm 20\%$)	DC RESISTANCE (Ω) Max.	OPERATING PARAMETERS				
			SRF (MHz) Typ.	INDUCTANCE RATING * (μH)	CURRENT RATING ** (A)	ENERGY STORAGE (μJoules) Max.	SWITCHING FREQUENCY Max.
SDT0402T-1R0M-N	1.0	0.045	157	0.60	2.00	1.8	1 MHz
SDT0402T-1R5M-N	1.5	0.050	108	0.80	1.90	1.8	1 MHz
SDT0402T-2R2M-N	2.2	0.060	92	0.90	1.50	1.8	1 MHz
SDT0402T-3R3M-N	3.3	0.070	69	1.50	1.20	1.4	1 MHz
SDT0402T-4R7M-N	4.7	0.080	59	2.00	1.20	1.6	1 MHz
SDT0402T-6R8M-N	6.8	0.085	51	3.00	1.00	1.9	1 MHz
SDT0402T-100M-N	10	0.095	33	5.00	0.70	1.2	1 MHz
SDT0402T-150M-N	15	0.135	26	6.00	0.60	1.1	1 MHz
SDT0402T-220M-N	22	0.160	20	10	0.50	1.2	1 MHz
SDT0402T-330M-N	33	0.275	17	12	0.45	1.5	1 MHz
SDT0402T-470M-N	47	0.340	12	20	0.34	1.3	1 MHz
SDT0402T-680M-N	68	0.575	11	30	0.29	1.4	1 MHz
SDT0402T-101M-N	100	1.100	9.40	40	0.24	1.5	1 MHz
SDT0402T-151M-N	150	1.400	6.70	60	0.20	1.4	500 KHz
SDT0402T-221M-N	220	2.250	6.10	90	0.17	1.6	500 KHz
SDT0402T-331M-N	330	2.900	4.70	100	0.16	1.4	500 KHz
SDT0402T-471M-N	470	3.600	3.85	150	0.14	1.5	500 KHz
SDT0402T-681M-N	680	4.550	3.10	200	0.12	1.4	500 KHz
SDT0402T-102M-N	1,000	8.100	2.30	400	0.08	1.4	500 KHz

Note:

*Measured at the rated current

**Average maximum allowable current. SDT Series inductors are designed for current spikes as high as 2X the current rating

Operating Temperature Range: -40 °C to +85 °C

SDT0804 Series

SMD Power Inductors

APPLICATIONS

Board mounted DC-DC converters

Miniature power supplies, and voltage multiplying circuits.

FEATURES

Ultra High L and low current

Functions equally well in filter and smoothing circuit applications.

ELECTRICAL CHARACTERISTICS

SPECIFICATIONS			OPERATING PARAMETERS				
PART NO.	INDUCTANCE at 100KHz ($\mu\text{H} \pm 20\%$)	DC RESISTANCE (Ω) Max.	SRF (MHz) Typ.	INDUCTANCE RATING * (μH)	CURRENT RATING ** (A)	ENERGY STORAGE (μ Joules) Max.	SWITCHING FREQUENCY Max.
SDT0804T-1R0M-N	1.0	0.025	60	0.50	5.0	9	1 MHz
SDT0804T-1R5M-N	1.5	0.030	55	0.70	5.0	12	1 MHz
SDT0804T-2R2M-N	2.2	0.035	55	1.00	5.0	15	1 MHz
SDT0804T-3R3M-N	3.3	0.040	50	1.50	5.0	16	1 MHz
SDT0804T-4R7M-N	4.7	0.045	45	2.00	3.0	10	1 MHz
SDT0804T-6R8M-N	6.8	0.050	40	4.00	2.5	14	1 MHz
SDT0804T-100M-N	10	0.055	35	5.00	2.0	11	1 MHz
SDT0804T-150M-N	15	0.060	25	6.00	1.8	12	1 MHz
SDT0804T-220M-N	22	0.084	22	10	1.5	11	1 MHz
SDT0804T-330M-N	33	0.090	18	12	1.3	13	1 MHz
SDT0804T-470M-N	47	0.11	16	27	1.0	13	1 MHz
SDT0804T-680M-N	68	0.15	12	40	0.90	17	1 MHz
SDT0804T-101M-N	100	0.29	9.0	50	0.80	15	1 MHz
SDT0804T-151M-N	150	0.36	8.0	80	0.60	15	500 KHz
SDT0804T-221M-N	220	0.39	6.0	90	0.50	10	500 KHz
SDT0804T-331M-N	330	0.73	5.0	150	0.40	13	500 KHz
SDT0804T-471M-N	470	0.88	4.0	200	0.35	13	500 KHz
SDT0804T-681M-N	680	1.15	3.0	300	0.30	13	500 KHz
SDT0804T-102M-N	1,000	1.45	2.5	420	0.25	13	500 KHz

Note:

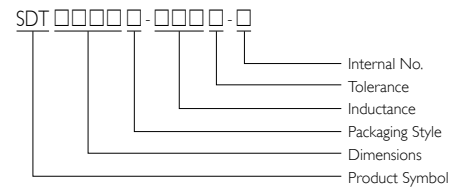
*Measured at the rated current

**Average maximum allowable current. SDT Series inductors are designed for current spikes as high as 2X the current rating

Operating Temperature Range: -40 °C to +85 °C



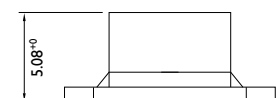
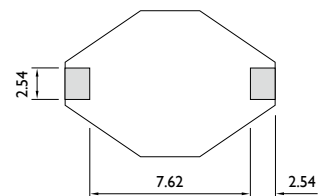
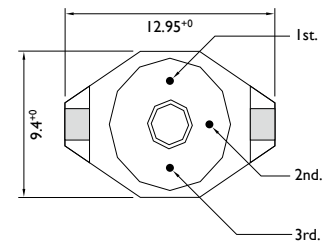
PRODUCT IDENTIFICATION



■ Packaging: T = Tape and Reel

■ Internal No.: N = Lead-Free

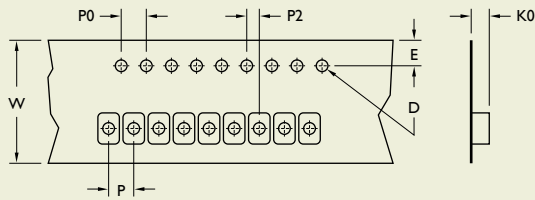
SHAPES AND DIMENSIONS



Dimensions: mm



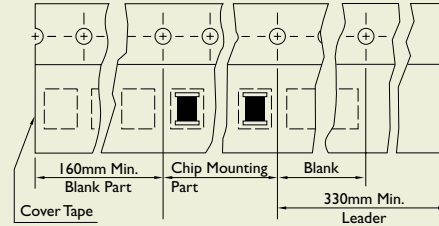
TAPE DIMENSIONS



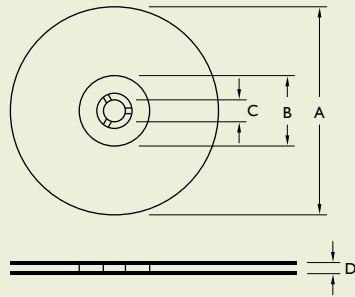
TAPE MATERIAL

Carrier Tape: Polystyrene

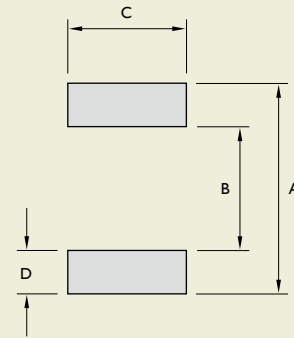
Cover Tape: Polyethylene



REEL DIMENSIONS



RECOMMENDED PATTERN



TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN				REEL DIMENSIONS				QUANTITY/ REEL	
	K0	D	E	W	P	P0	P2	A	B	C	D	A	B	C	D	178	330
	SDT0402	3.20	1.55	1.75	12	8	4	2	6.86	4.06	3.56	1.40	330	100	13	13.4	-
												178	60	13	13.2	750	-
SDT0804	5.40	1.55	1.75	24	16	4	2	13.21	7.37	2.79	2.92	330	100	13	24.4	-	750

Dimensions: mm