



ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (μ H)	RDC (Ω) Max.	SRF (MHz)TYP	CURRENT RAGING (A)	INDUCTANCE CE (μ H)	MAX ENERGE (μ JOULES)	MAX SWITCHING Frequency
SDT0804T-1R0 □ -S	1.0	0.025	60	5.0	0.5	9	1 MHz
SDT0804T-1R5 □ -S	1.5	0.030	55	5.0	0.7	12	1 MHz
SDT0804T-2R2 □ -S	2.2	0.035	55	5.0	1	15	1 MHz
SDT0804T-3R3 □ -S	3.3	0.040	50	5.0	1.5	16	1 MHz
SDT0804T-4R7 □ -S	4.7	0.045	45	3.0	2	10	1 MHz
SDT0804T-6R8 □ -S	6.8	0.050	40	2.5	4	14	1 MHz
SDT0804T-100 □ -S	10	0.055	35	2.0	5	11	1 MHz
SDT0804T-150 □ -S	15	0.060	25	1.8	6	12	1 MHz
SDT0804T-220 □ -S	22	0.084	22	1.5	10	11	1 MHz
SDT0804T-330 □ -S	33	0.090	18	1.3	12	13	1 MHz
SDT0804T-470 □ -S	47	0.11	16	1.0	27	13	1 MHz
SDT0804T-680 □ -S	68	0.15	12	0.90	40	17	1 MHz
SDT0804T-101 □ -S	100	0.29	9	0.80	50	15	1 MHz
SDT0804T-151 □ -S	150	0.36	8	0.60	80	15	500 KHz
SDT0804T-221 □ -S	220	0.39	6	0.50	90	10	500 KHz
SDT0804T-331 □ -S	330	0.73	5	0.40	150	13	500 KHz
SDT0804T-471 □ -S	470	0.88	4	0.35	200	13	500 KHz
SDT0804T-681 □ -S	680	1.15	3	0.30	300	13	500 KHz
SDT0804T-102 □ -S	1000	1.45	2.5	0.25	420	13	500 KHz

NOTE : □ -tolerance K=±10% / =±15% / M=±20% / N=+40% -20%

1. Operating temperature range -40°C~85°C

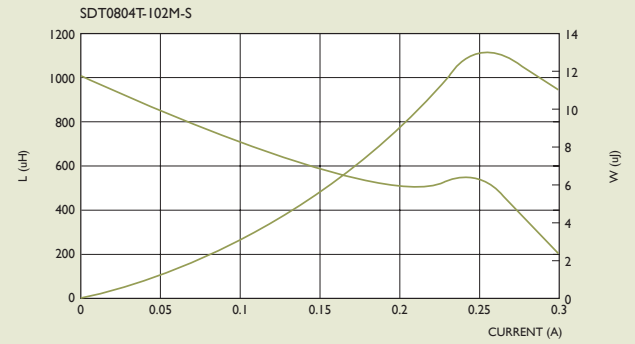
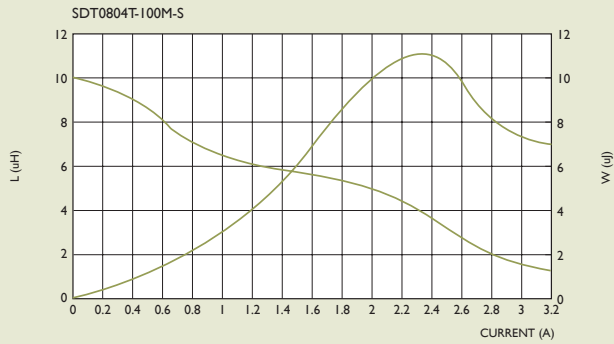
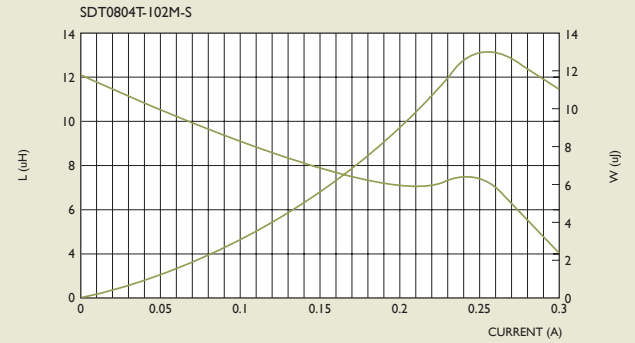
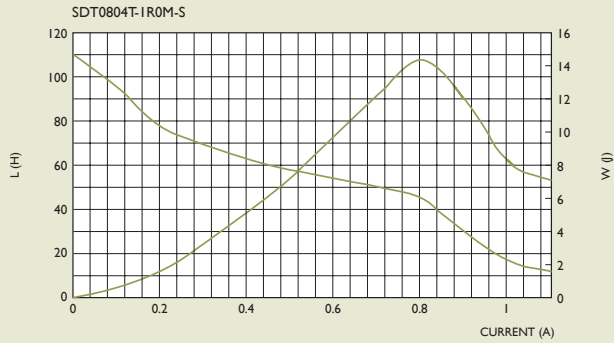
2. Inductance Rating: Measured at the ratted current. SDT Series inductors are design for current

3. Current Raging: Average maximum allowable current. SDT Series inductors are design for current spikes as high as 2X the current rating; TEST FREQUENCY : 100 KHz/0.1V

"-N"FOR COMPLETELY LEAD FREETYPE(INCLUDING FERRITE BODY & SOLDER)

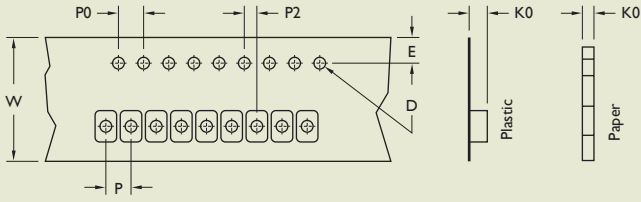


TYPICAL INDUCTANCE ENERGY STORAGE VS. CURRENT





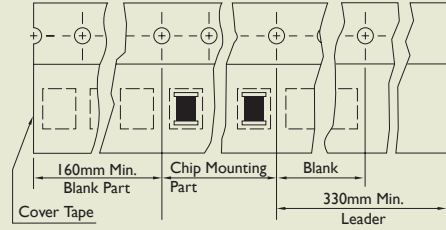
TAPE DIMENSIONS



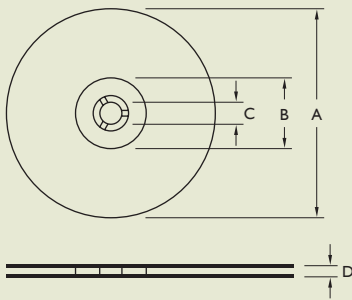
TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene

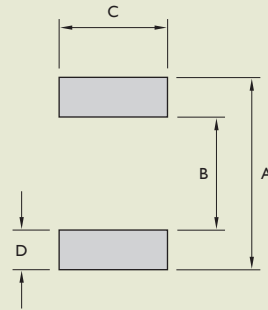


REEL DIMENSIONS



RECOMMENDED PATTERN

Land Pattern



Dimensions : mm

TYPE	TAPE DIMENSIONS						
	K0	D	E	W	P	P0	P2
SDT0402	3.2	1.55	1.75	12	8	4	2
SDT0804	5.4	1.55	1.75	24	16	4	2

RECOMMENDED PATTERN				REEL DIMENSIONS				QUANTITY PCS/REEL	
A	B	C	D	A	B	C	D	178	330
6.86	4.06	3.56	1.40	330	100	13	13.4	-	2500
				178	60	13	13.2	750	-
13.21	7.37	2.79	2.92	330	100	13	24.4	-	750



SDT SERIES RELIABILITY TEST

I-1 MECHANICAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS
I-1-1	Vibration	Appearance : No Damage L Change : within $\pm 10\%$ Q Change : within $\pm 30\%$ RDC : within Specification	Test device shall be soldered on the substrate. Oscillation Frequency : 10 to 55 to 10Hz for 1Min. Amplitude : 1.5mm Time : 2Hrs. for each Axis (X,Y & Z), Total 6Hrs.
I-1-2	Resistance to Soldering Heat	Appearance : No Damage	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 260 \pm 5°C Immersion Time : 10 \pm 1Sec.
I-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating.	Pre-heating : 150°C, 1Min. Solder Composition : Sn/Pb = 63/37 Solder Temperature : 230 \pm 5°C Immersion Time : 4 \pm 1Sec.

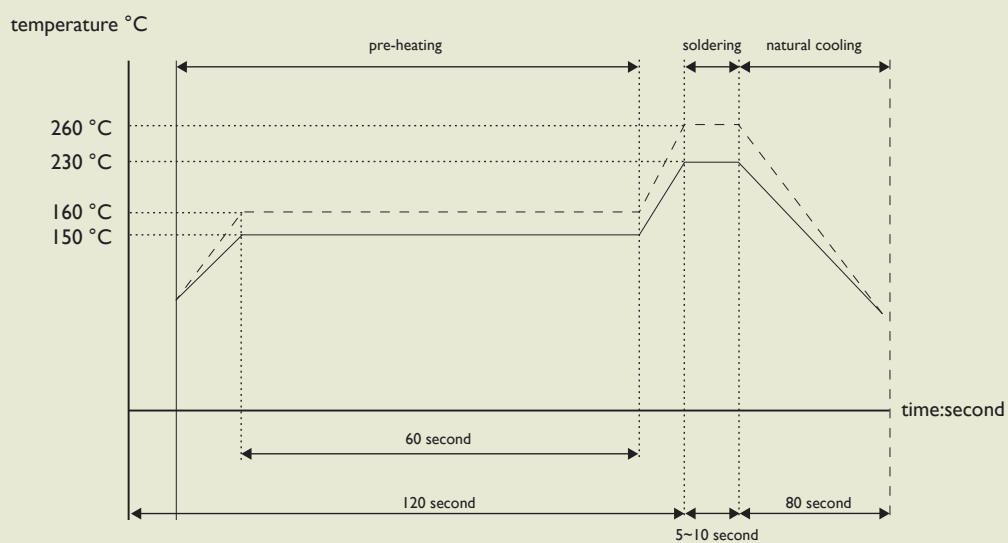
I-2 ENVIRONMENTAL PERFORMANCE

NO.	ITEM	SPECIFICATION	TEST CONDITIONS															
I-2-1	Temperature Shock	Appearance : No Damage L Change : within $\pm 10\%$ L Change : within $\pm 30\%$ RDC : within Specification	10 Cycles (Air to Air) 1 Cycles shall Consist of : 30Min. Exposure to -55°C 30Min. Exposure to 125°C 15Sec. Max. Transition between Temperatures Measured after Exposure in the Room Condition for 24Hrs.															
I-2-2	Temperature Cycle		One Cycle <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Time (Min.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25 \pm 3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25 \pm 2</td> <td>3</td> </tr> <tr> <td>3</td> <td>85 \pm 3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25 \pm 2</td> <td>3</td> </tr> </tbody> </table> Total : 100 Cycles Measured after Exposure in the Room Condition for 24Hrs.	Step	Temperature (°C)	Time (Min.)	1	-25 \pm 3	30	2	25 \pm 2	3	3	85 \pm 3	30	4	25 \pm 2	3
Step	Temperature (°C)	Time (Min.)																
1	-25 \pm 3	30																
2	25 \pm 2	3																
3	85 \pm 3	30																
4	25 \pm 2	3																
I-2-3	Humidity Resistance		Temperature : 40 \pm 2°C Relative Humidity : 90 ~ 95% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.															
I-2-4	High Temperature Resistance		Temperature : 85 \pm 3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.															
I-2-5	Low Temperature Resistance		Temperature : -25 \pm 3°C Relative Humidity : 0% Time : 1000Hrs. Measured after Exposure in the Room Condition for 24Hrs.															



RECOMMEND SOLDERING CONDITIONS

for:CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters, Transformers, Current Sensors



for: lead solder	—————
for: lead-free solder	- - - - -