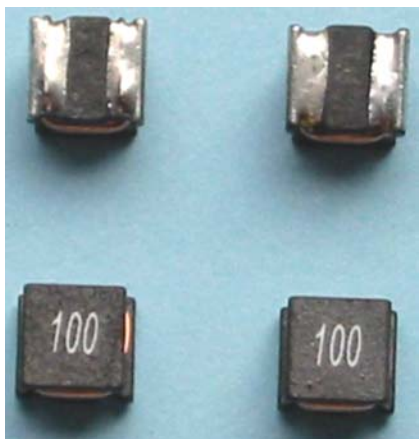




TSQ TYPE

SMD POWER INDUCTOR

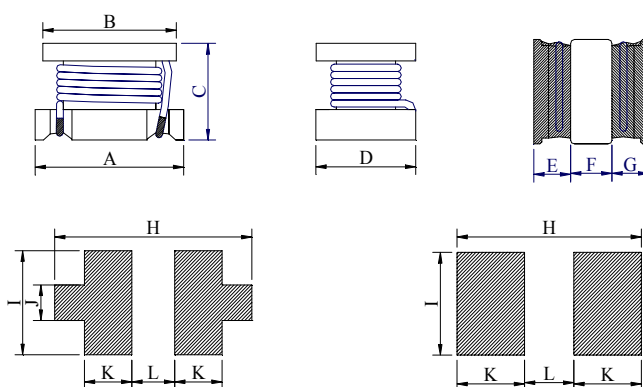


FEATURE:

- Large current capacity and large inductance by using high performance.
- High Q value at high frequencies and low DC resistance.

SHAPES&DIMENSION:

Unit:mm



LAND PATTERN FOR TSQ0302/0403

LAND PATTERN FOR TSQ0301/0605

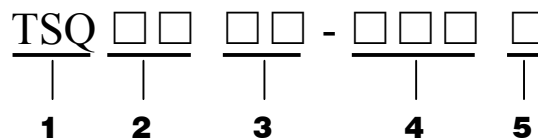
APPLICATION

- DC/DC converter
- Camcorder
- LCD TV
- MP3-player
- Digital camera
- G.P.S
- Portable CDR-W
- PDA(desktop)

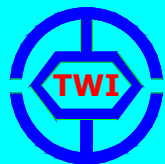
Part No.	A	B	C	D
TSQ 0301	3.20±0.30	2.30±0.30	1.80±0.30	1.60±0.30
TSQ 0302	3.20±0.30	2.50±0.30	2.00±0.30	2.50±0.30
TSQ 0403	4.50±0.30	3.60±0.30	2.60±0.30	3.20±0.30
TSQ 0605	5.70±0.30	5.00±0.30	4.70±0.30	5.00±0.30

Part No.	E	F	G	H	I	J	K	L
TSQ 0301	0.7min	0.7min	0.7min	4.5	1.5	1.75	1.00	1.00
TSQ 0302	0.90±0.30	1.30±0.20	0.90±0.30	5.5	2.0	1.0	1.00	1.00
TSQ 0403	1.0min	1.0min	1.0min	7.5	3.0	1.5	1.5	1.5
TSQ 0605	1.3min	1.7min	1.3min	8.0	3.5	3.0	2.0	2.0

PART NUMBERING SYSTEM:



- 1) PRODUCT SYMBOL
- 2) OUTSIDE DIA :m/m
- 3) BODY HEIGHT :m/m
- 4) INDUCTANCE :μH
- 5) TOLERANCE :K 10%, L 15%, M 20%



TSQ TYPE

SMD POWER INDUCTOR

STANDARD SPECIFICATION

Part Inductance		DCR(Ω)Max.				Rated D.C Current(A)Max.			
No.	L(μH)±20%	TSQ 0301	TSQ 0302	TSQ 0403	TSQ 0605	TSQ 0301	TSQ 0302	TSQ 0403	TSQ 0605
R10	0.10		0.25				0.70		
R12	0.12				0.0098				6.00
R15	0.15	0.546				0.250			
R18	0.18		0.25				0.65		
R22	0.22	0.602			0.0140	0.240			5.30
R27	0.27		0.25				0.60		
R33	0.33	0.630				0.230			
R39	0.39		0.25				0.53		
R47	0.47	1.162			0.0182	0.215			4.80
R56	0.56	0.854	0.25			0.200	0.53		
R68	0.68	0.938	0.25			0.190	0.47		
R82	0.82	1.022	0.25			0.185	0.45		
1R0	1.00	0.637	0.50	0.2	0.0270	0.175	0.445	0.500	4.00
1R2	1.20	1.170	0.60	0.2		0.165	0.425	0.500	
1R5	1.50	1.300	0.60	0.3	0.0310	0.155	0.40	0.500	3.70
1R8	1.80	2.080	0.70	0.3		0.150	0.39	0.500	
2R2	2.20	0.910	0.80	0.3	0.0410	0.140	0.37	0.500	3.20
2R7	2.70	0.715	0.90	0.3		0.135	0.33	0.500	
3R3	3.30	1.820	1.00	0.4	0.0500	0.130	0.30	0.500	2.90
3R9	3.90	1.950	1.10	0.4		0.125	0.29	0.500	
4R7	4.70	2.210	1.20	0.4	0.0574	0.120	0.27	0.500	2.70
5R6	5.60	2.340	1.30	0.5		0.115	0.25	0.500	
6R8	6.80	2.600	1.50	0.5	0.1040	0.110	0.24	0.450	2.00
8R2	8.20	2.860	1.60	0.6		0.105	0.23	0.450	
100	10	3.250	1.80	0.6	0.1300	0.100	0.19	0.400	1.70
120	12	3.510	2.00	0.6		0.095	0.18	0.380	
150	15	3.900	2.20	0.7	0.2100	0.090	0.17	0.360	1.40
180	18	4.420	2.50	0.8		0.085	0.17	0.340	
220	22	4.030	2.80	0.9	0.2660	0.085	0.15	0.320	1.20
270	27	4.420	3.10	1.1		0.085	0.13	0.300	
330	33	4.940	3.50	1.2	0.4480	0.080	0.12	0.270	0.90
390	39	9.360	3.90	1.4		0.055	0.11	0.240	
470	47	10.40	4.30	1.5	0.5600	0.055	0.10	0.220	0.80
560	56	11.57	4.90	1.7		0.050	0.09	0.200	
680	68	12.87	5.50	1.9	0.9380	0.050	0.09	0.180	0.64
820	82	14.30	6.20	2.2		0.045	0.08	0.170	
101	100	15.60	6.80	2.5	1.2040	0.045	0.08	0.160	0.56
121	120		7.80	3.0			0.07	0.150	
151	150		9.20	3.7	2.6600		0.07	0.130	0.42
181	180		10.00	4.5			0.07	0.120	
221	220		12.00	5.4	3.3600		0.07	0.110	0.32
271	270		13.00	6.8			0.07	0.100	
331	330		13.00	8.2	6.1600		0.07	0.095	0.27
391	390		22.00	9.7			0.05	0.090	
471	470		25.00	11.8	7.5600		0.05	0.080	0.24
561	560		28.00	14.5			0.04	0.070	
681	680			17.0	11.340			0.065	0.19
821	820			20.5				0.060	
102	1000			25.0	14.420			0.050	0.15
122	1200			30.0				0.045	
152	1500			37.0				0.040	
182	1800			45.0				0.035	
222	2200			50.0	30.100			0.030	0.10
472	4700				61.040				0.07
103	10000				140.00				0.05

1. Test Freq(L): at 1MHz/0.25V

2. Tolerance of Inductance

TSQ 0301 0.15~100μH±10%(K)

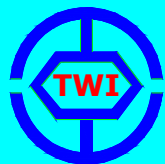
TSQ 0302 0.10~560μH±10%(K)

TSQ 0403 1.0~2200μH±10%(K)

TSQ 0605 0.12~10000μH±10%(K)

3. Operating temperature-25℃ to +85℃.

4. This indicates the value of current when the inductance is 10% lower than its initial value at D.C. superimposition or D.C. current when at Δt=40℃, whichever is lower. (Ta=20℃)



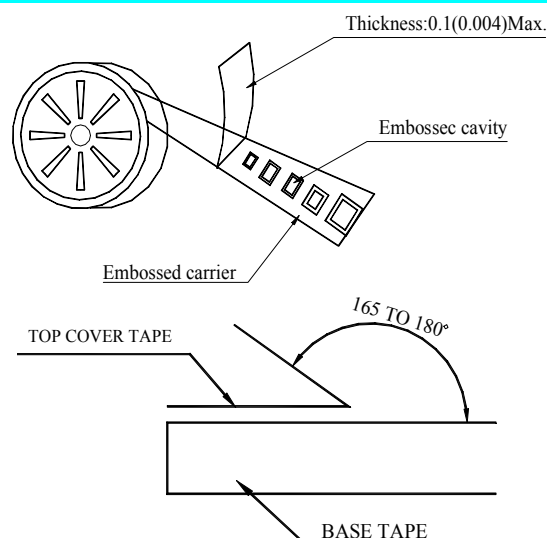
T-WELL

SMD
EMC
EMI
COMPONENT

TSQ TYPE

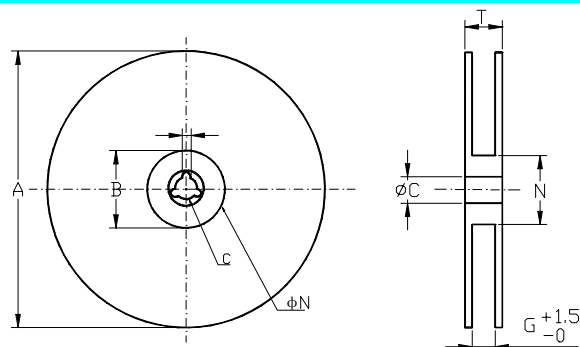
SMD POWER INDUCTOR

PACKAGING FOR SMC



The force for tearing off cover tape is 10 to 60 grams in the arrow direction.

CARRIER TAPE REELS

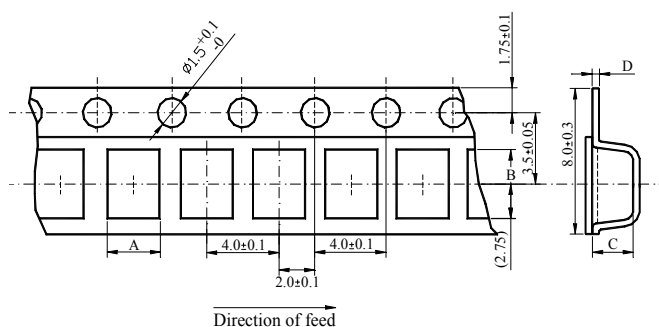


MATERIAL: PAPER/PLASTIC Dimension in mm

TYPE	A	B	C	G	N	T
8mm	180	21.0±0.8	13.0±0.2	8.4	55	12.4
12mm	180	21.0±0.8	13.0±0.2	12.4	55	16.4
12mm	330	21.0±0.8	13.0±0.2	12.4	100	16.4

TAPE DIMENSION/PACKAGING

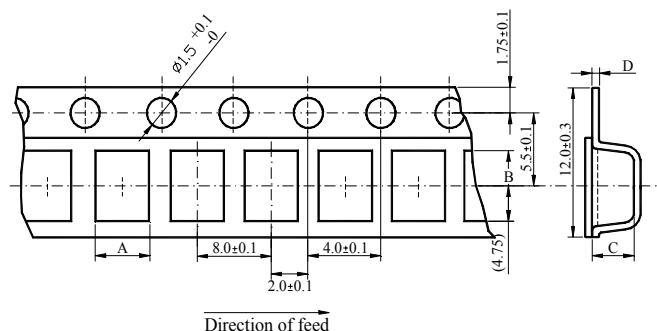
MINIMUM QUANTITY AND 8mm WIDTH TAPING DIMENSION



PLASTIC TAPE

PART NO.	DIMENSIONS(in mm)				Dimension in m/m MINIMUM QTY.(PCS)
	A	B	C	D	Φ180mm REEL
TSQ 0301	1.90	3.6	2.0	0.2	2000
TSQ 0302	2.90	3.6	2.1	0.2	2000

MINIMUM QUANTITY AND 12mm WIDTH TAPING DIMENSION



PLASTIC TAPE

PART NO.	DIMENSIONS(in mm)				Dimension in m/m MINIMUM QTY.(PCS)
	A	B	C	D	Φ330mm REEL
TSQ 0403	3.60	4.9	2.7	0.3	2500
TSQ 0605	5.40	6.1	5.0	0.4	1500