

TSPR TYPE

SMD POWER INDUCTOR

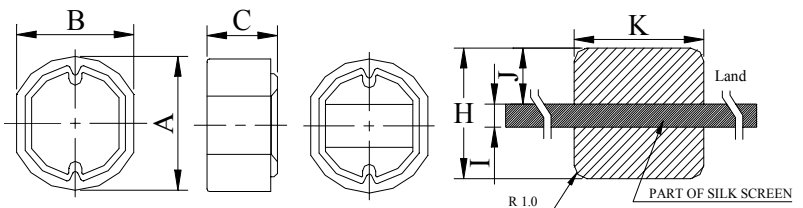


FEATURE:

- Magnetic shielded for low radiation.
- Ferrite bobbin core and compact size.
- Low core loss for high frequency power application.
- Large terminal surface for good PCB bonding.

SHAPES&DIMENSION:

Unit:mm

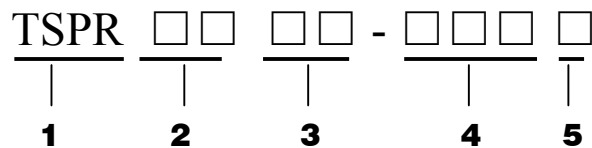


APPLICATION

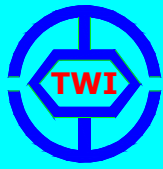
- Laptop & notebook computer
- Battery powered equipment
- DC/DC converter
- Digital camera & scanner
- CD-ROM & DVD

Part No.	A	B	C	H	I	J	K
TSPR 0603	6.20±0.30	5.60±0.30	3.20±0.30	5.0	1.5	1.5	4.5
TSPR 0704	8.00±0.35	7.40±0.35	4.50±0.40	6.0	1.7	2.15	5.5
TSPR 1005	10.00±0.40	9.60±0.40	5.00±0.50	8.0	2.0	3.0	7.5
TSPR 1205	12.60±0.50	11.6±0.50	5.40±0.50	10.0	2.5	3.75	9.5

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%

**TSPR TYPE****SMD POWER INDUCTOR****STANDARD SPECIFICATION**

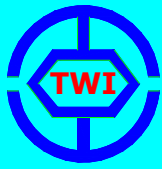
Part Inductance		DCR(Ω)Max.				Rated D.C. Current(A)Max.			
No.	L(μ H)	TSPR 0603	TSPR 0704	TSPR 1005	TSPR 1205	TSPR 0603	TSPR 0704	TSPR 1005	TSPR 1205
100	10	0.14	0.07	0.06	0.05	1.00	1.65	2.06	2.65
120	12	0.16	0.07	0.07	0.05	0.94	1.57	1.94	2.50
150	15	0.18	0.08	0.07	0.06	0.86	1.39	1.72	2.45
180	18	0.25	0.10	0.08	0.06	0.78	1.29	1.58	2.40
220	22	0.32	0.13	0.08	0.07	0.76	1.12	1.42	2.20
270	27	0.36	0.16	0.10	0.08	0.64	1.06	1.32	2.00
330	33	0.41	0.18	0.11	0.10	0.61	0.97	1.16	1.80
390	39	0.47	0.18	0.12	0.11	0.53	0.91	1.10	1.65
470	47	0.51	0.27	0.14	0.12	0.50	0.80	1.00	1.50
560	56	0.72	0.29	0.19	0.15	0.46	0.76	0.93	1.38
680	68	0.82	0.33	0.21	0.17	0.42	0.68	0.85	1.26
820	82		0.43	0.28	0.20		0.62	0.79	1.14
101	100		0.49	0.34	0.25		0.55	0.72	1.05
121	120		0.68	0.37	0.28		0.49	0.63	0.95
151	150		0.94	0.51	0.40		0.44	0.55	0.85
181	180		1.00	0.57	0.48		0.40	0.50	0.77
221	220		1.18	0.78	0.52		0.36	0.47	0.70
271	270		1.30	0.87	0.70		0.33	0.41	0.63
331	330			1.20	0.80			0.37	0.57
391	390			1.34	1.08			0.35	0.52
471	470			1.50	1.20			0.33	0.48
561	560				1.34				0.44
681	680				1.78				0.40
821	820				2.00				0.36

1. Test Freq.(L)

1.0~8.2 μ H(7.96MHz/0.25V);10~82 μ H(2.52MHz/0.25V);100~1000 μ H(1KHz/0.25V);

2. Tolerance of Inductance

TSPR 0603 10~27 μ H \pm 20%(M);33~68 μ H \pm 15%(L)TSPR 0704 10~27 μ H \pm 20%(M);33~82 μ H \pm 15%(L);100~270 μ H \pm 10%(K)TSPR 1005 10~27 μ H \pm 20%(M);33~82 μ H \pm 15%(L);100~470 μ H \pm 10%(K)TSPR 1205 10.0~27 μ H \pm 20%(M);33~82 μ H \pm 15%(L);100~820 μ H \pm 10%(K)3. Operating temperature-30 $^{\circ}$ C to +100 $^{\circ}$ C.4. Current to cause maximum 20% of inductance drop, or 40 $^{\circ}$ C temperature rise.



TSPD TYPE

SMD POWER INDUCTOR

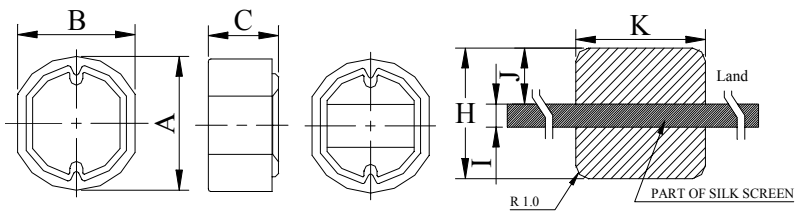


FEATURE:

- Magnetic shielded for low radiation.
- Ferrite bobbin core and compact size.
- Low core loss for high frequency power application.
- Large terminal surface for good PCB bonding.

SHAPES&DIMENSION:

Unit:mm

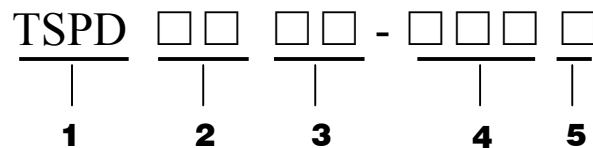


APPLICATION

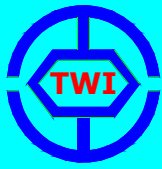
- Laptop & notebook computer
- Battery powered equipment
- DC/DC converter
- Digital camera & scanner
- CD-ROM & DVD

Part No.	A	B	C	H	I	J	K
TSPD 0603	6.20±0.30	5.60±0.30	3.20±0.30	6.2	1.7	2.25	5.5
TSPD 0704	7.80±0.35	7.00±0.35	4.50±0.40	10.0	2.0	4.00	7.5
TSPD 1005	10.00±0.40	9.00±0.40	5.00±0.50	12.5	2.5	5.0	9.5

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%



TSPD TYPE

SMD POWER INDUCTOR

STANDARD SPECIFICATION

Part Inductance		DCR(Ω)Max.			Rated D.C. Current(A)Max.		
No.	L(μH)	TSPD 0603	TSPD 0704	TSPD 1005	TSPD 0603	TSPD 0704	TSPD 1005
100	10	0.14	0.07	0.06	1.00	1.65	2.06
120	12	0.16	0.07	0.07	0.94	1.57	1.94
150	15	0.18	0.08	0.07	0.86	1.39	1.72
180	18	0.25	0.10	0.08	0.78	1.29	1.58
220	22	0.32	0.13	0.08	0.76	1.12	1.42
270	27	0.36	0.16	0.10	0.64	1.06	1.32
330	33	0.41	0.18	0.11	0.61	0.97	1.16
390	39	0.47	0.18	0.12	0.53	0.91	1.10
470	47	0.51	0.27	0.14	0.50	0.80	1.00
560	56	0.72	0.29	0.19	0.46	0.76	0.93
680	68	0.82	0.33	0.21	0.42	0.68	0.85
820	82		0.43	0.28		0.62	0.79
101	100		0.49	0.34		0.55	0.72
121	120		0.68	0.37		0.49	0.63
151	150		0.94	0.51		0.44	0.55
181	180		1.00	0.57		0.40	0.50
221	220		1.18	0.78		0.36	0.47
271	270		1.30	0.87		0.33	0.41
331	330			1.20			0.37
391	390			1.34			0.35
471	470			1.50			0.33

1. Test Freq.(L)

1.0~8.2μH(7.96MHz/0.25V);10~82μH(2.52MHz/0.25V);100~1000μH(1KHz/0.25V);

2. Tolerance of Inductance

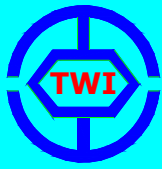
TSPD 0603 10~27μH±20%(M);33~68μH±15%(L)

TSPD 0704 10~27μH±20%(M);33~82μH±15%(L);100~270μH±10%(K)

TSPD 1005 10~27μH±20%(M);33~82μH±15%(L);100~470μH±10%(K)

3. Operating temperature-30°C to +100°C.

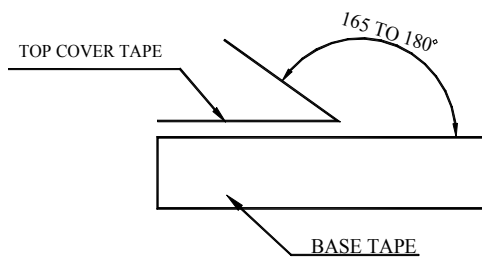
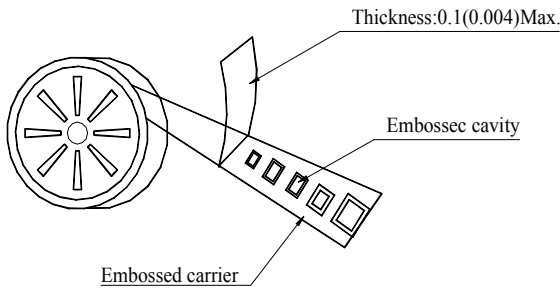
4. Current to cause maximum 10% of inductance drop, or 40°C temperature rise.



TSPR/D TYPE

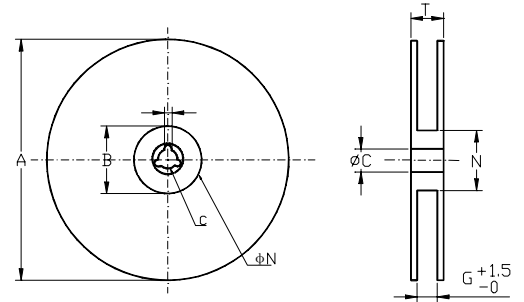
SMD POWER INDUCTOR

PACKAGING FOR SMC



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

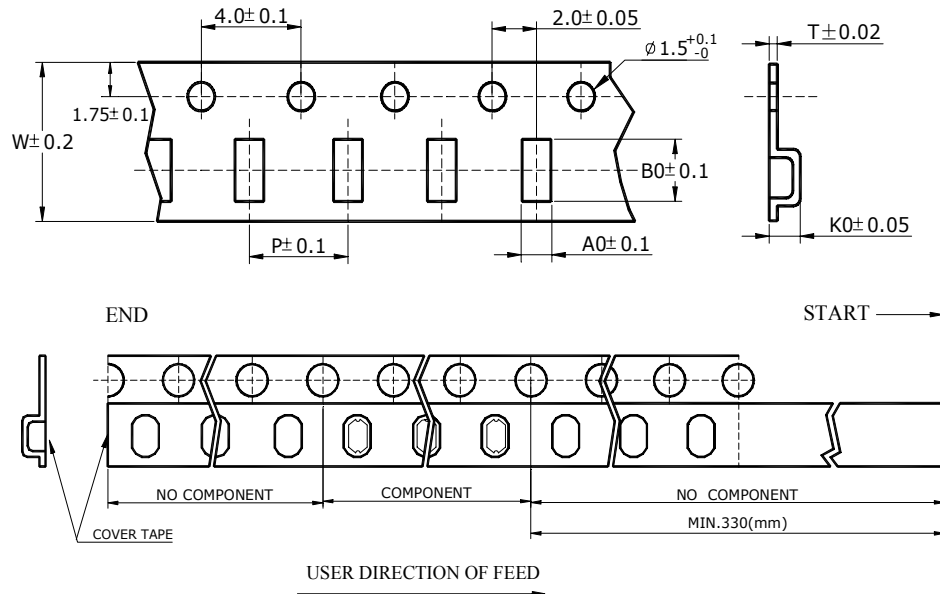
CARRIER TAPE REELS



MATERIAL: PAPER/PLASTIC Dimension in mm

TYPE	A	B	C	G	N	T
8mm	178	21.0±0.8	13.0±0.2	8.4	55	12.4
12mm	178	21.0±0.8	13.0±0.2	12.4	55	16.4
16mm	178	21.0±0.8	13.0±0.2	16.4	55	20.4
24mm	178	21.0±0.8	13.0±0.2	24.4	100	28.4
12mm	330	21.0±0.8	13.0±0.2	12.4	100	16.4
16mm	330	21.0±0.8	13.0±0.2	16.4	100	20.4
24mm	330	21.0±0.8	13.0±0.2	24.4	100	28.4
24mm	330	21.0±0.8	13.0±0.2	24.4	75	28.4
32mm	330	21.0±0.8	13.0±0.2	32.4	75	36.4

TAPE DIMENSION/PACKAGING



TYPE	A0	B0	K0	W	P	T	CHIPS/REEL
TSPR0603	6.20	6.80	3.80	16.00	12.00	0.40	1000
TSPD0603	6.20	6.80	3.80	16.00	12.00	0.40	1000
TSPR0704	7.60	8.30	5.50	16.00	12.00	0.40	1000
TSPD0704	7.2	8.10	5.50	16.00	12.00	0.40	1000
TSPR1005	10.10	10.40	5.80	24.00	16.00	0.10	500
TSPD1005	9.50	10.40	5.80	24.00	16.00	0.10	500
TSPR1205	12.00	13.00	6.20	24.00	16.00	0.10	300

Dimension in mm