



Semi-Shielded SMD Power Inductor

TPI25xx Series



千如電子集團
ABC ELECTRONICS GROUP.

AOBA Technology (M) Sdn. Bhd.

INTRODUCTION

The TPI series are characterized by low profile, and high current power inductor used in cellular phone, HDD, DVC, DSC, PDA, LCD display, and other electronic equipment. Several dimensions are available.

FEATURES

- Small and low profile inductor.
- High current performance.
- High magnetic shield construction should actualize high resolution.
- Available for automatic mounting in tape and reel package.

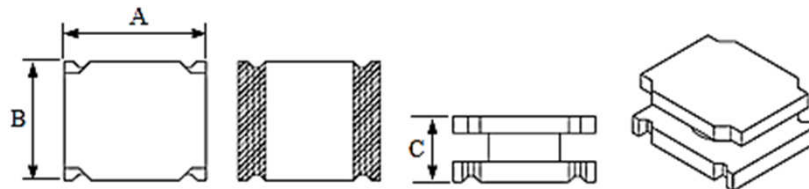
PART NUMBER

TPI 2510 C T 1R0 N - □□

1 2 3 taping 4 5 6

1 Product Type

2 Shape & Dimension



Size	A	B	C
TPI2510	(0.099 ± 0.004) 2.50 ± 0.10	(0.079 ± 0.004) 2.00 ± 0.10	(0.039 max.) 1.00 max.
TPI2512	(0.099 ± 0.004) 2.50 ± 0.10	(0.079 ± 0.004) 2.00 ± 0.10	(0.047 max.) 1.20 max.
TPI2515	(0.099 ± 0.004) 2.50 ± 0.10	(0.079 ± 0.004) 2.00 ± 0.10	(0.059 max.) 1.50 max.

(inch)
mm

3 Coating Type

C : Coating

4 Inductance

R47 = 0.47uH 1R0 = 1.0uH 100 = 10uH

5 Tolerance

M = ±20% N = ±30%

6 Internal Code

TPI25xx Series

TPI2510 Series

Part No.	Inductance (uH)	Test Freq.	Tolerance	DC Resistance (mΩ)		Rated DC Current (A)	
				Max.	Typ.	Idc1	Idc2
TPI2510CT R47 □-□□	0.47	100KHz, 1V	N	46	38	2.50	2.65
TPI2510CT R68 □-□□	0.68	100KHz, 1V	N	62	52	2.05	2.20
TPI2510CT 1R0 □-□□	1.0	100KHz, 1V	N	84	70	1.75	1.90
TPI2510CT 1R5 □-□□	1.5	100KHz, 1V	N	128	107	1.45	1.50
TPI2510CT 2R2 □-□□	2.2	100KHz, 1V	M	190	158	1.20	1.20
TPI2510CT 3R3 □-□□	3.3	100KHz, 1V	M	275	229	0.94	1.00
TPI2510CT 4R7 □-□□	4.7	100KHz, 1V	M	398	332	0.80	0.82
TPI2510CT 6R8 □-□□	6.8	100KHz, 1V	M	532	443	0.68	0.71
TPI2510CT 100 □-□□	10	100KHz, 1V	M	854	712	0.56	0.55

1. Inductance is measured in HP-4285A Precision LCR Meter.
2. RDC is measured in HP 4338B milliohm meter or equivalent.
3. Tolerance : M = ±20%, N = ±30% (Table shows stock tolerance in □).
4. Idc1 : Based on inductance change ($\Delta L/L_0$: ≤-30%).
5. Idc2 : Based on temperature rise (ΔT : 40°C typ.).

TPI25xx Series

TPI2512 Series

Part No.	Inductance (uH)	Test Freq.	Tolerance	DC Resistance (mΩ)		Rated DC Current (A)	
				Max.	Typ.	Idc1	Idc2
TPI2512CT R47 □-□□	0.47	100KHz, 1V	N	56	47	2.75	2.15
TPI2512CT 1R0 □-□□	1.0	100KHz, 1V	N	87	73	2.20	1.70
TPI2512CT 1R5 □-□□	1.5	100KHz, 1V	N	126	105	1.80	1.45
TPI2512CT 2R2 □-□□	2.2	100KHz, 1V	M	154	129	1.55	1.30
TPI2512CT 3R3 □-□□	3.3	100KHz, 1V	M	272	227	1.25	0.98
TPI2512CT 4R7 □-□□	4.7	100KHz, 1V	M	405	338	1.05	0.81
TPI2512CT 6R8 □-□□	6.8	100KHz, 1V	M	612	510	0.85	0.65
TPI2512CT 100 □-□□	10	100KHz, 1V	M	756	630	0.73	0.59

1. Inductance is measured in HP-4285A Precision LCR Meter.
2. RDC is measured in HP 4338B milliohm meter or equivalent.
3. Tolerance : M = ±20%, N = ±30% (Table shows stock tolerance in □).
4. Idc1 : Based on inductance change ($\Delta L/L_0$: ≤-30%).
5. Idc2 : Based on temperature rise (ΔT : 40°C typ.).

TPI25xx Series

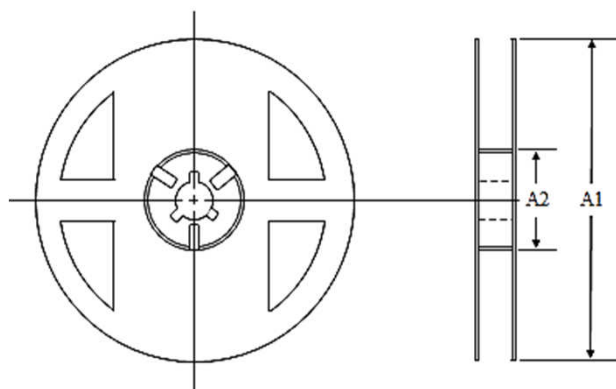
TPI2515 Series

Part No.	Inductance (uH)	Test Freq.	Tolerance	DC Resistance (mΩ)		Rated DC Current (A)	
				Max.	Typ.	Idc1	Idc2
TPI2515CT R47 □-□□	0.47	100KHz, 1V	N	46	35	3.30	2.80
TPI2515CT 1R0 □-□□	1.0	100KHz, 1V	N	64	49	2.30	2.20
TPI2515CT 1R5 □-□□	1.5	100KHz, 1V	N	87	67	2.00	1.80
TPI2515CT 2R2 □-□□	2.2	100KHz, 1V	M	120	100	1.70	1.50
TPI2515CT 3R3 □-□□	3.3	100KHz, 1V	M	166	138	1.35	1.30
TPI2515CT 4R7 □-□□	4.7	100KHz, 1V	M	247	206	1.15	1.10
TPI2515CT 6R8 □-□□	6.8	100KHz, 1V	M	354	295	0.95	0.90
TPI2515CT 100 □-□□	10	100KHz, 1V	M	534	445	0.80	0.75

1. Inductance is measured in HP-4285A Precision LCR Meter.
2. RDC is measured in HP 4338B milliohm meter or equivalent.
3. Tolerance : M = ±20%, N = ±30% (Table shows stock tolerance in □).
4. Idc1 : Based on inductance change ($\Delta L/L_o$: ≤-30%).
5. Idc2 : Based on temperature rise (ΔT : 40°C typ.).

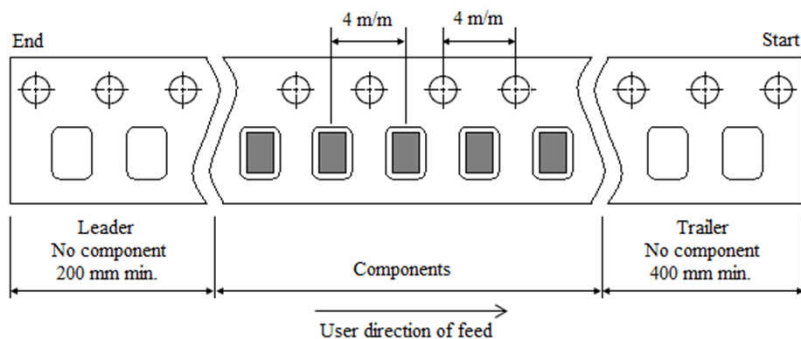
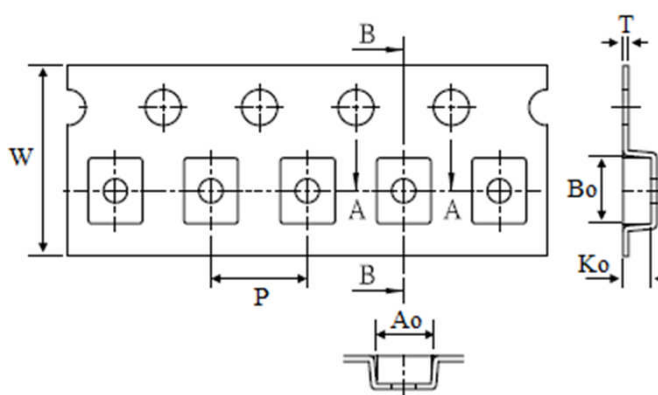
(unit : m/m)

Type	Pcs/Reel	Reel"	A1	A2
2510	2,000	7"	178	60
2512	2,000	7"	178	60
2515	2,000	7"	178	60



(unit : m/m)

Type		2510	2512	2515
Chip Cavity	Ao	2.27	2.27	2.20
	Bo	2.74	2.74	2.83
Insert Pitch	P	4.00	4.00	4.00
Tape Thickness	Ko	1.18	1.40	1.75
	T	0.23	0.23	0.22
Tape Width	W	8.00	8.00	8.00



Recommended Footprint (unit : m/m)

Type	A	B	C
2510	2.50	2.00	0.80
2512	2.50	2.00	0.80
2515	2.50	2.00	0.80

Recommended Pattern

