

# LOW PROFILE POWER INDUCTOR TPI SERIES

## 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 real package.

## PART NUMBER

**TPI 3015 C T 1R0 N -□□**

**1** Product Name      **1**    **2**    **3**    **4**    **5**    **6**    Internal Code

**2** Shape and Dimension

Size	A (inch) mm	B (inch) mm	C (inch) mm
TPI2410	(0.095 ± 0.004) 2.40 ± 0.10	(0.095 ± 0.004) 2.40 ± 0.10	(0.039) 1.00
TPI2510	(0.099 ± 0.004) 2.50 ± 0.10	(0.079 ± 0.004) 2.00 ± 0.10	(0.039) 1.00
TPI2512	(0.099 ± 0.004) 2.50 ± 0.10	(0.079 ± 0.004) 2.00 ± 0.10	(0.047) 1.20
TPI2515	(0.099 ± 0.004) 2.50 ± 0.10	(0.079 ± 0.004) 2.00 ± 0.10	(0.059) 1.50
TPI3010	(0.118 ± 0.004) 3.00 ± 0.10	(0.118 ± 0.004) 3.00 ± 0.10	(0.039) 1.00
TPI3012	(0.118 ± 0.004) 3.00 ± 0.10	(0.118 ± 0.004) 3.00 ± 0.10	(0.047) 1.20
TPI3015	(0.118 ± 0.004) 3.00 ± 0.10	(0.118 ± 0.004) 3.00 ± 0.10	(0.059) 1.50
TPI4018	(0.157 ± 0.008) 4.00 ± 0.20	(0.157 ± 0.008) 4.00 ± 0.20	(0.071) 1.80
TPI4025	(0.157 ± 0.008) 4.00 ± 0.20	(0.157 ± 0.008) 4.00 ± 0.20	(0.098) 2.50
TPI5020	(0.197 ± 0.008) 5.00 ± 0.20	(0.197 ± 0.008) 5.00 ± 0.20	(0.079) 2.00
TPI5040	(0.197 ± 0.008) 5.00 ± 0.20	(0.197 ± 0.008) 5.00 ± 0.20	(0.157) 4.00
TPI6020	(0.236 ± 0.008) 6.00 ± 0.20	(0.236 ± 0.008) 6.00 ± 0.20	(0.079) 2.00
TPI6028	(0.236 ± 0.008) 6.00 ± 0.20	(0.236 ± 0.008) 6.00 ± 0.20	(0.110) 2.80
TPI6045	(0.236 ± 0.008) 6.00 ± 0.20	(0.236 ± 0.008) 6.00 ± 0.20	(0.177) 4.50

**3** Coating Type

**4** Taping

**5** Inductance

1R0 = 1.0uH

100 = 10uH

**6** Tolerance

M = ± 20%

N = ± 30%

## TPI 2410 SERIES

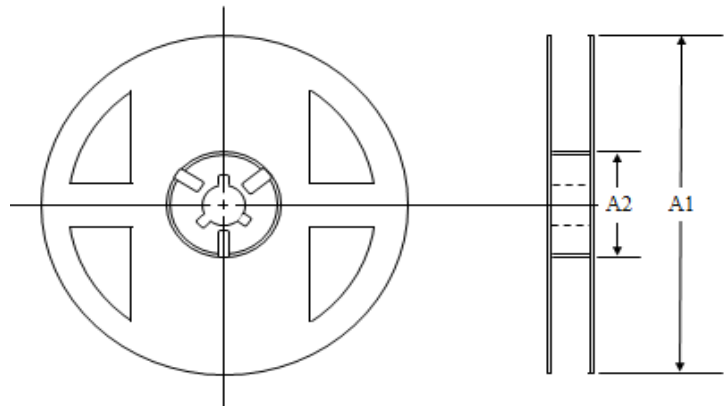
Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (mΩ)		Rated DC current (A)	
				Max.	Typ.	Idc1	Idc2
TPI2410CT R68 □-□□	0.68	100 KHz, 1V	N	72	60	2.60	2.50
TPI2410CT 1R0 □-□□	1.0	100 KHz, 1V	N	84	70	2.00	1.90
TPI2410CT 1R5 □-□□	1.5	100 KHz, 1V	M	132	110	1.50	1.50
TPI2410CT 2R2 □-□□	2.2	100 KHz, 1V	M	180	140	1.30	1.20
TPI2410CT 3R3 □-□□	3.3	100 KHz, 1V	M	264	220	1.05	1.00
TPI2410CT 4R7 □-□□	4.7	100 KHz, 1V	M	348	290	0.92	0.90
TPI2410CT 6R8 □-□□	6.8	100 KHz, 1V	M	492	410	0.75	0.65
TPI2410CT 100 □-□□	10	100 KHz, 1V	M	828	690	0.60	0.55
TPI2410CT 150 □-□□	15	100 KHz, 1V	M	1224	1020	0.50	0.45
TPI2410CT 220 □-□□	22	100 KHz, 1V	M	1764	1470	0.40	0.40

1. Inductance is measured in HP-4285A Precision LCR Meter.
2. RDC is measured in HP 4338B mill ohm meter.(or equivalent).
3. Tolerance : M =20% , N=30% (Table shows stock tolerances in □).
4. Idc1 : Based on inductance change ( $\Delta L/L_o : \leq -30\%$ )
5. Idc2 : Based on temperature rise ( $\Delta T : 40^\circ\text{C TYP.}$  )

# PACKAGING INFORMATION

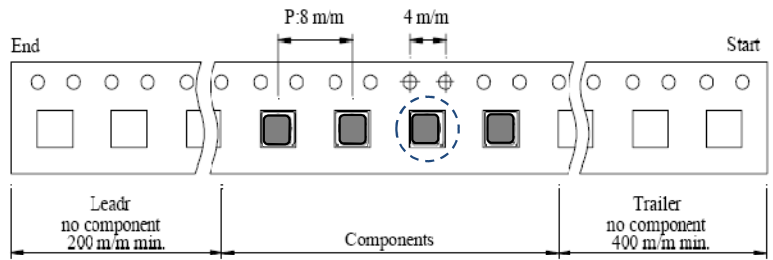
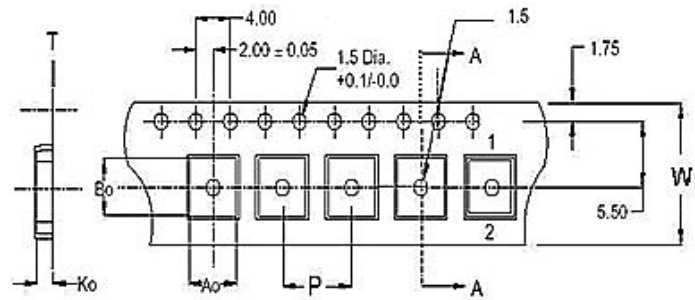
## Packing Quantity

TYPE	PCS / REEL	REEL"	A1	A2
TPI2410	2000	7"	178	60
TPI2510	2000	7"	178	60
TPI2512	2000	7"	178	60
TPI2515	2000	7"	178	60
TPI3010	2000	7"	178	60
TPI3012	2000	7"	178	60
TPI3015	2000	7"	178	60
TPI4018	3000	13"	330	99
TPI4025	3000	13"	330	99
TPI5020	2000	13"	330	99
TPI5040	1000	13"	330	99
TPI6020	2000	13"	330	99
TPI6028	1000	13"	330	99
TPI6045	1000	13"	330	99



## Dimension (unit:m/m)

TYPE	Chip Cavity		Insert Pitch	Tape Thickness		Tape Width
	Ao	Bo		Ko	T	
TPI2410	2.65	2.65	4	1.25	0.25	8
TPI2510	2.23	2.73	4	1.30	0.25	8
TPI2512	2.23	2.73	4	1.50	0.25	8
TPI2515	2.23	2.73	4	1.80	0.25	8
TPI3010	3.25	3.25	4	1.25	0.25	8
TPI3012	3.25	3.25	4	1.45	0.25	8
TPI3015	3.25	3.25	4	1.75	0.25	8
TPI4018	4.30	4.30	8	2.05	0.30	12
TPI4025	4.30	4.30	8	2.75	0.30	12
TPI5020	5.40	5.40	8	2.25	0.35	12
TPI5040	5.40	5.40	8	4.25	0.35	12
TPI6020	6.40	6.40	8	2.25	0.35	12
TPI6028	6.40	6.40	8	3.05	0.35	12
TPI6045	6.40	6.40	12	4.75	0.35	16



## Recommended Footprint (unit:m/m)

TYPE	A	B	C
TPI2410	2.15	2.00	0.70
TPI2510	2.50	2.00	0.80
TPI2512	2.50	2.00	0.80
TPI2515	2.50	2.00	0.80
TPI3010	3.00	2.70	0.80
TPI3012	3.00	2.70	0.80
TPI3015	3.00	2.70	0.80
TPI4018	4.55	3.60	1.50
TPI4025	4.55	3.60	1.50
TPI5020	5.10	4.00	1.50
TPI5040	5.10	4.00	1.50
TPI6020	6.30	5.70	1.60
TPI6028	6.30	5.70	1.60
TPI6045	6.30	5.70	1.60

