

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 4018 SERIES

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (mΩ)		Rated DC current (A)	
				Max.	Typ.	Idc1	Idc2
TPI4018CT R82 □-□□	0.82	100 KHz, 1V	N	21	16	4.20	4.00
TPI4018CT 1R0 □-□□	1.0	100 KHz, 1V	N	25	19	4.70	3.70
TPI4018CT 1R2 □-□□	1.2	100 KHz, 1V	N	27	21	4.00	3.50
TPI4018CT 1R5 □-□□	1.5	100 KHz, 1V	N	35	27	3.50	3.10
TPI4018CT 2R2 □-□□	2.2	100 KHz, 1V	M	44	37	3.00	2.90
TPI4018CT 2R7 □-□□	2.7	100 KHz, 1V	M	52	43	2.40	2.30
TPI4018CT 3R3 □-□□	3.3	100 KHz, 1V	M	66	55	2.30	2.20
TPI4018CT 4R7 □-□□	4.7	100 KHz, 1V	M	84	70	2.00	1.90
TPI4018CT 6R8 □-□□	6.8	100 KHz, 1V	M	118	98	1.60	1.50
TPI4018CT 100 □-□□	10	100 KHz, 1V	M	180	150	1.40	1.30
TPI4018CT 150 □-□□	15	100 KHz, 1V	M	264	220	1.10	1.00
TPI4018CT 220 □-□□	22	100 KHz, 1V	M	348	290	0.95	0.90
TPI4018CT 330 □-□□	33	100 KHz, 1V	M	552	460	0.75	0.70
TPI4018CT 470 □-□□	47	100 KHz, 1V	M	780	650	0.62	0.60
TPI4018CT 680 □-□□	68	100 KHz, 1V	M	1128	940	0.50	0.50
TPI4018CT 101 □-□□	100	100 KHz, 1V	M	1596	1330	0.45	0.42
TPI4018CT 151 □-□□	150	100 KHz, 1V	M	2400	2000	0.35	0.32
TPI4018CT 221 □-□□	220	100 KHz, 1V	M	3552	2960	0.30	0.28

TPI 4025 SERIES

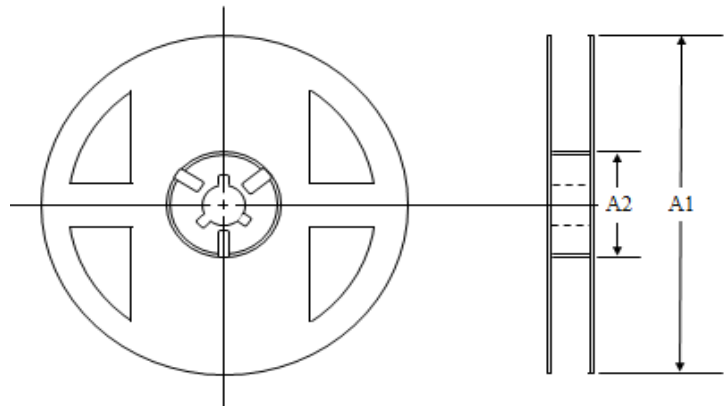
Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (mΩ)		Rated DC current (A)	
				Max.	Typ.	Idc1	Idc2
TPI4025CT 1R0 □-□□	1.0	100 KHz, 1V	N	16	12	3.00	3.00
TPI4025CT 1R2 □-□□	1.2	100 KHz, 1V	N	23	18	2.75	2.75
TPI4025CT 2R2 □-□□	2.2	100 KHz, 1V	N	29	22	2.10	2.10
TPI4025CT 3R3 □-□□	3.3	100 KHz, 1V	M	36	30	1.60	1.60
TPI4025CT 4R7 □-□□	4.7	100 KHz, 1V	M	48	40	1.40	1.40
TPI4025CT 6R8 □-□□	6.8	100 KHz, 1V	M	84	70	1.20	1.20
TPI4025CT 100 □-□□	10	100 KHz, 1V	M	102	85	0.97	0.97
TPI4025CT 150 □-□□	15	100 KHz, 1V	M	144	120	0.77	0.77
TPI4025CT 220 □-□□	22	100 KHz, 1V	M	234	195	0.67	0.67
TPI4025CT 330 □-□□	33	100 KHz, 1V	M	366	305	0.50	0.50
TPI4025CT 470 □-□□	47	100 KHz, 1V	M	594	495	0.40	0.40
TPI4025CT 680 □-□□	68	100 KHz, 1V	M	852	710	0.35	0.35
TPI4025CT 101 □-□□	100	100 KHz, 1V	M	1200	1000	0.30	0.30
TPI4025CT 151 □-□□	150	100 KHz, 1V	M	1920	1600	0.22	0.22
TPI4025CT 221 □-□□	220	100 KHz, 1V	M	2760	2300	0.20	0.20

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 ($\Delta L/L_0 : \leq -30\%$)
5. Idc2 : Based on temperature rise ($\Delta T : 40^\circ\text{C TYP.}$)

PACKAGING INFORMATION

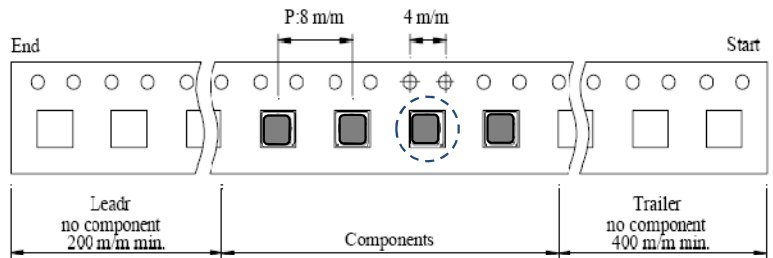
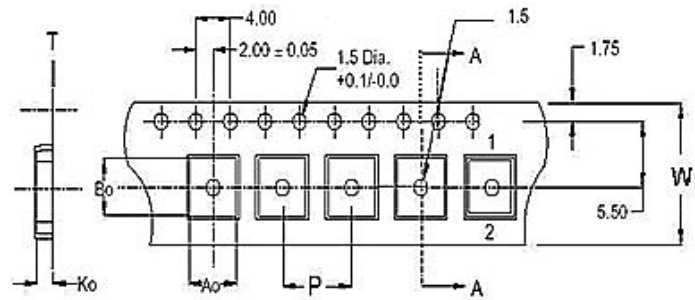
Packing Quantity

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

