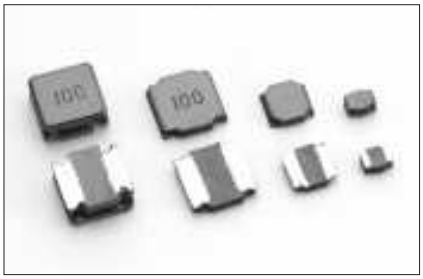


LOW PROFILE POWER INDUCTOR
TPI SERIES

Introductions

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

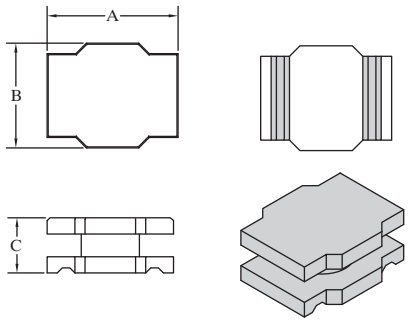
TPI	3015	C	T	1R0	N
1	2	3	4	5	6

1 **Product name**

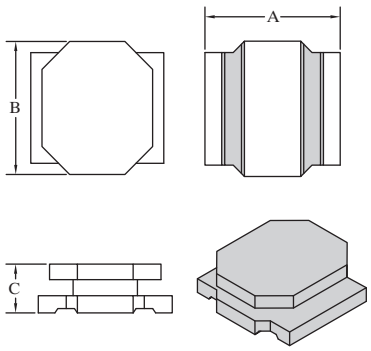
2 **Shapes and dimensions**

Size	A (inch) mm	B (inch) mm	C (inch) mm(max)
TPI2410	(0.095±0.004) 2.4 ± 0.1	(0.095±0.004) 2.4 ± 0.1	(0.039) 1.0
TPI252010	(0.099±0.004) 2.5 ± 0.1	(0.079±0.004) 2.0 ± 0.1	(0.039) 1.0
TPI252012	(0.099±0.004) 2.5 ± 0.1	(0.079±0.004) 2.0 ± 0.1	(0.047) 1.2
TPI252015	(0.099±0.004) 2.5 ± 0.1	(0.079±0.004) 2.0 ± 0.1	(0.059) 1.5
TPI3010	(0.118±0.004) 3.0 ± 0.1	(0.118±0.004) 3.0 ± 0.1	(0.039) 1.0
TPI3012	(0.118±0.004) 3.0 ± 0.1	(0.118±0.004) 3.0 ± 0.1	(0.047) 1.2
TPI3015	(0.118±0.004) 3.0 ± 0.1	(0.118±0.004) 3.0 ± 0.1	(0.059) 1.5
TPI4010	(0.157±0.008) 4.0 ± 0.2	(0.157±0.008) 4.0 ± 0.2	(0.039) 1.0
TPI4012	(0.157±0.008) 4.0 ± 0.2	(0.157±0.008) 4.0 ± 0.2	(0.047) 1.2
TPI4018	(0.157±0.008) 4.0 ± 0.2	(0.157±0.008) 4.0 ± 0.2	(0.071) 1.8
TPI4025	(0.157±0.008) 4.0 ± 0.2	(0.157±0.008) 4.0 ± 0.2	(0.098) 2.5
TPI5012	(0.197±0.008) 5.0 ± 0.2	(0.197±0.008) 5.0 ± 0.2	(0.047) 1.2
TPI5014	(0.197±0.008) 5.0 ± 0.2	(0.197±0.008) 5.0 ± 0.2	(0.055) 1.4
TPI5020	(0.197±0.008) 5.0 ± 0.2	(0.197±0.008) 5.0 ± 0.2	(0.079) 2.0
TPI5040	(0.197±0.008) 5.0 ± 0.2	(0.197±0.008) 5.0 ± 0.2	(0.157) 4.0
TPI6010	(0.236±0.008) 6.0 ± 0.2	(0.236±0.008) 6.0 ± 0.2	(0.039) 1.0
TPI6012	(0.236±0.008) 6.0 ± 0.2	(0.236±0.008) 6.0 ± 0.2	(0.047) 1.2
TPI6020	(0.236±0.008) 6.0 ± 0.2	(0.236±0.008) 6.0 ± 0.2	(0.079) 2.0
TPI6028	(0.236±0.008) 6.0 ± 0.2	(0.236±0.008) 6.0 ± 0.2	(0.110) 2.8
TPI6045	(0.236±0.008) 6.0 ± 0.2	(0.236±0.008) 6.0 ± 0.2	(0.177) 4.5
TPI8040	(0.307±0.008) 7.8 ± 0.2	(0.315±0.008) 8.0 ± 0.2	(0.157) 4.0

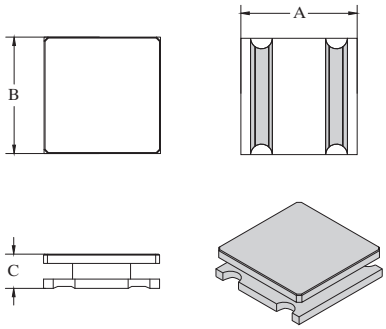
252010/252012/252015



2410/3010/4010/4012/5012/5014/5020/6010/6012



3012/3015/4018/4025/5040/6020/6028/6045/8040



3 **Coating Type**

4 **Taping**

5 **Inductance**

1R0 : 1.0 uH

100 : 10 uH

6 **Tolerance**

M:±20%

N:±30%

TPI2410 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI2410CT R68 □	0.68	100 KHz,1V	N	72m	60m	2.20	1.57
TPI2410CT 1R0 □	1.0	100 KHz,1V	N	84m	70m	1.80	1.41
TPI2410CT 1R5 □	1.5	100 KHz,1V	M	132m	110m	1.55	1.16
TPI2410CT 2R2 □	2.2	100 KHz,1V	M	180m	150m	1.29	0.97
TPI2410CT 3R3 □	3.3	100 KHz,1V	M	264m	220m	1.00	0.77
TPI2410CT 4R7 □	4.7	100 KHz,1V	M	348m	290m	0.88	0.67
TPI2410CT 6R8 □	6.8	100 KHz,1V	M	492m	410m	0.75	0.57
TPI2410CT 100 □	10.0	100 KHz,1V	M	828m	690m	0.55	0.45
TPI2410CT 150 □	15.0	100 KHz,1V	M	1224m	1020m	0.47	0.37
TPI2410CT 220 □	22.0	100 KHz,1V	M	1764m	1470m	0.39	0.30

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

TPI252010 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI252010CT R47 □	0.47	100KHz,1V	N	46m	38m	2.50	2.65
TPI252010CT R68 □	0.68	100KHz,1V	N	62m	52m	2.05	2.20
TPI252010CT 1R0 □	1.0	100KHz,1V	N	84m	70m	1.75	1.90
TPI252010CT 1R5 □	1.5	100KHz,1V	N	128m	107m	1.45	1.50
TPI252010CT 2R2 □	2.2	100KHz,1V	M	190m	158m	1.20	1.20
TPI252010CT 3R3 □	3.3	100KHz,1V	M	275m	229m	0.94	1.00
TPI252010CT 4R7 □	4.7	100KHz,1V	M	398m	332m	0.80	0.82
TPI252010CT 6R8 □	6.8	100KHz,1V	M	532m	443m	0.68	0.71
TPI252010CT 100 □	10.0	100KHz,1V	M	854m	712m	0.56	0.55

TPI252012 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI252012CT R47 □	0.47	100KHz,1V	N	56m	47m	2.75	2.15
TPI252012CT 1R0 □	1.0	100KHz,1V	N	87m	73m	2.20	1.70
TPI252012CT 1R5 □	1.5	100KHz,1V	N	126m	105m	1.80	1.45
TPI252012CT 2R2 □	2.2	100KHz,1V	M	154m	129m	1.55	1.30
TPI252012CT 3R3 □	3.3	100KHz,1V	M	272m	227m	1.25	0.98
TPI252012CT 4R7 □	4.7	100KHz,1V	M	405m	338m	1.05	0.81
TPI252012CT 6R8 □	6.8	100KHz,1V	M	612m	510m	0.85	0.65
TPI252012CT 100 □	10.0	100KHz,1V	M	756m	630m	0.73	0.59

TPI252015 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI252015CT 1R0 □	1.0	100KHz,1V	N	82m	68m	1.95	1.75
TPI252015CT 1R5 □	1.5	100KHz,1V	N	120m	100m	1.75	1.45
TPI252015CT 2R2 □	2.2	100KHz,1V	M	160m	133m	1.50	1.25
TPI252015CT 3R3 □	3.3	100KHz,1V	M	219m	182m	1.20	1.05
TPI252015CT 4R7 □	4.7	100KHz,1V	M	318m	265m	1.00	0.89
TPI252015CT 6R8 □	6.8	100KHz,1V	M	480m	400m	0.85	0.73
TPI252015CT 100 □	10.0	100KHz,1V	M	588m	490m	0.72	0.66

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

SMD Power Inductors
Magnetic Shielded Type

TPI3010 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI3010CT 1R0 □	1.0	100KHz,1V	N	78m	65m	1.30	1.40
TPI3010CT 1R5 □	1.5	100KHz,1V	N	96m	80m	1.20	1.30
TPI3010CT 2R2 □	2.2	100KHz,1V	M	114m	95m	1.10	1.10
TPI3010CT 3R3 □	3.3	100KHz,1V	M	168m	140m	0.87	0.94
TPI3010CT 4R7 □	4.7	100KHz,1V	M	228m	190m	0.75	0.78
TPI3010CT 6R8 □	6.8	100KHz,1V	M	360m	300m	0.61	0.63
TPI3010CT 100 □	10	100KHz,1V	M	540m	450m	0.50	0.51
TPI3010CT 150 □	15	100KHz,1V	M	888m	740m	0.40	0.40
TPI3010CT 220 □	22	100KHz,1V	M	1236m	1030m	0.35	0.35
TPI3010CT 330 □	33	100KHz,1V	M	1860m	1550m	0.26	0.28
TPI3010CT 470 □	47	100KHz,1V	M	2460m	2050m	0.22	0.24

TPI3012 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI3012CT 1R0 □	1.0	100KHz,1V	N	60m	45m	1.50	1.49
TPI3012CT 1R5 □	1.5	100KHz,1V	N	70m	59m	1.36	1.40
TPI3012CT 2R2 □	2.2	100KHz,1V	M	90m	75m	1.10	1.20
TPI3012CT 3R3 □	3.3	100KHz,1V	M	115m	97m	0.91	1.05
TPI3012CT 4R7 □	4.7	100KHz,1V	M	150m	125m	0.77	0.98
TPI3012CT 6R8 □	6.8	100KHz,1V	M	216m	180m	0.67	0.74
TPI3012CT 100 □	10	100KHz,1V	M	339m	285m	0.54	0.63
TPI3012CT 150 □	15	100KHz,1V	M	540m	450m	0.44	0.49
TPI3012CT 220 □	22	100KHz,1V	M	756m	630m	0.38	0.42
TPI3012CT 330 □	33	100KHz,1V	M	1236m	1030m	0.31	0.33
TPI3012CT 470 □	47	100KHz,1V	M	1740m	1450m	0.25	0.28

TPI3015 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI3015CT 1R0 □	1.0	100KHz,1V	N	36m	30m	2.10	2.10
TPI3015CT 1R5 □	1.5	100KHz,1V	N	48m	40m	1.80	1.82
TPI3015CT 2R2 □	2.2	100KHz,1V	M	72m	60m	1.48	1.50
TPI3015CT 3R3 □	3.3	100KHz,1V	M	96m	80m	1.21	1.23
TPI3015CT 4R7 □	4.7	100KHz,1V	M	144m	120m	1.02	1.04
TPI3015CT 6R8 □	6.8	100KHz,1V	M	192m	160m	0.87	0.88
TPI3015CT 100 □	10	100KHz,1V	M	276m	230m	0.70	0.71
TPI3015CT 150 □	15	100KHz,1V	M	432m	360m	0.56	0.56
TPI3015CT 220 □	22	100KHz,1V	M	624m	520m	0.47	0.47
TPI3015CT 330 □	33	100KHz,1V	M	1008m	840m	0.39	0.37
TPI3015CT 470 □	47	100KHz,1V	M	1608m	1340m	0.32	0.30

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

TPI4010 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI4010CT 1R0 □	1.0	100KHz,1V	N	120m	100m	1.80	1.05
TPI4010CT 2R2 □	2.2	100KHz,1V	N	180m	150m	1.15	0.89
TPI4010CT 3R3 □	3.3	100KHz,1V	M	216m	180m	1.10	0.82
TPI4010CT 4R7 □	4.7	100KHz,1V	M	252m	210m	0.90	0.75
TPI4010CT 6R8 □	6.8	100KHz,1V	M	360m	300m	0.74	0.62
TPI4010CT 100 □	10	100KHz,1V	M	456m	380m	0.56	0.60
TPI4010CT 150 □	15	100KHz,1V	M	612m	510m	0.47	0.51
TPI4010CT 220 □	22	100KHz,1V	M	1044m	870m	0.36	0.40
TPI4010CT 330 □	33	100KHz,1V	M	1848m	1540m	0.28	0.30
TPI4010CT 470 □	47	100KHz,1V	M	2172m	1810m	0.24	0.28

TPI4012 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI4012CT 1R0 □	1.0	100KHz,1V	N	72m	60m	2.50	1.50
TPI4012CT 2R2 □	2.2	100KHz,1V	M	108m	90m	1.65	1.20
TPI4012CT 3R3 □	3.3	100KHz,1V	M	156m	130m	1.20	0.98
TPI4012CT 4R7 □	4.7	100KHz,1V	M	168m	140m	1.05	0.96
TPI4012CT 6R8 □	6.8	100KHz,1V	M	216m	180m	0.90	0.84
TPI4012CT 100 □	10	100KHz,1V	M	288m	240m	0.74	0.77
TPI4012CT 150 □	15	100KHz,1V	M	480m	400m	0.56	0.60
TPI4012CT 220 □	22	100KHz,1V	M	576m	480m	0.51	0.54
TPI4012CT 330 □	33	100KHz,1V	M	972m	810m	0.40	0.42
TPI4012CT 470 □	47	100KHz,1V	M	1200m	1000m	0.35	0.37

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

TPI4018 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI4018CT 1R0 □	1.0	100KHz,1V	N	36m	30m	4.00	1.83
TPI4018CT 1R5 □	1.5	100KHz,1V	N	51m	42m	2.90	1.70
TPI4018CT 2R2 □	2.2	100KHz,1V	M	72m	60m	2.70	1.44
TPI4018CT 3R3 □	3.3	100KHz,1V	M	84m	70m	2.00	1.23
TPI4018CT 4R7 □	4.7	100KHz,1V	M	108m	90m	1.70	1.20
TPI4018CT 6R8 □	6.8	100KHz,1V	M	132m	110m	1.45	1.06
TPI4018CT 100 □	10	100KHz,1V	M	216m	180m	1.20	0.84
TPI4018CT 150 □	15	100KHz,1V	M	300m	250m	0.94	0.65
TPI4018CT 220 □	22	100KHz,1V	M	432m	360m	0.80	0.59
TPI4018CT 330 □	33	100KHz,1V	M	636m	530m	0.65	0.49
TPI4018CT 470 □	47	100KHz,1V	M	780m	650m	0.57	0.42
TPI4018CT 680 □	68	100KHz,1V	M	1200m	1000m	0.47	0.32
TPI4018CT 101 □	100	100KHz,1V	M	1800m	1500m	0.40	0.27
TPI4018CT 151 □	150	100KHz,1V	M	3000m	2500m	0.31	0.22
TPI4018CT 221 □	220	100KHz,1V	M	4800m	4000m	0.27	0.17

TPI4025 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI4025CT 1R0 □	1.0	100KHz,1V	N	22m	17m	3.10	2.40
TPI4025CT 2R2 □	2.2	100KHz,1V	M	37m	30m	2.10	2.00
TPI4025CT 3R3 □	3.3	100KHz,1V	M	57m	42m	1.80	1.70
TPI4025CT 4R7 □	4.7	100KHz,1V	M	66m	52m	1.40	1.60
TPI4025CT 6R8 □	6.8	100KHz,1V	M	78m	65m	1.10	1.30
TPI4025CT 100 □	10	100KHz,1V	M	115m	90m	1.00	1.20
TPI4025CT 150 □	15	100KHz,1V	M	132m	110m	0.90	1.10
TPI4025CT 220 □	22	100KHz,1V	M	198m	165m	0.61	0.90
TPI4025CT 330 □	33	100KHz,1V	M	240m	200m	0.54	0.80
TPI4025CT 470 □	47	100KHz,1V	M	360m	300m	0.41	0.65

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

TPI5012 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI5012CT 1R0 □	1.0	100KHz,1V	N	64m	53m	4.50	2.30
TPI5012CT 1R5 □	1.5	100KHz,1V	N	84m	70m	3.80	2.20
TPI5012CT 2R2 □	2.2	100KHz,1V	M	102m	85m	3.10	2.00
TPI5012CT 3R3 □	3.3	100KHz,1V	M	192m	160m	2.40	1.45
TPI5012CT 4R7 □	4.7	100KHz,1V	M	216m	180m	2.20	1.40
TPI5012CT 6R8 □	6.8	100KHz,1V	M	312m	260m	1.70	1.10
TPI5012CT 100 □	10	100KHz,1V	M	504m	420m	1.40	0.85

TPI5014 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI5014CT 1R2 □	1.2	100KHz,1V	N	54m	45m	3.80	2.80
TPI5014CT 2R2 □	2.2	100KHz,1V	N	78m	65m	2.80	2.30
TPI5014CT 3R3 □	3.3	100KHz,1V	N	96m	80m	2.35	2.10
TPI5014CT 4R7 □	4.7	100KHz,1V	N	120m	100m	2.05	1.80

TPI5020 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI5020CT 1R0 □	1.0	100KHz,1V	N	25m	21m	4.00	3.60
TPI5020CT 1R5 □	1.5	100KHz,1V	N	31m	26m	3.35	3.20
TPI5020CT 2R2 □	2.2	100KHz,1V	N	42m	35m	2.90	2.90
TPI5020CT 3R3 □	3.3	100KHz,1V	N	58m	48m	2.40	2.40
TPI5020CT 4R7 □	4.7	100KHz,1V	M	72m	60m	2.00	2.00
TPI5020CT 6R8 □	6.8	100KHz,1V	M	108m	90m	1.60	1.65
TPI5020CT 100 □	10	100KHz,1V	M	144m	120m	1.30	1.45
TPI5020CT 150 □	15	100KHz,1V	M	198m	165m	1.10	1.20
TPI5020CT 220 □	22	100KHz,1V	M	312m	260m	0.90	1.00

TPI5040 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI5040CT 1R5 □	1.5	100KHz,1V	N	24m	20m	6.00	3.60
TPI5040CT 2R2 □	2.2	100KHz,1V	N	26m	22m	4.60	3.50
TPI5040CT 3R3 □	3.3	100KHz,1V	M	32m	27m	3.80	3.30
TPI5040CT 4R7 □	4.7	100KHz,1V	M	35m	29m	3.30	3.10
TPI5040CT 6R8 □	6.8	100KHz,1V	M	59m	49m	2.60	2.30
TPI5040CT 100 □	10	100KHz,1V	M	67m	56m	2.30	2.10
TPI5040CT 150 □	15	100KHz,1V	M	96m	80m	2.00	1.80
TPI5040CT 220 □	22	100KHz,1V	M	151m	126m	1.60	1.40
TPI5040CT 330 □	33	100KHz,1V	M	216m	180m	1.30	1.20
TPI5040CT 470 □	47	100KHz,1V	M	372m	310m	1.10	0.90

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

TPI6010 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI6010CT 1R5 □	1.5	100KHz,1V	N	108m	90m	2.40	1.90
TPI6010CT 2R2 □	2.2	100KHz,1V	N	132m	110m	1.90	1.70
TPI6010CT 3R3 □	3.3	100KHz,1V	N	162m	135m	1.60	1.50
TPI6010CT 4R7 □	4.7	100KHz,1V	N	198m	165m	1.30	1.40
TPI6010CT 6R8 □	6.8	100KHz,1V	N	264m	220m	1.20	1.20
TPI6010CT 100 □	10	100KHz,1V	M	324m	270m	1.00	1.10

TPI6012 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI6012CT 2R5 □	2.5	100KHz,1V	N	108m	90m	2.10	1.73
TPI6012CT 4R0 □	4.0	100KHz,1V	N	126m	105m	1.80	1.57
TPI6012CT 5R3 □	5.3	100KHz,1V	M	150m	125m	1.50	1.40
TPI6012CT 6R8 □	6.8	100KHz,1V	M	198m	165m	1.30	1.18
TPI6012CT 100 □	10	100KHz,1V	M	282m	235m	1.00	1.00
TPI6012CT 150 □	15	100KHz,1V	M	396m	330m	0.80	0.79
TPI6012CT 220 □	22	100KHz,1V	M	636m	530m	0.76	0.63
TPI6012CT 330 □	33	100KHz,1V	M	840m	700m	0.59	0.53
TPI6012CT 470 □	47	100KHz,1V	M	1260m	1050m	0.52	0.46
TPI6012CT 680 □	68	100KHz,1V	M	1620m	1350m	0.44	0.41
TPI6012CT 101 □	100	100KHz,1V	M	2616m	2180m	0.35	0.32

TPI6020 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI6020CT 0R8 □	0.8	100KHz,1V	N	24m	20m	5.50	3.80
TPI6020CT 1R5 □	1.5	100KHz,1V	N	31m	26m	4.00	3.20
TPI6020CT 2R2 □	2.2	100KHz,1V	N	41m	34m	3.20	2.70
TPI6020CT 3R3 □	3.3	100KHz,1V	N	48m	40m	2.80	2.60
TPI6020CT 4R7 □	4.7	100KHz,1V	M	70m	58m	2.40	2.00
TPI6020CT 6R8 □	6.8	100KHz,1V	M	102m	85m	2.00	1.80
TPI6020CT 100 □	10	100KHz,1V	M	150m	125m	1.70	1.40
TPI6020CT 220 □	22	100KHz,1V	M	348m	290m	1.05	0.95

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

TPI6028 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI6028CT 0R9 □	0.9	100KHz,1V	N	16m	13m	6.60	4.60
TPI6028CT 1R5 □	1.5	100KHz,1V	N	19m	16m	5.00	4.20
TPI6028CT 2R2 □	2.2	100KHz,1V	N	24m	20m	4.20	3.70
TPI6028CT 3R0 □	3.0	100KHz,1V	M	28m	23m	3.60	3.40
TPI6028CT 4R7 □	4.7	100KHz,1V	M	37m	31m	2.70	3.00
TPI6028CT 6R0 □	6.0	100KHz,1V	M	48m	40m	2.50	2.50
TPI6028CT 100 □	10	100KHz,1V	M	78m	65m	1.90	1.90
TPI6028CT 150 □	15	100KHz,1V	M	114m	95m	1.60	1.80
TPI6028CT 220 □	22	100KHz,1V	M	162m	135m	1.30	1.40
TPI6028CT 330 □	33	100KHz,1V	M	264m	220m	1.10	1.10
TPI6028CT 470 □	47	100KHz,1V	M	360m	300m	0.95	0.92
TPI6028CT 680 □	68	100KHz,1V	M	504m	420m	0.76	0.77
TPI6028CT 101 □	100	100KHz,1V	M	720m	600m	0.62	0.66

TPI6045 Series

Specification

Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI6045CT 1R0 □	1.0	100KHz,1V	N	17m	14m	8.50	4.20
TPI6045CT 1R3 □	1.3	100KHz,1V	N	19m	16m	8.00	4.00
TPI6045CT 1R8 □	1.8	100KHz,1V	N	22m	18m	7.00	3.70
TPI6045CT 2R2 □	2.2	100KHz,1V	N	24m	20m	6.10	3.60
TPI6045CT 3R0 □	3.0	100KHz,1V	M	29m	24m	5.00	3.20
TPI6045CT 4R7 □	4.7	100KHz,1V	M	38m	32m	3.90	2.90
TPI6045CT 6R8 □	6.8	100KHz,1V	M	43m	36m	3.60	2.60
TPI6045CT 100 □	10	100KHz,1V	M	56m	47m	3.00	2.50
TPI6045CT 150 □	15	100KHz,1V	M	92m	77m	2.30	1.90
TPI6045CT 220 □	22	100KHz,1V	M	138m	115m	1.90	1.50
TPI6045CT 330 □	33	100KHz,1V	M	174m	145m	1.50	1.40
TPI6045CT 470 □	47	100KHz,1V	M	264m	220m	1.30	1.10
TPI6045CT 680 □	68	100KHz,1V	M	396m	330m	1.00	0.90
TPI6045CT 101 □	100	100KHz,1V	M	600m	500m	0.80	0.70

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

SMD Power Inductors
Magnetic Shielded Type

TPI8040 Series

Specification

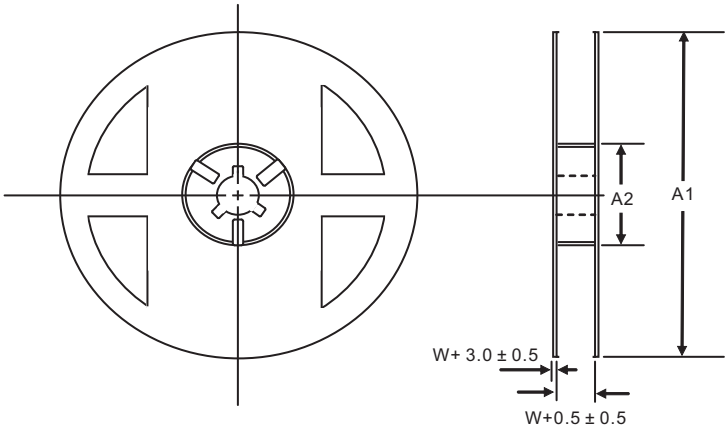
Part No.	Inductance (uH)	Test Freq.	Tolerance	DCResistance (Ω)		Rated DC current (A)	
				Max	Typ	Idc1	Idc2
TPI8040CT 0R9 □	0.9	100KHz,1V	N	7m	6m	11.00	7.80
TPI8040CT 1R4 □	1.4	100KHz,1V	N	9m	7m	9.00	7.00
TPI8040CT 2R2 □	2.2	100KHz,1V	M	13m	11m	7.00	5.90
TPI8040CT 3R9 □	3.9	100KHz,1V	M	19m	16m	5.30	4.90
TPI8040CT 4R7 □	4.7	100KHz,1V	M	22m	18m	4.70	4.10
TPI8040CT 6R8 □	6.8	100KHz,1V	M	30m	25m	4.00	3.70
TPI8040CT 100 □	10	100KHz,1V	M	41m	34m	3.40	3.10
TPI8040CT 150 □	15	100KHz,1V	M	60m	50m	2.70	2.40
TPI8040CT 220 □	22	100KHz,1V	M	79m	66m	2.20	2.20
TPI8040CT 330 □	33	100KHz,1V	M	120m	100m	1.90	1.70
TPI8040CT 470 □	47	100KHz,1V	M	180m	150m	1.50	1.40
TPI8040CT 680 □	68	100KHz,1V	M	276m	230m	1.20	1.10
TPI8040CT 101 □	100	100KHz,1V	M	348m	290m	1.00	1.00

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 (ΔL/Lo :≦-30%)
5. Idc2 : Based on temperature rise (ΔT : 40 °C TYP.)

PACKAGING INFORMATION

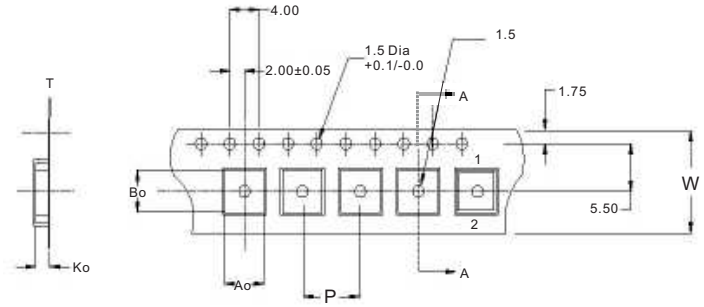
Packing Quantity

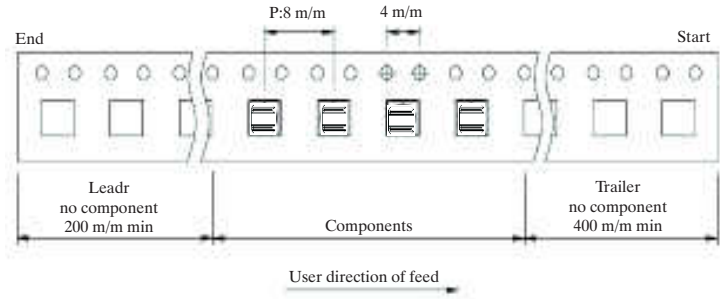
TYPE	PCS / REEL	REEL "	A1	A2
TPI2410	2000	7"	178	60
TPI252010	2000	7"	178	60
TPI252012	2000	7"	178	60
TPI252015	2000	7"	178	60
TPI3010	2000	7"	178	60
TPI3012	2000	7"	178	60
TPI3015	2000	7"	178	60
TPI4010	4000	13"	330	99
TPI4012	4000	13"	330	99
TPI4018	3000	13"	330	99
TPI4025	3000	13"	330	99
TPI5012	3000	13"	330	99
TPI5014	3000	13"	330	99
TPI5020	2000	13"	330	99
TPI5040	1000	13"	330	99
TPI6010	3000	13"	330	99
TPI6012	3000	13"	330	99
TPI6020	2000	13"	330	99
TPI6028	1500	13"	330	99
TPI6045	1000	13"	330	99
TPI8040	1000	13"	330	99



Dimensions (unit:m/m)

TYPE	Chip		Insert	Tape		Tape
	Cavity		Pitch	Thickness		Width
	Ao	Bo	P	Ko	T	W
TPI2410	2.65	2.65	4.00	1.25	0.25	8.00
TPI252010	2.23	2.73	4.00	1.30	0.25	8.00
TPI252012	2.23	2.73	4.00	1.50	0.25	8.00
TPI252015	2.23	2.73	4.00	1.80	0.25	8.00
TPI3010	3.25	3.25	4.00	1.25	0.25	8.00
TPI3012	3.25	3.25	4.00	1.45	0.25	8.00
TPI3015	3.25	3.25	4.00	1.75	0.25	8.00
TPI4010	4.30	4.30	8.00	1.25	0.30	12.00
TPI4012	4.30	4.30	8.00	1.45	0.30	12.00
TPI4018	4.30	4.30	8.00	2.05	0.30	12.00
TPI4025	4.30	4.30	8.00	2.75	0.30	12.00
TPI5012	5.40	5.40	12.00	1.45	0.35	16.00
TPI5014	5.40	5.40	12.00	1.65	0.35	16.00
TPI5020	5.40	5.40	12.00	2.25	0.35	16.00
TPI5040	5.40	5.40	12.00	4.25	0.35	16.00
TPI6010	6.40	6.40	12.00	1.25	0.35	16.00
TPI6012	6.40	6.40	12.00	1.45	0.35	16.00
TPI6020	6.40	6.40	12.00	2.25	0.35	16.00
TPI6028	6.40	6.40	12.00	3.05	0.35	16.00
TPI6045	6.40	6.40	12.00	4.75	0.35	16.00
TPI8040	8.40	8.20	12.00	4.25	0.35	16.00





Recommended Footprint(unit: m/m)

TYPE	A	B	C
TPI2410	2.15	2.00	0.70
TPI252010	2.50	2.00	0.80
TPI252012	2.50	2.00	0.80
TPI252015	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
TPI4010	4.55	3.60	1.50
TPI4012	4.55	3.60	1.50
TPI4018	4.55	3.60	1.50
TPI4025	4.55	3.60	1.50
TPI5012	5.10	4.00	1.50
TPI5014	5.10	4.00	1.50
TPI5020	5.10	4.00	1.50
TPI5040	5.10	4.00	1.50
TPI6010	6.30	5.70	1.60
TPI6012	6.30	5.70	1.60
TPI6020	6.30	5.70	1.60
TPI6028	6.30	5.70	1.60
TPI6045	6.30	5.70	1.60
TPI8040	7.40	7.50	1.80