



Semi-Shielded SMD Power Inductor

TPI60xx 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.

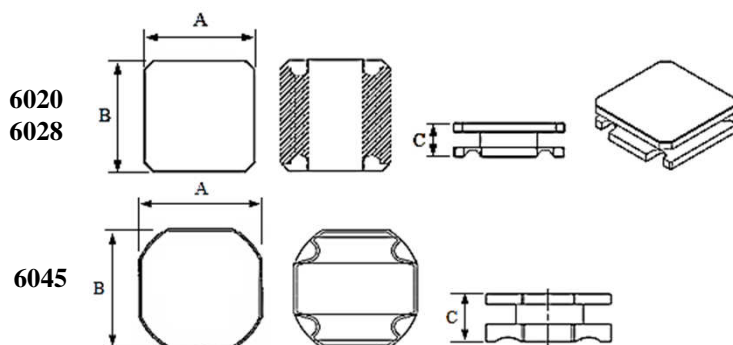
PART NUMBER

TPI 6020 C T 1R0 N - □□

1 2 3 4 5 6
taping

1 Product Type

2 Shape & Dimension



Size	A	B	C
TPI6020	(0.236 ± 0.008) 6.00 ± 0.20	(0.236 ± 0.008) 6.00 ± 0.20	(0.079 ± 0.008) 2.00 ± 0.20
TPI6028	(0.236 ± 0.008) 6.00 ± 0.20	(0.236 ± 0.008) 6.00 ± 0.20	(0.110 max.) 2.80 max.
TPI6045	(0.236 ± 0.008) 6.00 ± 0.20	(0.236 ± 0.008) 6.00 ± 0.20	(0.177 max.) 4.50 max.

(inch)
mm

3 Coating Type

C : Coating

4 Inductance

R80 = 0.8uH 1R0 = 1.0uH 100 = 10uH 101 = 100uH

5 Tolerance

M = ±20% N = ±30%

6 Internal Code

TPI60xx Series

TPI6020 Series

Part No.	Inductance (uH)	Test Freq.	Tolerance	DC Resistance (mΩ)		Rated DC Current (A)		Marking
				Max.	Typ.	Idc1	Idc2	
TPI6020CT R50 □-□□	0.5	100KHz, 1V	N	12	9	7.00	5.20	R50
TPI6020CT R80 □-□□	0.8	100KHz, 1V	N	16	12	6.00	4.10	R80
TPI6020CT 1R5 □-□□	1.5	100KHz, 1V	N	22	17	4.00	3.60	1R5
TPI6020CT 2R2 □-□□	2.2	100KHz, 1V	N	31	24	3.50	2.90	2R2
TPI6020CT 3R3 □-□□	3.3	100KHz, 1V	N	39	30	2.80	2.80	3R3
TPI6020CT 4R7 □-□□	4.7	100KHz, 1V	M	52	43	2.40	2.20	4R7
TPI6020CT 5R6 □-□□	5.6	100KHz, 1V	M	66	55	2.20	2.00	5R6
TPI6020CT 6R8 □-□□	6.8	100KHz, 1V	M	72	60	2.00	1.80	6R8
TPI6020CT 100 □-□□	10	100KHz, 1V	M	108	90	1.90	1.50	100
TPI6020CT 150 □-□□	15	100KHz, 1V	M	144	120	1.30	1.20	150
TPI6020CT 220 □-□□	22	100KHz, 1V	M	204	170	1.10	1.00	220
TPI6020CT 330 □-□□	33	100KHz, 1V	M	372	310	0.90	0.90	330
TPI6020CT 470 □-□□	47	100KHz, 1V	M	444	370	0.80	0.80	470

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.).

TPI60xx Series

TPI6028 Series

Part No.	Inductance (uH)	Test Freq.	Tolerance	DC Resistance (mΩ)		Rated DC Current (A)		Marking
				Max.	Typ.	Idc1	Idc2	
TPI6028CT R90 □-□□	0.9	100KHz, 1V	N	17	13	6.70	4.60	R90
TPI6028CT 1R5 □-□□	1.5	100KHz, 1V	N	21	16	5.10	4.20	1R5
TPI6028CT 2R2 □-□□	2.2	100KHz, 1V	N	26	20	4.20	3.70	2R2
TPI6028CT 3R0 □-□□	3.0	100KHz, 1V	N	30	23	3.60	3.40	3R0
TPI6028CT 3R3 □-□□	3.3	100KHz, 1V	M	34	28	3.50	3.40	3R3
TPI6028CT 3R9 □-□□	3.9	100KHz, 1V	M	37	31	2.70	3.00	3R9
TPI6028CT 4R7 □-□□	4.7	100KHz, 1V	M	37	31	2.70	3.00	4R7
TPI6028CT 6R0 □-□□	6.0	100KHz, 1V	M	48	40	2.50	2.50	6R0
TPI6028CT 6R2 □-□□	6.2	100KHz, 1V	M	62	52	2.20	2.20	6R2
TPI6028CT 6R8 □-□□	6.8	100KHz, 1V	M	62	52	2.20	2.20	6R8
TPI6028CT 100 □-□□	10	100KHz, 1V	M	78	65	1.90	1.90	100
TPI6028CT 150 □-□□	15	100KHz, 1V	M	114	95	1.60	1.80	150
TPI6028CT 220 □-□□	22	100KHz, 1V	M	162	135	1.30	1.40	220
TPI6028CT 330 □-□□	33	100KHz, 1V	M	264	220	1.10	1.10	330
TPI6028CT 470 □-□□	47	100KHz, 1V	M	360	300	1.00	0.92	470
TPI6028CT 680 □-□□	68	100KHz, 1V	M	504	420	0.80	0.77	680
TPI6028CT 101 □-□□	100	100KHz, 1V	M	720	600	0.65	0.66	101

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.).

TPI60xx Series

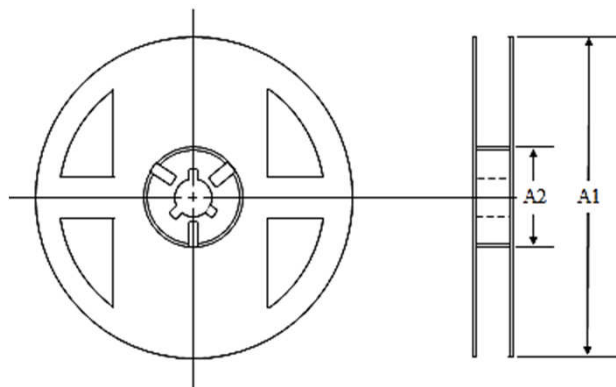
TPI6045 Series

Part No.	Inductance (uH)	Test Freq.	Tolerance	DC Resistance (mΩ)		Rated DC Current (A)		Marking
				Max.	Typ.	Idc1	Idc2	
TPI6045CT 1R0 □-□□	1.0	100KHz, 1V	N	13	10	8.60	6.50	1R0
TPI6045CT 1R3 □-□□	1.3	100KHz, 1V	N	14	11	8.00	6.00	1R3
TPI6045CT 1R8 □-□□	1.8	100KHz, 1V	N	16	12	7.00	5.30	1R8
TPI6045CT 2R2 □-□□	2.2	100KHz, 1V	N	17	13	6.10	5.00	2R2
TPI6045CT 3R0 □-□□	3.0	100KHz, 1V	N	22	17	5.00	4.80	3R0
TPI6045CT 3R3 □-□□	3.3	100KHz, 1V	N	22	17	4.50	4.50	3R3
TPI6045CT 4R5 □-□□	4.5	100KHz, 1V	N	30	23	4.30	3.80	4R5
TPI6045CT 4R7 □-□□	4.7	100KHz, 1V	N	30	23	4.00	3.70	4R7
TPI6045CT 5R6 □-□□	5.6	100KHz, 1V	N	34	26	3.80	3.60	5R6
TPI6045CT 6R3 □-□□	6.3	100KHz, 1V	N	34	26	3.80	3.60	6R3
TPI6045CT 6R8 □-□□	6.8	100KHz, 1V	N	44	34	3.60	3.50	6R8
TPI6045CT 8R2 □-□□	8.2	100KHz, 1V	N	53	41	3.20	3.10	8R2
TPI6045CT 100 □-□□	10	100KHz, 1V	M	54	45	3.10	3.00	100
TPI6045CT 150 □-□□	15	100KHz, 1V	M	96	80	2.30	2.30	150
TPI6045CT 220 □-□□	22	100KHz, 1V	M	134	112	1.90	1.90	220
TPI6045CT 330 □-□□	33	100KHz, 1V	M	204	170	1.50	1.50	330
TPI6045CT 470 □-□□	47	100KHz, 1V	M	252	210	1.30	1.30	470
TPI6045CT 560 □-□□	56	100KHz, 1V	M	324	270	1.20	1.20	560
TPI6045CT 680 □-□□	68	100KHz, 1V	M	390	325	1.00	1.00	680
TPI6045CT 101 □-□□	100	100KHz, 1V	M	552	460	0.90	0.90	101
TPI6045CT 221 □-□□	220	100KHz, 1V	M	1104	920	0.55	0.50	221

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.).

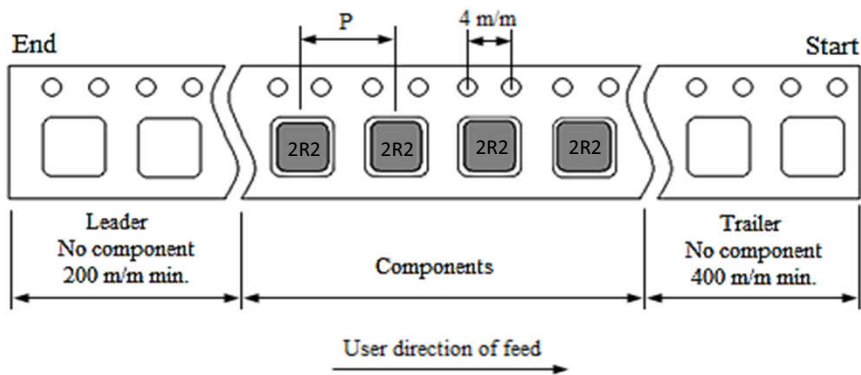
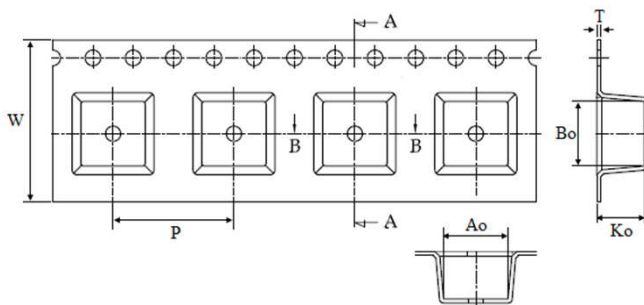
(unit : m/m)

Type	Pcs/Reel	Reel"	A1	A2
6020	2,000	13"	330	99
6028	1,000	13"	330	99
6045	1,000	13"	330	99



(unit : m/m)

Type		6020	6028	6045
Chip Cavity	Ao	6.35	6.40	6.30
	Bo	6.20	6.40	6.30
Insert Pitch	P	8.00	8.00	12.00
Tape Thickness	Ko	2.40	3.10	4.70
	T	0.30	0.30	0.40
Tape Width	W	12.00	12.00	16.00



Recommended Footprint (unit : m/m)

Type	A	B	C
6020	6.30	5.70	1.60
6028	6.30	5.70	1.60
6045	6.30	5.70	1.60

Recommended Pattern

