Unshielded Power Inductor / PI Series

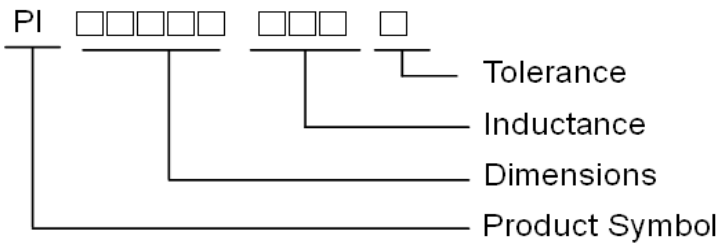
.Features:

1. Excellent solderability and high heat resistance.
2. Excellent terminal strength construction.
3. Packed in embossed carrier tape and can be used by automatic mounting machine.

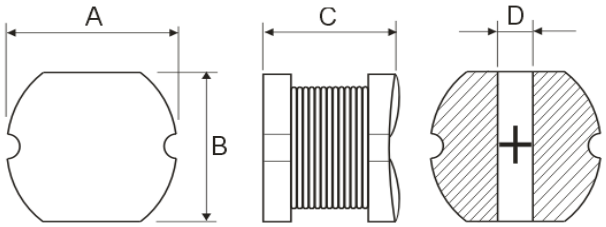
.Applications:

Power supply for VCR, OA equipment, LCD television set notebook, DC to DC converters, DC to AC inverters, etc. VCR, notebook PCs , PCs, Portable communication equipment.

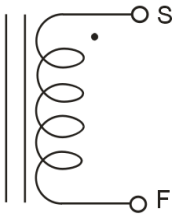
.Product Identification :



.Shape and Dimension



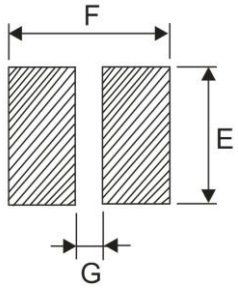
.Schematic



Dimensions in mm

ITEM \ TYPE	PI0301	PI0302L	PI0302	PI0403	PI0502	PI0503	PI0504	PI0703	PI0705	PI1004	PI1005
A(mm)	3.5±0.3	3.5±0.3	3.5±0.3	4.5±0.3	5.8±0.3	5.8±0.3	5.8±0.3	7.8±0.3	7.8±0.3	10.0 ±0.3	10.0 ±0.3
B(mm)	3.0±0.3	3.0±0.3	3.0±0.3	4.0±0.3	5.2±0.3	5.2±0.3	5.2±0.3	7.0±0.3	7.0±0.3	9.0±0.3	9.0±0.3
C(mm)	1.6±0.2	1.6±0.3	2.1±0.3	3.2±0.3	2.0±0.3	3.0±0.3	4.5±0.3	3.5±0.3	5.0±0.3	4.0±0.3	5.4±0.3
D(mm)	0.8 Typ.	1.0 Typ.	1.0 Typ.	1.2 Typ.	1.5 Typ.	1.5 Typ.	1.5 Typ.	2.1 Typ.	2.1 Typ.	2.9 Typ.	2.9 Typ.

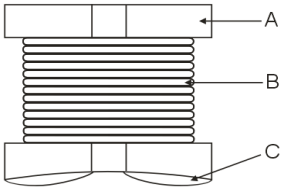
.Land Patterns



ITEM \ TYPE	PI0301	PI0302L	PI0302	PI0403	PI0502	PI0503	PI0504	PI0703	PI0705	PI1004	PI1005
F(mm)	4.00	4.50	4.50	5.50	6.50	6.50	6.50	8.50	8.50	12.50	12.50
G(mm)	0.80	1.10	1.10	1.50	1.70	1.70	1.70	2.00	2.00	2.50	2.50
E(mm)	3.50	3.30	3.30	4.50	5.50	5.50	5.50	7.50	7.50	9.50	9.50

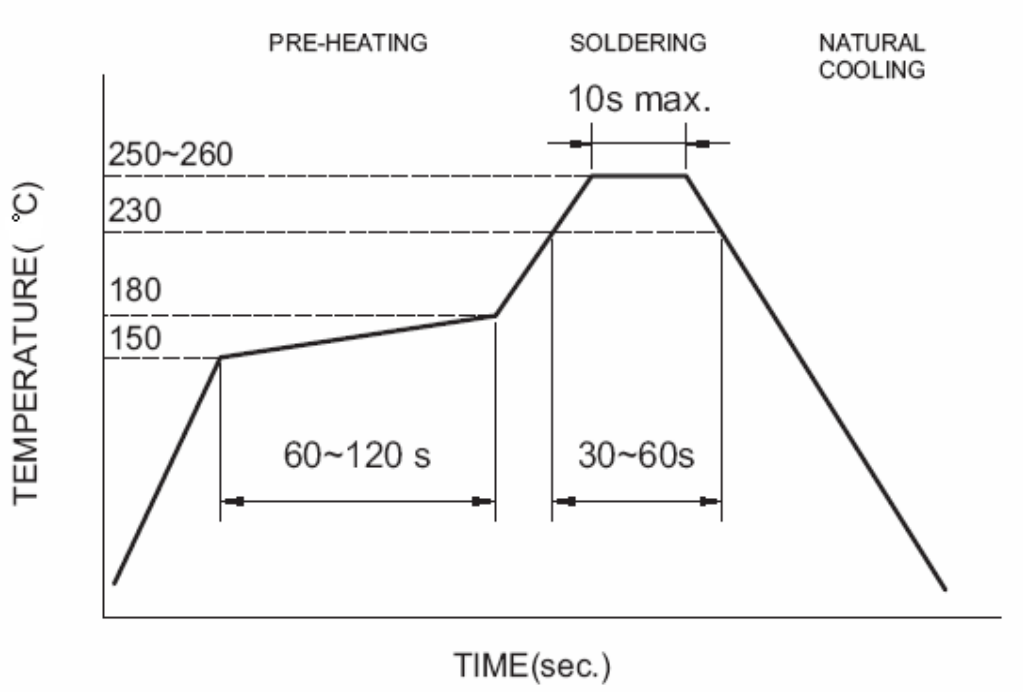
Unshielded Power Inductor / PI Series

.Material



No.	ITEM	Material
A	Core	Ferrite DR Core
B	Wire	Enamelled Copper wire
C	Terminal	Ag+Sn+SnPb

.Recommended Reflow



Unshielded Power Inductor / PI Series

. Electrical Characteristics（PI0301 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0301-1R0□	1	20	0.083	1.40	100KHz/1.0V
PI0301-1R2□	1.2	20	0.099	1.24	100KHz/1.0V
PI0301-1R5□	1.5	20	0.128	1.06	100KHz/1.0V
PI0301-1R8□	1.8	20	0.145	0.96	100KHz/1.0V
PI0301-2R2□	2.2	20	0.194	0.88	100KHz/1.0V
PI0301-2R7□	2.7	20	0.225	0.80	100KHz/1.0V
PI0301-3R3□	3.3	20	0.270	0.79	100KHz/1.0V
PI0301-3R9□	3.9	20	0.321	0.68	100KHz/1.0V
PI0301-4R7□	4.7	20	0.376	0.66	100KHz/1.0V
PI0301-5R6□	5.6	20	0.393	0.61	100KHz/1.0V
PI0301-6R8□	6.8	20	0.485	0.56	100KHz/1.0V
PI0301-8R2□	8.2	20	0.628	0.50	100KHz/1.0V
PI0301-100□	10	20	0.809	0.45	100KHz/1.0V
PI0301-120□	12	20	0.901	0.40	100KHz/1.0V
PI0301-150□	15	20	1.063	0.37	100KHz/1.0V
PI0301-180□	18	20	1.231	0.34	100KHz/1.0V
PI0301-220□	22	20	1.750	0.31	100KHz/1.0V
PI0301-270□	27	20	2.113	0.28	100KHz/1.0V
PI0301-330□	33	20	2.888	0.24	100KHz/1.0V
PI0301-390□	39	20	3.100	0.23	100KHz/1.0V
PI0301-470□	47	20	3.513	0.21	100KHz/1.0V
PI0301-560□	56	20	3.950	0.20	100KHz/1.0V
PI0301-680□	68	20	5.688	0.18	100KHz/1.0V
PI0301-820□	82	20	6.575	0.15	100KHz/1.0V
PI0301-101□	100	10	7.700	0.14	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI0302 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0302-1R0□	1	20	0.038	2.2	100KHz/1.0V
PI0302-1R2□	1.2	20	0.038	3.1	100KHz/1.0V
PI0302-1R4□	1.4	20	0.081	2.1	100KHz/1.0V
PI0302-1R5□	1.5	20	0.045	2.1	100KHz/1.0V
PI0302-1R8□	1.8	20	0.100	2.0	100KHz/1.0V
PI0302-2R2□	2.2	20	0.080	1.8	100KHz/1.0V
PI0302-3R3□	3.3	20	0.110	1.7	100KHz/1.0V
PI0302-3R9□	3.9	20	0.130	1.6	100KHz/1.0V
PI0302-4R7□	4.7	20	0.170	1.5	100KHz/1.0V
PI0302-5R6□	5.6	20	0.185	1.2	100KHz/1.0V
PI0302-6R8□	6.8	20	0.200	1.05	100KHz/1.0V
PI0302-8R2□	8.2	20	0.220	0.900	100KHz/1.0V
PI0302-100□	10	20	0.230	0.760	100KHz/1.0V
PI0302-120□	12	20	0.270	0.685	100KHz/1.0V
PI0302-150□	15	20	0.310	0.635	100KHz/1.0V
PI0302-180□	18	20	0.410	0.525	100KHz/1.0V
PI0302-220□	22	20	0.470	0.500	100KHz/1.0V
PI0302-270□	27	20	0.660	0.405	100KHz/1.0V
PI0302-330□	33	20	0.760	0.380	100KHz/1.0V
PI0302-390□	39	20	0.850	0.355	100KHz/1.0V
PI0302-470□	47	20	0.970	0.330	100KHz/1.0V
PI0302-560□	56	20	1.250	0.290	100KHz/1.0V
PI0302-680□	68	20	1.450	0.275	100KHz/1.0V
PI0302-820□	82	20	1.850	0.235	100KHz/1.0V
PI0302-101□	100	20	2.200	0.220	100KHz/1.0V
PI0302-121□	120	20	2.900	0.185	100KHz/1.0V
PI0302-151□	150	20	3.400	0.170	100KHz/1.0V
PI0302-181□	180	20	3.900	0.165	100KHz/1.0V
PI0302-221□	220	20	4.500	0.155	100KHz/1.0V
PI0302-271□	270	20	6.000	0.135	100KHz/1.0V
PI0302-331□	330	20	7.000	0.125	100KHz/1.0V
PI0302-391□	390	20	7.800	0.115	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI0403 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0403-1R0□	1	20	0.033	3.80	100KHz/1.0V
PI0403-1R4□	1.4	20	0.038	3.30	100KHz/1.0V
PI0403-1R8□	1.8	20	0.042	2.91	100KHz/1.0V
PI0403-2R2□	2.2	20	0.047	2.60	100KHz/1.0V
PI0403-2R7□	2.7	20	0.052	2.43	100KHz/1.0V
PI0403-3R3□	3.3	20	0.058	2.15	100KHz/1.0V
PI0403-3R9□	3.9	20	0.076	1.98	100KHz/1.0V
PI0403-4R7□	4.7	20	0.094	1.70	100KHz/1.0V
PI0403-5R6□	5.6	20	0.101	1.60	100KHz/1.0V
PI0403-6R8□	6.8	20	0.117	1.41	100KHz/1.0V
PI0403-8R2□	8.2	20	0.132	1.26	100KHz/1.0V
PI0403-100□	10	20	0.182	1.15	100KHz/1.0V
PI0403-120□	12	20	0.210	1.05	100KHz/1.0V
PI0403-150□	15	20	0.235	0.92	100KHz/1.0V
PI0403-180□	18	20	0.338	0.84	100KHz/1.0V
PI0403-220□	22	20	0.378	0.76	100KHz/1.0V
PI0403-270□	27	20	0.522	0.71	100KHz/1.0V
PI0403-330□	33	20	0.540	0.64	100KHz/1.0V
PI0403-390□	39	20	0.587	0.59	100KHz/1.0V
PI0403-470□	47	20	0.844	0.54	100KHz/1.0V
PI0403-560□	56	20	0.937	0.50	100KHz/1.0V
PI0403-680□	68	20	1.117	0.46	100KHz/1.0V
PI0403-820□	82	20	1.345	0.45	100KHz/1.0V
PI0403-101□	100	10	1.520	0.44	100KHz/1.0V
PI0403-121□	120	10	1.800	0.43	100KHz/1.0V
PI0403-151□	150	10	2.000	0.42	100KHz/1.0V
PI0403-181□	180	10	3.200	0.38	100KHz/1.0V
PI0403-221□	220	10	3.400	0.36	100KHz/1.0V
PI0403-271□	270	10	3.900	0.34	100KHz/1.0V
PI0403-331□	330	10	5.300	0.28	100KHz/1.0V
PI0403-391□	390	10	5.900	0.24	100KHz/1.0V
PI0403-471□	470	10	6.800	0.21	100KHz/1.0V
PI0403-561□	560	10	8.500	0.20	100KHz/1.0V
PI0403-681□	680	10	10.000	0.18	100KHz/1.0V
PI0403-821□	820	10	13.4 0	0.15	100KHz/1.0V
PI0403-102□	1000	10	15.600	0.14	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI0502 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0502-1R0□	1	20	0.045	4.50	100KHz/1.0V
PI0502-1R2□	1.2	20	0.050	4.20	100KHz/1.0V
PI0502-1R5□	1.5	20	0.060	4.00	100KHz/1.0V
PI0502-1R8□	1.8	20	0.065	3.70	100KHz/1.0V
PI0502-2R2□	2.2	20	0.070	3.50	100KHz/1.0V
PI0502-2R7□	2.7	20	0.080	3.20	100KHz/1.0V
PI0502-3R3□	3.3	20	0.100	2.70	100KHz/1.0V
PI0502-3R9□	3.9	20	0.120	2.40	100KHz/1.0V
PI0502-4R7□	4.7	20	0.140	2.00	100KHz/1.0V
PI0502-5R6□	5.6	20	0.150	1.80	100KHz/1.0V
PI0502-6R8□	6.8	20	0.160	1.50	100KHz/1.0V
PI0502-8R2□	8.2	20	0.170	1.40	100KHz/1.0V
PI0502-100□	10	20	0.200	1.30	100KHz/1.0V
PI0502-120□	12	20	0.230	1.10	100KHz/1.0V
PI0502-150□	15	20	0.250	1.05	100KHz/1.0V
PI0502-180□	18	20	0.300	1.00	100KHz/1.0V
PI0502-220□	22	20	0.350	0.90	100KHz/1.0V
PI0502-270□	27	20	0.400	0.85	100KHz/1.0V
PI0502-330□	33	20	0.500	0.75	100KHz/1.0V
PI0502-390□	39	20	0.550	0.70	100KHz/1.0V
PI0502-470□	47	20	0.650	0.60	100KHz/1.0V
PI0502-560□	56	20	0.750	0.55	100KHz/1.0V
PI0502-680□	68	20	0.950	0.50	100KHz/1.0V
PI0502-820□	82	20	1.200	0.45	100KHz/1.0V
PI0502-101□	100	10	1.400	0.40	100KHz/1.0V
PI0502-121□	120	10	1.750	0.35	100KHz/1.0V
PI0502-151□	150	10	2.000	0.25	100KHz/1.0V
PI0502-181□	180	10	2.600	0.22	100KHz/1.0V
PI0502-221□	220	10	3.000	0.20	100KHz/1.0V
PI0502-271□	270	10	3.700	0.18	100KHz/1.0V
PI0502-331□	330	10	4.300	0.17	100KHz/1.0V
PI0502-391□	390	10	6.000	0.16	100KHz/1.0V

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Electrical Characteristics（PI0502 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0502-471□	470	10	6.700	0.15	100KHz/1.0V
PI0502-561□	560	10	8.150	0.14	100KHz/1.0V
PI0502-681□	680	10	8.980	0.13	100KHz/1.0V
PI0502-821□	820	10	11.240	0.12	100KHz/1.0V
PI0502-102□	1000	10	15.250	0.11	100KHz/1.0V
PI0502-122□	1200	10	16.750	0.10	100KHz/1.0V

Electrical Characteristics（PI0503 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0503-1R0□	1	20	0.030	4.50	100KHz/1.0V
PI0503-1R2□	1.2	20	0.030	4.20	100KHz/1.0V
PI0503-1R5□	1.5	20	0.030	4.10	100KHz/1.0V
PI0503-1R8□	1.8	20	0.030	3.70	100KHz/1.0V
PI0503-2R2□	2.2	20	0.030	3.50	100KHz/1.0V
PI0503-2R7□	2.7	20	0.040	3.20	100KHz/1.0V
PI0503-3R3□	3.3	20	0.050	2.80	100KHz/1.0V
PI0503-3R9□	3.9	20	0.060	2.60	100KHz/1.0V
PI0503-4R7□	4.7	20	0.070	2.50	100KHz/1.0V
PI0503-5R6□	5.6	20	0.080	2.40	100KHz/1.0V
PI0503-6R8□	6.8	20	0.090	2.20	100KHz/1.0V
PI0503-8R2□	8.2	20	0.100	2.00	100KHz/1.0V
PI0503-100□	10	20	0.120	1.80	100KHz/1.0V
PI0503-120□	12	20	0.130	1.75	100KHz/1.0V
PI0503-150□	15	20	0.150	1.70	100KHz/1.0V
PI0503-180□	18	20	0.180	1.60	100KHz/1.0V
PI0503-220□	22	20	0.220	1.50	100KHz/1.0V
PI0503-270□	27	20	0.240	1.40	100KHz/1.0V
PI0503-330□	33	20	0.300	1.10	100KHz/1.0V
PI0503-390□	39	20	0.400	1.00	100KHz/1.0V
PI0503-470□	47	20	0.430	0.90	100KHz/1.0V
PI0503-560□	56	20	0.500	0.85	100KHz/1.0V
PI0503-680□	68	20	0.600	0.80	100KHz/1.0V
PI0503-820□	82	20	0.800	0.65	100KHz/1.0V
PI0503-101□	100	10	0.900	0.60	100KHz/1.0V
PI0503-121□	120	10	1.000	0.58	100KHz/1.0V
PI0503-151□	150	10	1.300	0.43	100KHz/1.0V
PI0503-181□	180	10	1.500	0.41	100KHz/1.0V
PI0503-221□	220	10	2.000	0.38	100KHz/1.0V
PI0503-271□	270	10	2.500	0.35	100KHz/1.0V
PI0503-331□	330	10	3.200	0.28	100KHz/1.0V
PI0503-391□	390	10	3.500	0.26	100KHz/1.0V
PI0503-471□	470	10	4.200	0.20	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI0503 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0503-561□	560	10	4.500	0.19	100KHz/1.0V
PI0503-681□	680	10	6.000	0.18	100KHz/1.0V
PI0503-821□	820	10	6.500	0.15	100KHz/1.0V
PI0503-102□	1000	10	8.000	0.13	100KHz/1.0V
PI0503-122□	1200	10	12.500	0.12	100KHz/1.0V

Electrical Characteristics（PI0504 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0504-1R0□	1	20	0.015	5.90	100KHz/1.0V
PI0504-1R2□	1.2	20	0.020	5.20	100KHz/1.0V
PI0504-1R5□	1.5	20	0.025	4.70	100KHz/1.0V
PI0504-1R8□	1.8	20	0.030	4.00	100KHz/1.0V
PI0504-2R2□	2.2	20	0.035	3.80	100KHz/1.0V
PI0504-2R7□	2.7	20	0.040	3.40	100KHz/1.0V
PI0504-3R3□	3.3	20	0.045	3.30	100KHz/1.0V
PI0504-3R9□	3.9	20	0.050	2.90	100KHz/1.0V
PI0504-4R7□	4.7	20	0.060	2.80	100KHz/1.0V
PI0504-5R6□	5.6	20	0.070	2.40	100KHz/1.0V
PI0504-6R8□	6.8	20	0.080	2.10	100KHz/1.0V
PI0504-8R2□	8.2	20	0.090	2.00	100KHz/1.0V
PI0504-100□	10	20	0.100	1.44	100KHz/1.0V
PI0504-120□	12	20	0.120	1.40	100KHz/1.0V
PI0504-150□	15	20	0.140	1.30	100KHz/1.0V
PI0504-180□	18	20	0.150	1.23	100KHz/1.0V
PI0504-220□	22	20	0.180	1.11	100KHz/1.0V
PI0504-270□	27	20	0.200	0.97	100KHz/1.0V
PI0504-330□	33	20	0.230	0.88	100KHz/1.0V
PI0504-390□	39	20	0.320	0.80	100KHz/1.0V
PI0504-470□	47	20	0.370	0.72	100KHz/1.0V
PI0504-560□	56	20	0.420	0.68	100KHz/1.0V
PI0504-680□	68	20	0.460	0.61	100KHz/1.0V
PI0504-820□	82	20	0.600	0.58	100KHz/1.0V
PI0504-101□	100	10	0.700	0.52	100KHz/1.0V
PI0504-121□	120	10	0.930	0.48	100KHz/1.0V
PI0504-151□	150	10	1.100	0.40	100KHz/1.0V
PI0504-181□	180	10	1.380	0.38	100KHz/1.0V
PI0504-221□	220	10	1.570	0.35	100KHz/1.0V
PI0504-271□	270	10	1.650	0.32	100KHz/1.0V
PI0504-331□	330	10	1.700	0.28	100KHz/1.0V
PI0504-391□	390	10	1.800	0.26	100KHz/1.0V
PI0504-471□	470	10	2.300	0.23	100KHz/1.0V
PI0504-561□	560	10	2.500	0.20	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI0504 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0504-681□	680	10	3.000	0.19	100KHz/1.0V
PI0504-821□	820	10	4.500	0.16	100KHz/1.0V
PI0504-102□	1000	10	4.800	0.14	100KHz/1.0V

Electrical Characteristics（PI0703 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0703-1R0□	1	20	0.030	8.85	100KHz/1.0V
PI0703-1R2□	1.2	20	0.040	7.85	100KHz/1.0V
PI0703-1R5□	1.5	20	0.050	6.96	100KHz/1.0V
PI0703-1R8□	1.8	20	0.050	5.46	100KHz/1.0V
PI0703-2R2□	2.2	20	0.050	4.88	100KHz/1.0V
PI0703-2R7□	2.7	20	0.060	4.32	100KHz/1.0V
PI0703-3R3□	3.3	20	0.060	3.71	100KHz/1.0V
PI0703-3R9□	3.9	20	0.060	3.70	100KHz/1.0V
PI0703-4R7□	4.7	20	0.070	3.52	100KHz/1.0V
PI0703-5R6□	5.6	20	0.070	2.86	100KHz/1.0V
PI0703-6R8□	6.8	20	0.080	2.55	100KHz/1.0V
PI0703-8R2□	8.2	20	0.080	2.44	100KHz/1.0V
PI0703-100□	10	20	0.080	1.44	100KHz/1.0V
PI0703-120□	12	20	0.090	1.39	100KHz/1.0V
PI0703-150□	15	20	0.100	1.24	100KHz/1.0V
PI0703-180□	18	20	0.110	1.12	100KHz/1.0V
PI0703-220□	22	20	0.130	1.07	100KHz/1.0V
PI0703-270□	27	20	0.150	0.94	100KHz/1.0V
PI0703-330□	33	20	0.170	0.85	100KHz/1.0V
PI0703-390□	39	20	0.220	0.74	100KHz/1.0V
PI0703-470□	47	20	0.250	0.68	100KHz/1.0V
PI0703-560□	56	20	0.280	0.64	100KHz/1.0V
PI0703-680□	68	20	0.330	0.59	100KHz/1.0V
PI0703-820□	82	20	0.410	0.54	100KHz/1.0V
PI0703-101□	100	10	0.480	0.51	100KHz/1.0V
PI0703-121□	120	10	0.540	0.49	100KHz/1.0V
PI0703-151□	150	10	0.750	0.40	100KHz/1.0V
PI0703-181□	180	10	1.020	0.36	100KHz/1.0V
PI0703-221□	220	10	1.200	0.31	100KHz/1.0V
PI0703-271□	270	10	1.310	0.29	100KHz/1.0V
PI0703-331□	330	10	1.500	0.28	100KHz/1.0V
PI0703-391□	390	10	1.800	0.26	100KHz/1.0V
PI0703-471□	470	10	1.950	0.23	100KHz/1.0V
PI0703-561□	560	10	2.300	0.21	100KHz/1.0V
PI0703-681□	680	10	2.700	0.13	100KHz/1.0V
PI0703-821□	820	10	3.200	0.11	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI0703 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0703-102□	1000	10	3.800	0.08	100KHz/1.0V
PI0703-122□	1200	10	6.350	0.07	100KHz/1.0V

Electrical Characteristics（PI0705 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0705-1R0□	1	20	0.030	11.25	100KHz/1.0V
PI0705-1R2□	1.2	20	0.030	9.87	100KHz/1.0V
PI0705-1R5□	1.5	20	0.040	8.35	100KHz/1.0V
PI0705-1R8□	1.8	20	0.040	7.12	100KHz/1.0V
PI0705-2R2□	2.2	20	0.050	6.52	100KHz/1.0V
PI0705-2R7□	2.7	20	0.060	6.06	100KHz/1.0V
PI0705-3R3□	3.3	20	0.060	5.26	100KHz/1.0V
PI0705-3R9□	3.9	20	0.060	4.68	100KHz/1.0V
PI0705-4R7□	4.7	20	0.070	4.54	100KHz/1.0V
PI0705-5R6□	5.6	20	0.070	4.25	100KHz/1.0V
PI0705-6R8□	6.8	20	0.070	3.45	100KHz/1.0V
PI0705-8R2□	8.2	20	0.070	3.10	100KHz/1.0V
PI0705-100□	10	20	0.070	2.30	100KHz/1.0V
PI0705-120□	12	20	0.080	2.00	100KHz/1.0V
PI0705-150□	15	20	0.090	1.80	100KHz/1.0V
PI0705-180□	18	20	0.100	1.60	100KHz/1.0V
PI0705-220□	22	20	0.110	1.50	100KHz/1.0V
PI0705-270□	27	20	0.120	1.30	100KHz/1.0V
PI0705-330□	33	20	0.130	1.20	100KHz/1.0V
PI0705-390□	39	20	0.160	1.10	100KHz/1.0V
PI0705-470□	47	20	0.180	1.10	100KHz/1.0V
PI0705-560□	56	20	0.240	0.94	100KHz/1.0V
PI0705-680□	68	20	0.280	0.85	100KHz/1.0V
PI0705-820□	82	20	0.370	0.78	100KHz/1.0V
PI0705-101□	100	10	0.430	0.72	100KHz/1.0V
PI0705-121□	120	10	0.470	0.66	100KHz/1.0V
PI0705-151□	150	10	0.640	0.58	100KHz/1.0V
PI0705-181□	180	10	0.710	0.51	100KHz/1.0V
PI0705-221□	220	10	0.960	0.49	100KHz/1.0V
PI0705-271□	270	10	1.110	0.42	100KHz/1.0V
PI0705-331□	330	10	1.260	0.40	100KHz/1.0V
PI0705-391□	390	10	1.770	0.36	100KHz/1.0V
PI0705-471□	470	10	1.960	0.34	100KHz/1.0V
PI0705-561□	560	10	2.000	0.33	100KHz/1.0V
PI0705-681□	680	10	2.200	0.32	100KHz/1.0V
PI0705-821□	820	10	2.900	0.25	100KHz/1.0V
PI0705-102□	1000	10	3.900	0.20	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI0705 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI0705-122□	1200	10	5.690	0.18	100KHz/1.0V

Electrical Characteristics（PI1004 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI1004-1R0□	1	20	0.020	12.25	100KHz/1.0V
PI1004-1R5□	1.5	20	0.030	9.86	100KHz/1.0V
PI1004-2R2□	2.2	20	0.030	7.48	100KHz/1.0V
PI1004-3R3□	3.3	20	0.040	6.21	100KHz/1.0V
PI1004-4R7□	4.7	20	0.040	5.43	100KHz/1.0V
PI1004-6R8□	6.8	20	0.053	4.56	100KHz/1.0V
PI1004-100□	10	20	0.053	2.38	100KHz/1.0V
PI1004-120□	12	20	0.061	2.13	100KHz/1.0V
PI1004-150□	15	20	0.070	1.87	100KHz/1.0V
PI1004-180□	18	20	0.081	1.73	100KHz/1.0V
PI1004-220□	22	20	0.088	1.60	100KHz/1.0V
PI1004-270□	27	20	0.100	1.44	100KHz/1.0V
PI1004-330□	33	20	0.120	1.26	100KHz/1.0V
PI1004-390□	39	20	0.151	1.20	100KHz/1.0V
PI1004-470□	47	20	0.170	1.10	100KHz/1.0V
PI1004-560□	56	20	0.199	1.01	100KHz/1.0V
PI1004-680□	68	20	0.223	0.91	100KHz/1.0V
PI1004-820□	82	20	0.252	0.85	100KHz/1.0V
PI1004-101□	100	10	0.344	0.74	100KHz/1.0V
PI1004-121□	120	10	0.396	0.69	100KHz/1.0V
PI1004-151□	150	10	0.544	0.61	100KHz/1.0V
PI1004-181□	180	10	0.621	0.56	100KHz/1.0V
PI1004-221□	220	10	0.721	0.53	100KHz/1.0V
PI1004-271□	270	10	0.949	0.45	100KHz/1.0V
PI1004-331□	330	10	1.100	0.42	100KHz/1.0V
PI1004-391□	390	10	1.245	0.38	100KHz/1.0V
PI1004-471□	470	10	1.526	0.35	100KHz/1.0V
PI1004-561□	560	10	1.904	0.32	100KHz/1.0V
PI1004-681□	680	10	2.200	0.31	100KHz/1.0V
PI1004-821□	820	10	2.700	0.30	100KHz/1.0V

Electrical Characteristics（PI1005 TYPE）

Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI1005-1R0□	1	20	0.010	15.35	100KHz/1.0V
PI1005-1R5□	1.5	20	0.020	11.58	100KHz/1.0V
PI1005-2R2□	2.2	20	0.020	9.24	100KHz/1.0V
PI1005-3R3□	3.3	20	0.030	7.36	100KHz/1.0V
PI1005-4R7□	4.7	20	0.030	5.67	100KHz/1.0V

Unshielded Power Inductor / PI Series

Electrical Characteristics（PI1005 TYPE）

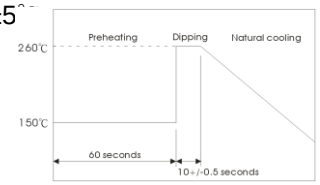
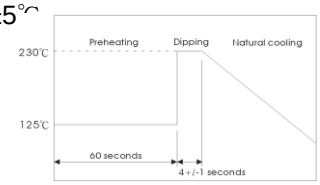
Part No.	INDUCTANCE （μH）	Tolerane (±%)	DCR (Ω) Max	IDC （A） Max	Test frequency
PI1005-6R8□	6.8	20	0.040	4.52	100KHz/1.0V
PI1005-100□	10	20	0.060	2.60	100KHz/1.0V
PI1005-150□	15	20	0.080	2.27	100KHz/1.0V
PI1005-220□	22	20	0.100	1.95	100KHz/1.0V
PI1005-330□	33	20	0.120	1.50	100KHz/1.0V
PI1005-470□	47	20	0.170	1.28	100KHz/1.0V
PI1005-560□	56	20	0.190	1.17	100KHz/1.0V
PI1005-680□	68	20	0.220	1.11	100KHz/1.0V
PI1005-820□	82	20	0.250	1.00	100KHz/1.0V
PI1005-101□	100	10	0.350	0.97	100KHz/1.0V
PI1005-121□	120	10	0.400	0.89	100KHz/1.0V
PI1005-151□	150	10	0.470	0.78	100KHz/1.0V
PI1005-181□	180	10	0.630	0.72	100KHz/1.0V
PI1005-221□	220	10	0.730	0.66	100KHz/1.0V
PI1005-271□	270	10	0.970	0.57	100KHz/1.0V
PI1005-331□	330	10	1.150	0.52	100KHz/1.0V
PI1005-391□	390	10	1.300	0.48	100KHz/1.0V
PI1005-471□	470	10	1.480	0.42	100KHz/1.0V
PI1005-561□	560	10	1.900	0.33	100KHz/1.0V
PI1005-681□	680	10	2.250	0.28	100KHz/1.0V
PI1005-821□	820	10	2.550	0.24	100KHz/1.0V

NOTE:

1. Inductance is Measured by LCR-Meter 4284A(HP) or equivalent.
2. DC Resistance is Measured by HP4338B Milliohms meter or equivalent.
3. Rated current is measured by LCR-meter 3260B(WK) & DC Bias 3265B(WK).
4. Rated current:Value obtained when current flows and the temperautre has risen to 40℃ or when DC current flows and the
   initial value of inductance has fallen by 35%, whichever is smaller.
5. Operating temperature -55℃ ~ +125℃.
6. All test data is referenced to 25℃ ambient.
7. □Tolerance：K=10%；M=20%

Unshielded Power Inductor / PI Series

. Reliability and Test Conditions(可靠性測試條件)

ITEM	Performance	Test Condition
Operating Temperature	-55~+85℃	
Storage temperature	-55~+125℃	
Rated Current	Refer to standard electrical characteristics list.	
Temperature Rise Test	40℃ max.(△t)	
Electrical Performance Test		
Solder Heat Resistance	Appearance:No significant abnormality. Inductance change:Within ± 20%.	Preheat:150℃,60sec. Solder: Sn/Ag3.0/Cu0.5(Pb-Free) Solder temperature:260±5℃ Flux for lead free: rosin Dip time:10±0.5sec. 
Solderability Test	More than 90% of the terminal electrode should be covered with solder.	Preheat:125±25℃,60sec. Solder: Sn/Ag3.0/Cu0.5(Pb-Free) Solder temperature:230±5℃ Flux for lead free: rosin Dip time:4±1sec. 
High Temperature Resistance Test	Appearance: no damage. Inductance: within±20%of initial value. No disconnection or short circuit.	Temperature:85±2℃. Applied current: rated current. Duration: 500 hrs.
Humidity Resistance Test	Appearance: no damage. Inductance: within±20%of initial value. No disconnection or short circuit.	Temperature:40±2℃. Applied current: rated current. Duration: 500 hrs. Humidity: 90~95%

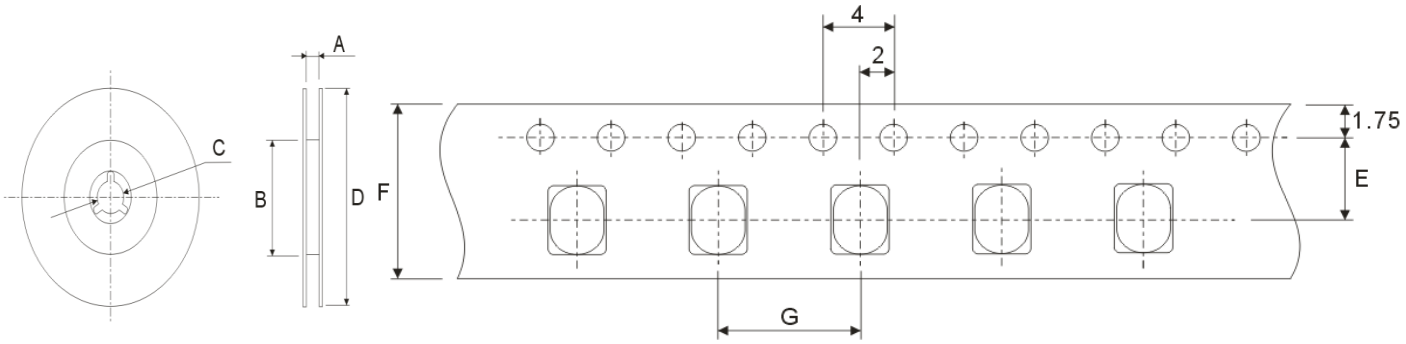
Unshielded Power Inductor / PI Series

. Reliability and Test Conditions(可靠性測試條件)

<table>
<tr><th>ITEM</th><th>Performance</th><th>Test Condition</th></tr>
<tr><td>Thermal shock</td><td>Appearance: no damage.
Inductance: within±20%of initial value.
No disconnection or short circuit.</td><td>Condition for 1 cycle
Step1:-25±2℃，30±3 min.
Step2:Room temperature within 15 min.
Step3:+85±5℃，30±3 min.
Step4: Room temperature within 15 min.
Number of cycles: 50
<table>
<tr><th>Phase</th><th>Temperature(℃)</th><th>Time(min)</th></tr>
<tr><td>1</td><td>-25±2℃</td><td>30±3</td></tr>
<tr><td>2</td><td>Room Temp.</td><td>15</td></tr>
<tr><td>3</td><td>+85±2℃</td><td>30±3</td></tr>
<tr><td>4</td><td>Room Temp.</td><td>15</td></tr>
</table>
</td></tr>
<tr><td>Humidity Resistance</td><td>Appearance: no damage.
Inductance: within±20%of initial value.
No disconnection or short circuit.</td><td>Humidity:90~95%RH.
Temperature:40±5℃.
Applied current:rated current.
Duration:500±12hrs.
Measured at room temperature after placing for 2 to 3hrs.</td></tr>
</table>

Unshielded Power Inductor / PI Series

.Packing Specifications



TYPE	Parts per reel	Tape and Reel Dimension(mm)						
	Pcs / Reel	A	B	C	D	E	F	G
PI0301	3000	12.5	100	13	330	5.5 ± 0.1	12.0 ± 0.3	8.0 ± 0.1
PI0302	2000	12.5	100	13	330	5.5 ± 0.1	12.0 ± 0.3	8.0 ± 0.1
PI0403	1500	12.5	100	13	330	5.5 ± 0.1	12.0 ± 0.3	8.0 ± 0.1
PI0502	1500	12.5	100	13	330	5.5 ± 0.1	12.0 ± 0.3	8.0 ± 0.1
PI0503	1500	12.5	100	13	330	5.5 ± 0.1	12.0 ± 0.3	8.0 ± 0.1
PI0504	1500	12.5	100	13	330	5.5 ± 0.1	12.0 ± 0.3	8.0 ± 0.1
PI0703	1000	16.5	100	13	330	7.5 ± 0.1	16 ± 0.3	12 ± 0.1
PI0705	1000	16.5	100	13	330	7.5 ± 0.1	16 ± 0.3	12 ± 0.1
PI1004	1000	24.5	100	13	330	11.5	24.5	12
PI1005	500	24.5	100	13	330	11.5	24.5	12