

## SMD Power Inductors / PIC TYPE

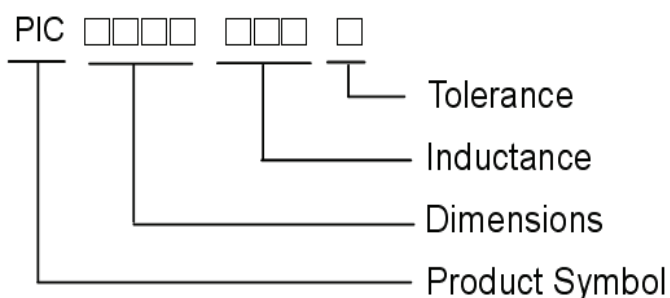
### Features:

1. Magnetic Shielded surface mount inductor with high current rating. (磁遮蔽表面黏著型式電感, 具高額定電流)
2. Low resistance to keep power loss minimum. (低電阻使功率損失降至最低)

### Applications:

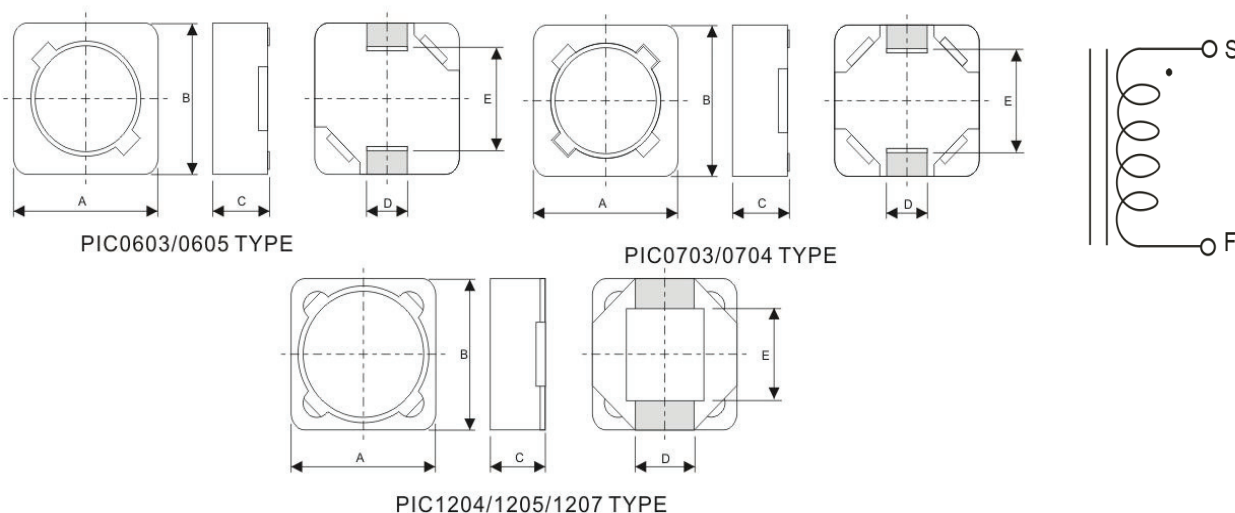
Excellent for power line DC-DC conversion applications used in hard disk, notebook computers and other electronic equipment.

### Product Identification :



### Shape and Dimension

### Schematic

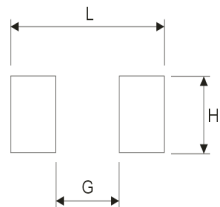


Dimensions in mm

TYPE	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
PIC0603	6.2±0.3	6.0±0.3	3.5 Max	1.5±0.2	2.8±0.2
PIC0605	6.2±0.3	6.0±0.3	5.0 Max	1.5±0.2	2.8±0.2
PIC0703	7.3±0.3	7.3±0.3	3.5 Max	1.8±0.2	5.0±0.2
PIC0704	7.3±0.3	7.3±0.3	4.5 Max	1.8±0.2	5.0±0.2
PIC1204	12.0±0.3	12.0±0.3	5.0 Max	5.0±0.2	7.6±0.2
PIC1205	12.0±0.3	12.0±0.3	6.0 Max	5.0±0.2	7.6±0.2
PIC1207	12.0±0.3	12.0±0.3	8.0 Max	5.0±0.2	7.6±0.2

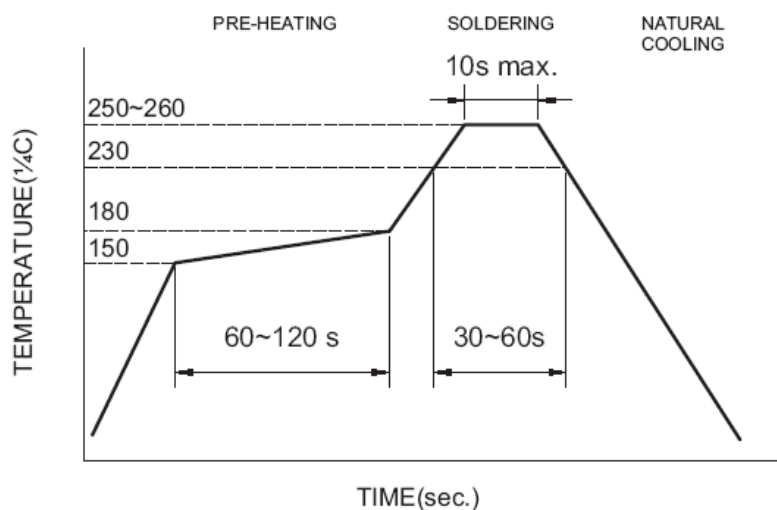
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### Land Patterns for Reflow Soldering



TYPE	L(mm)	G(mm)	H(mm)
PIC0603	7.0	2.5	1.8
PIC0605	7.0	2.5	1.8
PIC0703	7.8	4.8	2.2
PIC0704	7.8	4.8	2.2
PIC1204	12.6	7.0	5.4
PIC1205	12.6	7.0	5.4
PIC1207	12.6	7.0	5.4

### Recommended Reflow Soldering Conditions (For Lead Free)



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### Electrical Characteristics ( PIC0603 TYPE )

Part No.	INDUCTANCE ( $\mu$ H)	Tolerane ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC0603-100□	10	20	1.10	0.15	1.0KHz/1.0V
PIC0603-120□	12	20	1.00	0.20	1.0KHz/1.0V
PIC0603-150□	15	20	0.90	0.23	1.0KHz/1.0V
PIC0603-180□	18	20	0.80	0.27	1.0KHz/1.0V
PIC0603-220□	22	20	0.74	0.34	1.0KHz/1.0V
PIC0603-270□	27	20	0.66	0.38	1.0KHz/1.0V
PIC0603-330□	33	20	0.59	0.45	1.0KHz/1.0V
PIC0603-390□	39	20	0.54	0.49	1.0KHz/1.0V
PIC0603-470□	47	20	0.50	0.69	1.0KHz/1.0V
PIC0603-560□	56	20	0.46	0.78	1.0KHz/1.0V
PIC0603-680□	68	20	0.42	1.07	1.0KHz/1.0V
PIC0603-820□	82	20	0.38	1.21	1.0KHz/1.0V
PIC0603-101□	100	20	0.34	1.39	1.0KHz/1.0V
PIC0603-121□	120	20	0.31	1.90	1.0KHz/1.0V
PIC0603-151□	150	20	0.28	2.18	1.0KHz/1.0V
PIC0603-181□	180	20	0.26	2.77	1.0KHz/1.0V
PIC0603-221□	220	20	0.23	3.12	1.0KHz/1.0V
PIC0603-271□	270	20	0.22	4.38	1.0KHz/1.0V
PIC0603-331□	330	20	0.19	4.94	1.0KHz/1.0V

### Electrical Characteristics ( PIC0605 TYPE )

Part No.	INDUCTANCE ( $\mu$ H)	Tolerane ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC0605-100□	10	20	1.35	0.12	1.0KHz/1.0V
PIC0605-120□	12	20	1.22	0.13	1.0KHz/1.0V
PIC0605-150□	15	20	1.11	0.18	1.0KHz/1.0V
PIC0605-180□	18	20	1.02	0.24	1.0KHz/1.0V
PIC0605-220□	22	20	0.91	0.27	1.0KHz/1.0V
PIC0605-270□	27	20	0.82	0.30	1.0KHz/1.0V
PIC0605-330□	33	20	0.74	0.33	1.0KHz/1.0V
PIC0605-390□	39	20	0.69	0.37	1.0KHz/1.0V
PIC0605-470□	47	20	0.62	0.52	1.0KHz/1.0V
PIC0605-560□	56	20	0.58	0.56	1.0KHz/1.0V
PIC0605-680□	68	20	0.51	0.63	1.0KHz/1.0V
PIC0605-820□	82	20	0.46	0.71	1.0KHz/1.0V
PIC0605-101□	100	20	0.42	1.03	1.0KHz/1.0V
PIC0605-121□	120	20	0.38	1.15	1.0KHz/1.0V
PIC0605-151□	150	20	0.35	1.68	1.0KHz/1.0V
PIC0605-181□	180	20	0.32	1.87	1.0KHz/1.0V
PIC0605-221□	220	20	0.29	2.08	1.0KHz/1.0V

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### Electrical Characteristics (PIC0605 TYPE)

Part No.	INDUCTANCE ( $\mu$ H)	Tolerance ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC0605-271□	270	20	0.26	2.37	1.0KHz/1.0V
PIC0605-331□	330	20	0.23	2.67	1.0KHz/1.0V
PIC0605-391□	390	20	0.22	2.94	1.0KHz/1.0V
PIC0605-471□	470	20	0.20	3.93	1.0KHz/1.0V
PIC0605-561□	560	20	0.18	5.43	1.0KHz/1.0V
PIC0605-681□	680	20	0.17	7.32	1.0KHz/1.0V
PIC0605-821□	820	20	0.15	8.24	1.0KHz/1.0V
PIC0605-102□	1000	20	0.14	9.26	1.0KHz/1.0V

### Electrical Characteristics (PIC0703 TYPE)

Part No.	INDUCTANCE ( $\mu$ H)	Tolerance ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC0703-100□	10	20	1.68	0.072	1.0KHz/1.0V
PIC0703-120□	12	20	1.52	0.098	1.0KHz/1.0V
PIC0703-150□	15	20	1.33	0.130	1.0KHz/1.0V
PIC0703-180□	18	20	1.20	0.140	1.0KHz/1.0V
PIC0703-220□	22	20	1.07	0.190	1.0KHz/1.0V
PIC0703-270□	27	20	0.96	0.210	1.0KHz/1.0V
PIC0703-330□	33	20	0.91	0.240	1.0KHz/1.0V
PIC0703-390□	39	20	0.77	0.320	1.0KHz/1.0V
PIC0703-470□	47	20	0.76	0.360	1.0KHz/1.0V
PIC0703-560□	56	20	0.68	0.470	1.0KHz/1.0V
PIC0703-680□	68	20	0.61	0.520	1.0KHz/1.0V
PIC0703-820□	82	20	0.57	0.690	1.0KHz/1.0V
PIC0703-101□	100	20	0.50	0.790	1.0KHz/1.0V
PIC0703-121□	120	20	0.49	0.890	1.0KHz/1.0V
PIC0703-151□	150	20	0.43	1.270	1.0KHz/1.0V
PIC0703-181□	180	20	0.39	1.450	1.0KHz/1.0V
PIC0703-221□	220	20	0.35	1.650	1.0KHz/1.0V
PIC0703-271□	270	20	0.32	2.310	1.0KHz/1.0V
PIC0703-331□	330	20	0.28	2.620	1.0KHz/1.0V
PIC0703-471□	470	20	0.24	4.180	1.0KHz/1.0V
PIC0703-561□	560	20	0.22	4.670	1.0KHz/1.0V
PIC0703-681□	680	20	0.19	5.730	1.0KHz/1.0V
PIC0703-821□	820	20	0.18	6.540	1.0KHz/1.0V
PIC0703-102□	1000	20	0.16	9.440	1.0KHz/1.0V

### Electrical Characteristics (PIC0704 TYPE)

Part No.	INDUCTANCE ( $\mu$ H)	Tolerance ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC0704-100□	10	20	1.84	0.049	1.0KHz/1.0V
PIC0704-120□	12	20	1.71	0.058	1.0KHz/1.0V

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### Electrical Characteristics ( PIC0704 TYPE )

Part No.	INDUCTANCE ( $\mu$ H)	Tolerance ( $\pm$ %)	Rated Current ( A ) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC0704-150□	15	20	1.47	0.081	1.0KHz/1.0V
PIC0704-180□	18	20	1.31	0.091	1.0KHz/1.0V
PIC0704-220□	22	20	1.23	0.110	1.0KHz/1.0V
PIC0704-270□	27	20	1.12	0.150	1.0KHz/1.0V
PIC0704-330□	33	20	0.96	0.170	1.0KHz/1.0V
PIC0704-390□	39	20	0.91	0.230	1.0KHz/1.0V
PIC0704-470□	47	20	0.88	0.260	1.0KHz/1.0V
PIC0704-560□	56	20	0.75	0.350	1.0KHz/1.0V
PIC0704-680□	68	20	0.69	0.380	1.0KHz/1.0V
PIC0704-820□	82	20	0.61	0.430	1.0KHz/1.0V
PIC0704-101□	100	20	0.60	0.610	1.0KHz/1.0V
PIC0704-121□	120	20	0.52	0.660	1.0KHz/1.0V
PIC0704-151□	150	20	0.46	0.880	1.0KHz/1.0V
PIC0704-181□	180	20	0.42	0.980	1.0KHz/1.0V
PIC0704-221□	220	20	0.36	1.170	1.0KHz/1.0V
PIC0704-271□	270	20	0.34	1.640	1.0KHz/1.0V
PIC0704-331□	330	20	0.32	1.860	1.0KHz/1.0V
PIC0704-391□	390	20	0.29	2.850	1.0KHz/1.0V
PIC0704-471□	470	20	0.26	3.010	1.0KHz/1.0V
PIC0704-561□	560	20	0.23	3.620	1.0KHz/1.0V
PIC0704-681□	680	20	0.22	4.630	1.0KHz/1.0V
PIC0704-821□	820	20	0.20	5.200	1.0KHz/1.0V
PIC0704-102□	1000	20	0.18	6.000	1.0KHz/1.0V

### Electrical Characteristics ( PIC1204 TYPE )

Part No.	INDUCTANCE ( $\mu$ H)	Tolerance ( $\pm$ %)	Rated Current ( A ) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC1204-3R9□	3.9	20	6.50	0.015	100.0KHz/1.0V
PIC1204-4R7□	4.7	20	5.70	0.018	100.0KHz/1.0V
PIC1204-6R8□	6.8	20	4.90	0.023	100.0KHz/1.0V
PIC1204-8R2□	8.2	20	4.60	0.026	100.0KHz/1.0V
PIC1204-100□	10	20	4.50	0.028	100.0KHz/1.0V
PIC1204-120□	12	20	4.00	0.038	100.0KHz/1.0V
PIC1204-150□	15	20	3.20	0.050	100.0KHz/1.0V
PIC1204-180□	18	20	3.10	0.057	100.0KHz/1.0V
PIC1204-220□	22	20	2.90	0.066	100.0KHz/1.0V
PIC1204-270□	27	20	2.80	0.080	100.0KHz/1.0V
PIC1204-330□	33	20	2.70	0.097	100.0KHz/1.0V
PIC1204-390□	39	20	2.10	0.132	100.0KHz/1.0V
PIC1204-470□	47	20	1.90	0.160	100.0KHz/1.0V
PIC1204-560□	56	20	1.80	0.190	100.0KHz/1.0V
PIC1204-680□	68	20	1.50	0.220	100.0KHz/1.0V

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### Electrical Characteristics (PIC1204 TYPE)

Part No.	INDUCTANCE ( $\mu$ H)	Tolerane ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC1204-820□	82	20	1.30	0.260	100.0KHz/1.0V
PIC1204-101□	100	20	1.20	0.308	100.0KHz/1.0V
PIC1204-121□	120	20	1.10	0.380	100.0KHz/1.0V
PIC1204-151□	150	20	0.95	0.530	100.0KHz/1.0V
PIC1204-181□	180	20	0.85	0.620	100.0KHz/1.0V
PIC1204-221□	220	20	0.80	0.700	100.0KHz/1.0V
PIC1204-271□	270	20	0.60	0.870	100.0KHz/1.0V
PIC1204-331□	330	20	0.50	0.990	100.0KHz/1.0V

### Electrical Characteristics (PIC1205 TYPE)

Part No.	INDUCTANCE ( $\mu$ H)	Tolerane ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC1205-1R3□	1.3	20	8.00	0.012	7.96MHz/1.0V
PIC1205-2R1□	2.1	20	7.00	0.014	7.96MHz/1.0V
PIC1205-3R1□	3.1	20	6.00	0.017	7.96MHz/1.0V
PIC1205-4R4□	4.4	20	5.00	0.020	7.96MHz/1.0V
PIC1205-5R8□	5.8	20	4.40	0.021	7.96MHz/1.0V
PIC1205-7R5□	7.5	20	4.20	0.024	7.96MHz/1.0V
PIC1205-100□	10	20	4.00	0.025	1.0KHz/1.0V
PIC1205-120□	12	20	3.50	0.027	1.0KHz/1.0V
PIC1205-150□	15	20	3.30	0.030	1.0KHz/1.0V
PIC1205-180□	18	20	3.00	0.034	1.0KHz/1.0V
PIC1205-220□	22	20	2.80	0.036	1.0KHz/1.0V
PIC1205-270□	27	20	2.30	0.051	1.0KHz/1.0V
PIC1205-330□	33	20	2.10	0.057	1.0KHz/1.0V
PIC1205-390□	39	20	2.00	0.068	1.0KHz/1.0V
PIC1205-470□	47	20	1.80	0.075	1.0KHz/1.0V
PIC1205-560□	56	20	1.70	0.110	1.0KHz/1.0V
PIC1205-680□	68	20	1.50	0.120	1.0KHz/1.0V
PIC1205-820□	82	20	1.40	0.140	1.0KHz/1.0V
PIC1205-101□	100	20	1.30	0.160	1.0KHz/1.0V
PIC1205-121□	120	20	1.10	0.170	1.0KHz/1.0V
PIC1205-151□	150	20	1.00	0.230	1.0KHz/1.0V
PIC1205-181□	180	20	0.90	0.290	1.0KHz/1.0V
PIC1205-221□	220	20	0.80	0.400	1.0KHz/1.0V
PIC1205-271□	270	20	0.75	0.460	1.0KHz/1.0V
PIC1205-331□	330	20	0.68	0.510	1.0KHz/1.0V
PIC1205-391□	390	20	0.65	0.690	1.0KHz/1.0V
PIC1205-471□	470	20	0.58	0.770	1.0KHz/1.0V
PIC1205-561□	560	20	0.54	0.860	1.0KHz/1.0V
PIC1205-681□	680	20	0.48	1.200	1.0KHz/1.0V
PIC1205-821□	820	20	0.43	1.340	1.0KHz/1.0V
PIC1205-102□	1000	20	0.40	1.530	1.0KHz/1.0V

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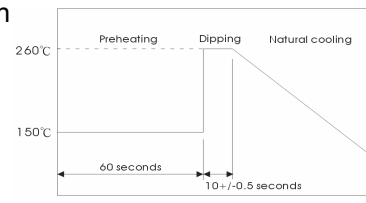
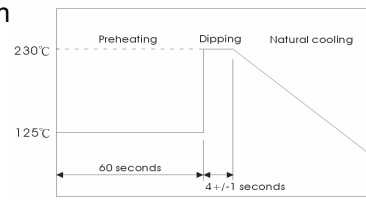
### Electrical Characteristics (PIC1207 TYPE)

Part No.	INDUCTANCE ( $\mu$ H)	Tolerance ( $\pm$ %)	Rated Current (A) Max	DCR ( $\Omega$ ) Max	Test Condition
PIC1207-1R2□	1.2	20	9.80	0.0070	100.0KHz/1.0V
PIC1207-2R4□	2.4	20	8.00	0.0115	100.0KHz/1.0V
PIC1207-3R5□	3.5	20	7.50	0.0135	100.0KHz/1.0V
PIC1207-4R7□	4.7	20	6.80	0.0158	100.0KHz/1.0V
PIC1207-6R1□	6.1	20	6.60	0.0176	100.0KHz/1.0V
PIC1207-7R6□	7.6	20	5.90	0.0200	100.0KHz/1.0V
PIC1207-100□	10	20	5.40	0.0216	1.0KHz/1.0V
PIC1207-120□	12	20	4.90	0.0243	1.0KHz/1.0V
PIC1207-150□	15	20	4.50	0.0270	1.0KHz/1.0V
PIC1207-180□	18	20	3.90	0.0392	1.0KHz/1.0V
PIC1207-220□	22	20	3.60	0.0432	1.0KHz/1.0V
PIC1207-270□	27	20	3.40	0.0459	1.0KHz/1.0V
PIC1207-330□	33	20	3.00	0.0648	1.0KHz/1.0V
PIC1207-390□	39	20	2.75	0.0729	1.0KHz/1.0V
PIC1207-470□	47	20	2.50	0.1000	1.0KHz/1.0V
PIC1207-560□	56	20	2.35	0.1100	1.0KHz/1.0V
PIC1207-680□	68	20	2.10	0.1400	1.0KHz/1.0V
PIC1207-820□	82	20	1.95	0.1600	1.0KHz/1.0V
PIC1207-101□	100	20	1.70	0.2200	1.0KHz/1.0V
PIC1207-121□	120	20	1.60	0.2500	1.0KHz/1.0V
PIC1207-151□	150	20	1.42	0.2800	1.0KHz/1.0V
PIC1207-181□	180	20	1.30	0.3500	1.0KHz/1.0V
PIC1207-221□	220	20	1.16	0.3900	1.0KHz/1.0V
PIC1207-271□	270	20	1.06	0.5600	1.0KHz/1.0V
PIC1207-331□	330	20	0.95	0.6400	1.0KHz/1.0V
PIC1207-391□	390	20	0.88	0.7000	1.0KHz/1.0V
PIC1207-471□	470	20	0.79	0.9800	1.0KHz/1.0V
PIC1207-561□	560	20	0.73	1.0700	1.0KHz/1.0V
PIC1207-681□	680	20	0.67	1.4600	1.0KHz/1.0V
PIC1207-821□	820	20	0.60	1.6400	1.0KHz/1.0V
PIC1207-102□	1000	20	0.55	1.8200	1.0KHz/1.0V

#### NOTE:

1. Inductance is measured by LCR-meter 4284 / 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. Maximum allowable DC current is that which causes a 25% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).
5. Operating temperature -55°C ~ +125°C.
6. All test data is referenced to 25°C ambient.
7. □Tolerance : K=10% ; M=20% ; N=30%

**SMD Power Inductors / PIC TYPE**
**Reliability and Test Conditions(可靠性測試條件)**

ITEM	Performance	Test Condition
Operating Temperature 操作溫度	-55~+125°C	
Storage temperature 儲存溫度	-40~+85°C	
Rated Current 額定電流	Refer to standard electrical characteristics list. 參考標準特性規格表	
Temperature Rise Test 溫昇測試	40°C max.( $\Delta t$ ) 40度最大	
<b>Electrical Performance Test</b>		
Solder Heat Resistance 耐焊錫熱	Appearance: No significant abnormality. Inductance change: Within $\pm 20\%$ . 外觀: 無顯著異常. 電感值: 變異性在初始值20%內	Preheat: 150°C, 60sec. Solder: H63A Solder temperature: 260 $\pm 5$ °C Flux for lead free: rosin Dip time: 10 $\pm 0.5$ sec. 預熱: 150°C, 60sec. 錫爐溫度: 260 $\pm 5$ °C 時間: 10 $\pm 0.5$ sec. 助焊劑: rosin 
Solderability Test 端面焊錫性	More than 90% of the terminal electrode should be covered with solder. 端電極之錫覆蓋面達90%以上。	Preheat: 125 $\pm 25$ °C, 60sec. Solder: H63A Solder temperature: 230 $\pm 5$ °C Flux for lead free: rosin Dip time: 4 $\pm 1$ sec. 預熱: 125 $\pm 25$ °C, 60sec. 錫爐溫度: 230 $\pm 5$ °C 時間: 4 $\pm 1$ sec. 助焊劑: rosin 
High Temperature Resistance Test 高溫放置測試	Appearance: no damage. Inductance: within $\pm 20\%$ of initial value. No disconnection or short circuit. 外觀不能破損. 電感值: 變異值在初始值20%內. 電性無短路或斷線	Temperature: 85 $\pm 2$ °C. Applied current: rated current. Duration: 500 hrs.
Humidity Resistance Test 高濕放置測試	Appearance: no damage. Inductance: within $\pm 20\%$ of initial value. No disconnection or short circuit. 外觀不能破損. 電感值: 變異值在初始值20%內. 電性無短路或斷線	Temperature: 40 $\pm 2$ °C. Applied current: rated current. Duration: 500 hrs. Humidity: 90~95%

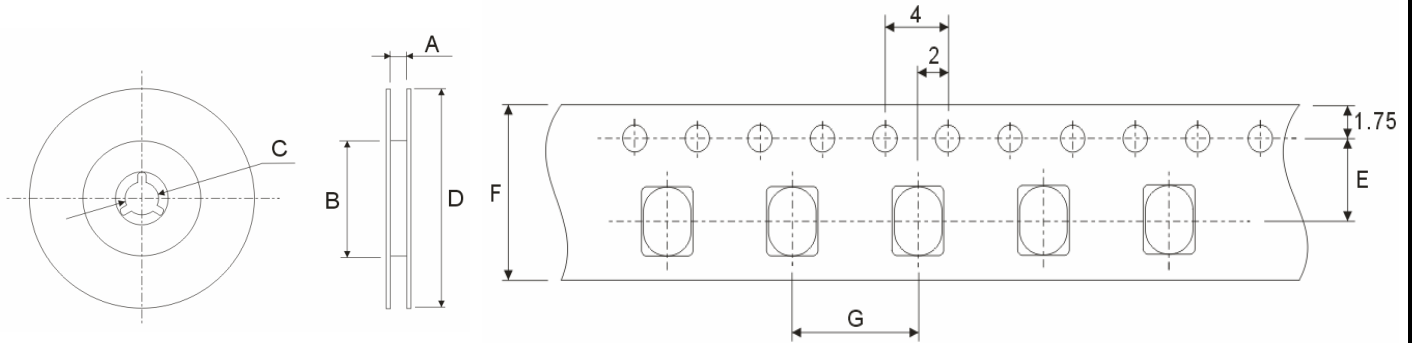


**SMD Power Inductors / PIC TYPE**
**4 . Reliability and Test Conditions(可靠性測試條件)**

ITEM	Performance	Test Condition															
Thermal shock 熱衝擊試驗	Appearance: no damage. Inductance: within±20%of initial value. No disconnection or short circuit. 外觀不能破損. 電感值:變異值在初始值20%內. 電性無短路或斷線	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 border="1" data-bbox="1118 618 1457 797"> <thead> <tr> <th>Phase</th> <th>Temperature(℃)</th> <th>Time (min)</th> </tr> </thead> <tbody> <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> </tbody> </table>	Phase	Temperature(℃)	Time (min)	1	-25±2℃	30±3	2	Room Temp	15	3	+85±2℃	30±3	4	Room Temp	15
Phase	Temperature(℃)	Time (min)															
1	-25±2℃	30±3															
2	Room Temp	15															
3	+85±2℃	30±3															
4	Room Temp	15															

## SMD Power Inductors / PIC TYPE

### .Packing Specifications



TYPE	Packaging Quantity			Tape and Reel Dimension						
	Pcs / Reel	Inner box	Carton	A	B	C	D	E	F	G
PIC0603	1000	4000	8000	16.5	100	13±0.2	330	7.5	16	12
PIC0605	1000	4000	8000	16.5	100	13±0.2	330	7.5	16	12
PIC0703	1000	4000	8000	16.5	100	13±0.2	330	7.5	16	12
PIC0704	1000	4000	8000	16.5	100	13±0.2	330	7.5	16	12
PIC1204	500	1500	3000	24.5	100	13±0.2	330	11.5	24	16
PIC1205	500	1500	3000	24.5	100	13±0.2	330	11.5	24	16
PIC1207	500	1500	3000	24.5	100	13±0.2	330	11.5	24	16

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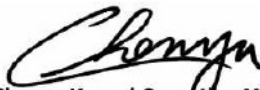


The following sample(s) was/were submitted and identified by/on behalf of the client as :

Sample Description	:	POWER INDUCTOR SERIES
Style/Item No.	:	POWER INDUCTOR SERIES
Sample Receiving Date	:	2008/01/30
Testing Period	:	2008/01/30 TO 2008/02/04

=====

Test Result(s) : Please refer to next page(s).



Chenyu Kung / Operation Manager  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory – Taipei

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#### Test Result(s)

PART NAME NO.1 : MIXED ALL PARTS

Test Item (s):	Unit	Method	MDL	Result
				No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321, Ed.1 111/54/CDV. Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321, Ed.1 111/54/CDV. Determination of Lead by ICP-AES.	2	65
Mercury (Hg)	mg/kg	With reference to IEC 62321, Ed.1 111/54/CDV. Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321, Ed.1 111/54/CDV. Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.	2	n.d.
Halogen	---	With reference to BS EN 14582:2007. Analysis was performed by IC method for F, Cl, Br, I content.	---	---
Halogen-Fluorine (F) (CAS No.: 007782-41-4)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Fluorine content.	50	n.d.
Halogen-Chlorine (Cl) (CAS No.: 007782-50-5)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Chlorine content.	50	n.d.
Halogen-Bromine (Br) (CAS No.: 007726-95-6)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Bromine content.	50	325
Halogen-Iodine (I) (CAS No.: 007553-56-2)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Iodine content.	50	n.d.

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SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.  
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Test Item (s):	Unit	Method	MDL	Result
				No.1
<b>Sum of PBBs</b>	mg/kg	With reference to IEC 62321, Ed.1 111/54/CDV. Determination of PBB and PBDE by GC/MS.	-	n.d.
Monobromobiphenyl			5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl			5	n.d.
Tetrabromobiphenyl			5	n.d.
Pentabromobiphenyl			5	n.d.
Hexabromobiphenyl			5	n.d.
Heptabromobiphenyl			5	n.d.
Octabromobiphenyl			5	n.d.
Nonabromobiphenyl			5	n.d.
Decabromobiphenyl			5	n.d.
<b>Sum of PBDEs (Mono to Nona) (Note 4)</b>			-	n.d.
Monobromobiphenyl ether			5	n.d.
Dibromobiphenyl ether			5	n.d.
Tribromobiphenyl ether			5	n.d.
Tetrabromobiphenyl ether			5	n.d.
Pentabromobiphenyl ether			5	n.d.
Hexabromobiphenyl ether			5	n.d.
Heptabromobiphenyl ether			5	n.d.
Octabromobiphenyl ether			5	n.d.
Nonabromobiphenyl ether	5	n.d.		
Decabromobiphenyl ether	5	n.d.		
<b>Sum of PBDEs (Mono to Deca)</b>	-	n.d.		

- Note :
1. mg/kg = ppm
  2. n.d. = Not Detected
  3. MDL = Method Detection Limit
  4. According to 2005/717/EC DecaBDE is exempt.
  5. "- " = Not Regulated
  6. "----" = Not Conducted
  7. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

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