

POS □□□□ TYPE

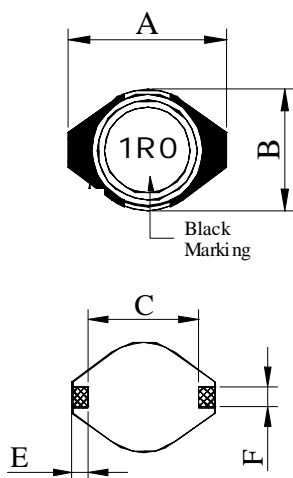
● FEATURE

1. High current capacity and Low DCR (POS1608 used ceramic base)
2. High heat resistance, ideal for reflow soldering
3. Magnetic shielded type

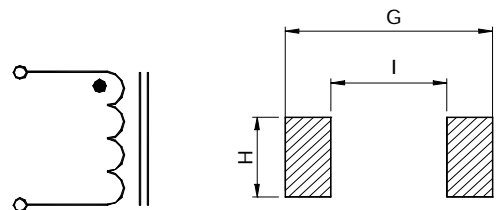
● Applications

1. Portable communication equipment, notebook computer
2. Set top box and Notebook and Server,etc

● Shape and Dimension



● Schematics and Land Patterns(mm)



● Specification

Dimension in m/m

TYPE	A	B	D	C	E	F	G	I	H
POS 1608	6.6 MAX	4.45 MAX	2.92 MAX	4.32	1.27	1.02	6.70	4.30	1.30
POS 3316	13.0 MAX	9.5 MAX	5.21 MAX	7.62	2.54	2.54	13.00	7.62	3.00
POS 5022	18.6 MAX	15.3 MAX	7.62 MAX	12.70	2.54	2.54	18.70	12.70	3.00

Note1. Measurement frequency of Inductance value : at 100KHz, 0.1V

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. IDC : This indicates the value of current when the inductances is 30% lower than its initial value at D.C. superimposition or D.C. current when at $\Delta t=40^{\circ}\text{C}$, which is lower. ($T_a=20^{\circ}\text{C}$)

Note4. Inductance tolerance: M: $\pm 20\%$

Note5. Ordering Code: TYPE NAME: POS3316

Main Inductance: 100 (10uH)

Tolerance : M ($\pm 20\%$)

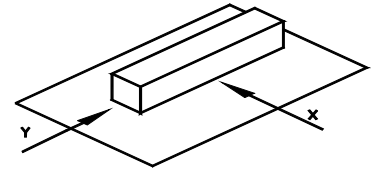
Note6. Packaging: Taping ; Quantity: POS1608: 2000 Pieces/reel ; POS3316: 1000 Pieces/reel ;

POS5022: 300 Pieces/reel ;

Part No.	Inductance(uH)	D.C.R.(ΩMax)/Rated D.C. Current(A)		
		POS 1608	POS 3316	POS 5022
1R0	1.0	0.040 / 3.00	0.021 / 5.00	
1R5	1.5	0.045 / 2.80	0.022 / 4.50	
2R2	2.2	0.050 / 1.80	0.032 / 3.80	
3R3	3.3	0.055 / 1.60	0.039 / 3.30	
4R7	4.7	0.060 / 1.40	0.054 / 2.70	
6R8	6.8	0.065 / 1.20	0.075 / 2.20	
100	10	0.075 / 1.00	0.101 / 2.00	0.040 / 3.90
150	15	0.090 / 0.80	0.150 / 1.50	0.048 / 3.40
220	22	0.110 / 0.70	0.207 / 1.30	0.059 / 3.10
270	27			
330	33	0.190 / 0.60	0.334 / 1.10	0.075 / 2.80
390	39			
470	47	0.230 / 0.50	0.472 / 0.80	0.097 / 2.40
560	56			
680	68	0.290 / 0.40	0.660 / 0.70	0.138 / 2.00
820	82			
101	100	0.480 / 0.30	1.110 / 0.60	0.207 / 1.70
121	120			
151	150	0.590 / 0.26	1.550 / 0.50	0.293 / 1.30
181	180			
221	220	0.770 / 0.22	2.000 / 0.37	0.470 / 1.10
271	270			
331	330	1.400 / 0.20		0.780 / 0.86
471	470	1.800 / 0.19		1.080 / 0.73
561	560			
681	680	2.200 / 0.18		1.400 / 0.64
821	820			
102	1000	3.400 / 0.15	8.30 / 0.17	2.010 / 0.53
152	1500	4.200 / 0.12		
222	2200	8.500 / 0.10		
332	3300	11.00 / 0.08		
472	4700	13.90 / 0.06		
682	6800	25.00 / 0.04		
103	10000	32.80 / 0.02		

GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.
Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C degree Celsius), inductance deviation within $\pm 5.0\%$, after 96 hours.
7. Humidity characteristics (Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds (See attached recommend reflow)
11. Storage condition: Temperature Range: 0°C ~ 35°C ; -40°C ~ 105°C (after PCB) · Humidity Range: 50% ~ 70% RH
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test

Lead-free the recommended reflow condition

