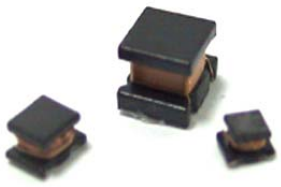
POI SERIES



Features

The POI1C/POI3C/POI4C SERIES are miniature SMT wire –wound open magnetic path construction inductors with the low DCR, high current capacity.

They are excellent for use as choke coils in DC/DC converter DC power supply circuits.

The comparsive low cost.

POI1C

The small dimensions (3.2*1.6*1.8mm) allow parallel mounting on 2.5mm centers.

The maximum current rating upto 970mA for 0.12μH.

POI3C

The small dimensions (3.2*2.5*2.0mm)

The low DCR , high current & high inductance.

POI4C

The dimensions(4.5*3.2*2.6mm)

Low voltage drop and stable inductance with respect to temperature rise and DC current loading.

POI6C

The dimension(5.7*5.0*4.7mm)

The POI6C are SMT choke which have low DCR, high current capacity.

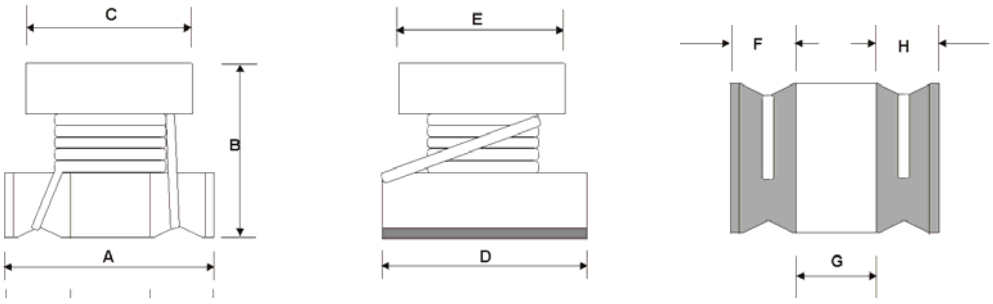
Be used in DC/DC converters and DC/Power supply circuits.

It is open magnetic path construction.

The comparsive low cost.

Inductance up to 10000uH.

Dimensions

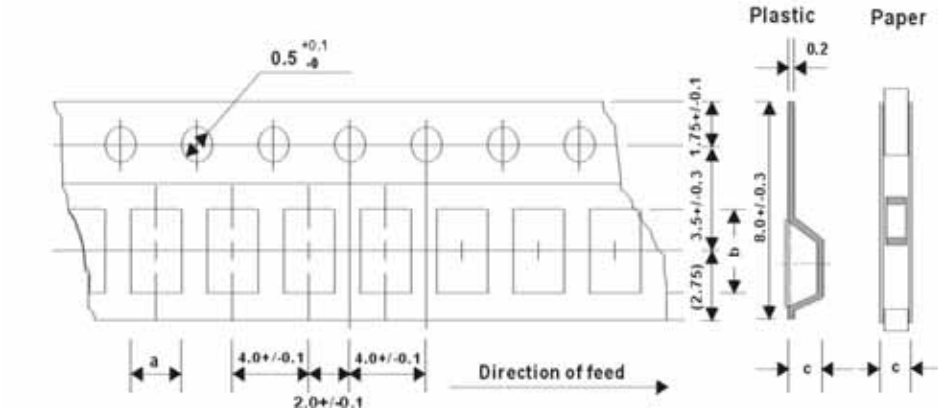


DIM:mm

Type	A	B	C	D	E	F	G	H
POI 1C	3.2±0.3	1.8±0.2	2.3±0.2	1.6±0.2	1.6±0.2	0.7 min	0.7 min	0.7min
POI 3C	3.2±0.3	2.0±0.2	2.5±0.2	2.5±0.2	2.5±0.2	0.7 min	0.7 min	0.7 min
POI 4C	4.5±0.3	2.6±0.2	3.6±0.2	3.2±0.2	3.2±0.2	1.0 min	1.0 min	1.0 min
POI 6C	5.7±0.3	4.7±0.3	5.0±0.3	5.0±0.3	5.0±0.3	1.3 min	1.7 min	1.3 min

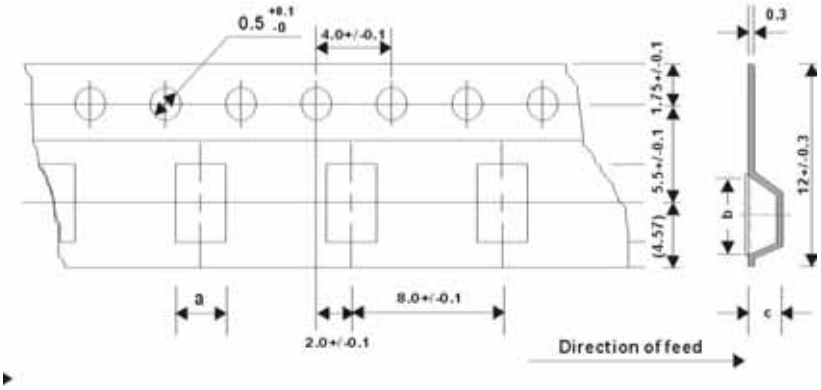
Packaging

8mm TYPE(PLASTIC AND PAPER TAPE)



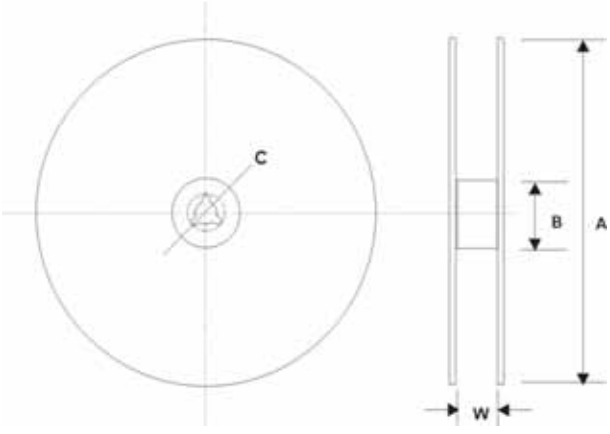
SERIES	a	b	c	Packaging Unit	
				180mm Reel	330mm Reel
POI1C	1.9	3.6	2.0	2000	7500
POI3C	2.9	3.6	2.1	2000	7500

12mm TYPE(PLASTIC AND PAPER TAPE)



SERIES	a	b	c	Packaging Unit	
				180mm Reel	330mm Reel
POI4C	3.6	4.9	2.7	500	2500
POI6C	5.4	6.1	5.0	350	---

REEL DIMENSIONS



		Φ180mm Reel	Φ330mm Reel
A		178 ± 2	328 ± 2
B		50 (min)	
C		Φ13 ± 0.5	
W	8mm Width Tape	10 ± 1.5	
	12mm Width	14 ± 1.5	

TYPE SPECIFICATIONS

1.All tape packaging conforms to 0806 specifications. Dimensions are described separately for each product.

2.Tape is wound clockwise. When tape is pulled toward the used , the feeding hole is observable on the right side of the tape.

POI 1C / 3C / 4C SERIES

Part Number	L (uH)	Test Freq. (MHz)	RDC(ohm MAX)			SRF(MHz MIN)			IDC(mA)		
			POI1C	POI3C	POI4C	POI1C	POI3C	POI4C	POI1C	POI3C	POI4C
R12	0.12	1MKz	0.12			250			970		
R22	0.22	1MKz	0.15			250			850		
R47	0.47	1MKz	0.22			180			700		
1R0	1.0	1MKz	0.38	0.12	0.08	100	96	100	510	800	1080
1R5	1.5	1MKz			0.09			85			1000
2R2	2.2	1MKz	0.55	0.18	0.11	50	64	60	430	600	900
3R3	3.3	1MKz			0.13			47			800
4R7	4.7	1MKz	0.85	0.28	0.15	31	43	35	340	450	750
6R8	6.8	1MKz			0.20			30			720
100	10	1MKz	1.8	0.6	0.24	20	26	23	230	300	650
150	15	1MKz			0.32			20			570
220	22	1MKz	4.0	0.95	0.60	14	19	15	160	250	420
330	33	1MKz			1.00			12			310
470	47	1MKz	10.5	1.8	1.10	10	15	10	100	170	280
680	68	1MKz			1.70			8.4			220
101	100	1MKz	16.0	5.0	2.20	7	10	6.8	80	100	190
151	150	1MKz			3.50			5.5			130
221	220	1MKz		12	4.00		6.8	4.5		70	110
331	330	1MKz		14	6.80		5.6	3.6		60	100
391	390	1MKz		23			5.0			60	
471	470	1KHz		26	8.50		5.0	3.0		60	90
561	560	1KHz		30			5.0			60	

1. The operating temperature range is -25℃ to +85℃.

2. Tolerance of inductance：0.12~6.8uH±20%(M),10~560uH±10%(K).

POI6C SERIES

Part Number	L (uH)	Test Freq. (MHz)	RDC (ohm MAX)	SRF (MHz MIN)	IDC (A)
R12	0.12	1MHz	0.0084	450	6.0
R27	0.27	1MHz	0.0112	300	5.3
R47	0.47	1MHz	0.0154	200	4.8
1R0	1.0	1MHz	0.0224	150	4.0
1R5	1.5	1MHz	0.0266	110	3.7
2R2	2.2	1MHz	0.0336	80	3.2
3R3	3.3	1MHz	0.0406	40	2.9
4R7	4.7	1MHz	0.0476	30	2.7
6R8	6.8	1MHz	0.0910	25	2.0
100	10	1MHz	0.1078	20	1.7
150	15	1MHz	0.182	17	1.4
220	22	1MHz	0.224	15	1.2
330	33	1MHz	0.364	12	0.9
470	47	1MHz	0.434	10	0.8
680	68	1MHz	0.812	7.6	0.64
101	100	100KHz	0.98	6.5	0.56
151	150	100KHz	2.10	5.0	0.42
221	220	100KHz	2.52	4.0	0.32
331	330	100KHz	4.90	3.1	0.27
471	470	100KHz	5.88	2.4	0.24
681	680	100KHz	9.24	1.9	0.19
102	1000	10KHZ	11.20	1.7	0.15
222	2200	10KHz	23.38	1.2	0.10
472	4700	10KHz	49.98	0.8	0.07
103	10000	10KHz	113.12	0.5	0.05

一、Mechanical Characteristics

No	Item	Specification	Test Conditions
01	Vibration test	No apparent damage L:within ±10% Z,Rdc:within ±20% Q:within ±30%	Frequency:10~55~10Hz Amplitude:1.5mm Direction:X,Y,Z Time:each 2 hours
02	IR Reflow Test	No apparent damage L:within ±10% Z,Rdc:within ±20% Q:within ±30%	IR Furnace Temperature:230 ±5ºC Time:3 MIN Cycle times:1 cycles
03	Resistance to soldering heat Test	No apparent damage Terminal surface Covered>75%	Solder Bath Temperature:260 ±5ºC Dwell Time:10 ±1sec Solder Bath:40%Pb/60%Sn Cycle time:1cycles

二、Environmental Characteristics

No	Item	Specification	Test Conditions
01	Temperature Cycling Test	No apparent damage L：within ±10% Z,Rdc：within ±20% Q：within ±30%	Low Temp./Time：-25 ±3ºC/30min High Temp./Time：85 ±2ºC/30min Transition Temp./Time：25 ±3ºC/30min Cycle time：5 cycles Recover at room temp.： 25 ±2ºC/2hr
02	Humidity Resistance Test	No apparent damage L：within ±10% Z,Rdc：within ±20% Q：within ±30%	Temperature/Relative humidity： 40 ±2ºC/90~95%RH Time：96hr Recovery at room temp.：25 ±2ºC/2hr
03	Heat Resisance Test	No apparent damage L：within ±10% Z,Rdc：within ±20% Q：within ±30%	Temperature/Relative humidit： 85±2ºC/20%RH Time：96hr Recovery at room temp.： 25 ±2ºC/2hr
04	Cold Test	No apparent damage L：within ±10% Z,Rdc：within ±20% Q：within ±30%	Temperature：-25 ±3ºC Time：96hr Recovery at room temp.：25 ±2ºC/2hr
05	Temperature Cycling Test	No apparent damage L：within ±10% Z,Rdc：within ±20% Q：within ±30%	Temp./Time：25 ±3ºC/3Hr. Relative humidity：95~100%RH Temp./Time：55 ±3ºC/9.5Hr. Relative humidity：90~96RH Temp./Time：25 ±3ºC/11.5Hr. Relative humidity：95~100%RH Cycle time：6cycles