

SSPU Series (Shielded Type)

Serie SSPU

Application

- Hand Phone of new generation.
- Personal computers.
- Other various appliances



Features

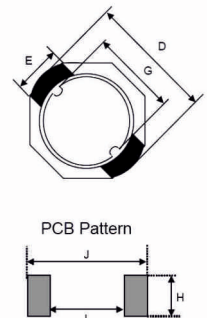
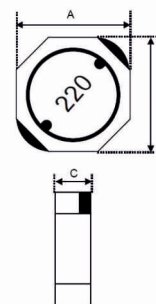
- Small size with the electrode attached to the ferrite RI core directly
- Magnetically shielded construction
- Ideal inductor for DC-DC conversion in notebook computer, Step-up or Step-down converters, etc.

Characteristics:

- Rated DC Current: The current when the inductance becomes 30% lower than its initial value (for SSPU0830,0840,0845 series: the inductance becomes 35% lower than its initial value.)
- Operating temperature range: -40°C -+105°C

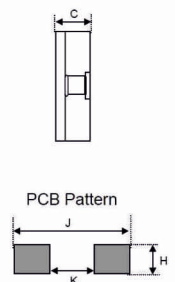
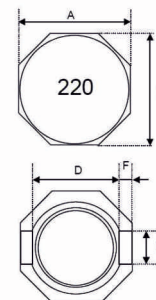
SSPU0302,0303....0603

Codes	A	B	C(Max)	D	E	G	H	I	J
SSPU0302	3,85±0,30	3,85±0,30	2,00	3,9±0,20	1,60	3,20	1,90	3,00	4,55
SSPU0303	3,85±0,30	3,85±0,30	3,00	3,9±0,20	1,60	3,20	1,90	3,00	4,55
SSPU0415	3,85±0,30	3,85±0,30	1,50	4,8max	1,60	3,00	2,00	2,60	5,20
SSPU0502	5,30max	5,30max	2,00	5,7±0,4	1,60	4,20	1,90	3,90	5,70
SSPU0503	5,3max	5,3max	3,00	5,7±0,4	1,60	4,20	1,90	3,90	5,70
SSPU0603	5,9±0,2	5,9±0,2	3,00	6,4±0,3	2,40	4,70	2,70	4,40	6,50



SSPU0830,0840,0845

Codes	A	B	C(Max)	Dref.	Eref.	Gref.	H	J	K
SSPU0830	8,00±0,3	8,00±0,3	3,00	6,30	2,50	1,20	2,80	10,10	6,10
SSPU0840	8,00±0,3	8,00±0,3	4,00	6,30	2,50	1,20	2,80	10,10	6,10
sspu0845	8,00±0,3	8,00±0,3	4,50	6,30	2,50	1,20	2,80	10,10	6,10

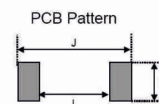
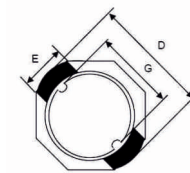
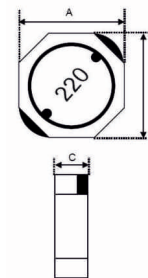


SSPU Series (Shielded Type)

Electrical Characteristic

SSPU0302/0303/0415

Inductance value code	L (μH)	Tol. (%)	DC Resistance (mΩ)			Rated DC Current (mA) Max.		
			0302	0303	0415	0302	0303	0415
R47	0,47	N	0,017	-	-	1,840	-	-
1R0	1,00	N	0,030	0,009	0,058	1,800	1,900	1,500
1R2	1,20	N	0,043	0,010	0,070	1,700	1,750	1,400
1R5	1,50	N	0,052	0,013	-	1,600	1,450	-
1R8	1,80	N	0,056	-	-	1,550	-	-
2R0	2,00	N	0,057	0,016	-	1,510	1,250	-
2R2	2,20	N	0,058	0,025	0,082	1,500	1,150	1,000
2R4	2,40	N	0,059	-	-	1,410	-	-
2R5	2,50	N	0,059	0,018	-	1,400	1,050	-
2R7	2,70	N	0,060	0,020	-	1,350	1,000	-
3R3	3,30	N	0,064	0,030	0,105	1,300	0,960	0,920
3R5	3,50	N	0,127	0,025	-	1,300	0,950	-
3R9	3,90	N	-	0,033	0,012	-	0,870	0,800
4R7	4,70	N	0,146	0,039	0,150	1,100	0,780	0,760
5R6	5,60	N	0,176	0,044	0,180	0,950	0,740	0,690
6R2	6,20	N	0,220	-	-	0,910	-	-
6R8	6,80	N	0,238	0,051	0,220	0,900	0,680	0,620
8R2	8,20	N	0,272	0,065	0,240	0,800	0,570	0,560
100	10,00	M*	0,299	0,092	0,255	0,700	0,430	0,500
120	12,00	M	0,350	0,100	-	0,620	0,380	-
150	15,00	M*	0,472	0,113	0,390	0,610	0,330	0,400
180	18,00	M	0,552	0,125	-	0,580	0,300	-
220	22,00	M	0,592	0,146	0,610	0,520	0,280	0,320
270	27,00	M	0,630	0,176	-	0,440	0,260	-
330	33,00	M	1,075	0,214	0,920	0,430	0,230	0,280
390	39,00	M	1,269	0,225	-	0,370	0,210	-
470	47,00	M	1,309	0,304	1,130	0,340	0,190	0,200
560	56,00	M	1,960	0,324	-	0,290	0,170	-
680	68,00	M	2,613	0,472	1,520	0,250	0,156	0,150
820	82,00	M	2,950	0,539	-	0,200	0,142	-
101	100,00	M	3,255	0,608	2,120	0,190	0,128	0,100
121	120,00	M	3,350	0,757	-	0,150	0,116	-
151	150,00	M	3,550	0,882	-	0,120	0,106	-
181	180,00	M	4,000	1,130	-	0,100	0,095	-
221	220,00	M	4,900	1,269	-	0,090	0,087	-
271	270,00	M	5,300	1,570	-	0,085	0,080	-
331	330,00	M	7,280	1,930	-	0,080	0,078	-
391	390,00	M	8,200	2,360	-	0,078	0,073	-
471	470,00	M	9,200	2,770	-	0,075	0,068	-
561	560,00	M	11,000	3,520	-	0,072	0,065	-
681	680,00	M	13,370	4,250	-	0,070	0,056	-
821	820,00	M	16,500	4,830	-	0,068	0,050	-
102	1000,00	M	19,550	6,260	-	0,065	0,047	-
122	1200,00	M	25,500	7,860	-	0,045	0,043	-
152	1500,00	M	36,150	9,980	-	0,038	0,039	-
182	1800,00	M	57,620	12,170	-	0,036	0,036	-
272	2700,00	M	-	16,120	-	-	0,029	-
332	3300,00	M	-	22,040	-	-	0,026	-



Notes:

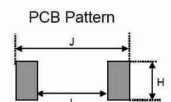
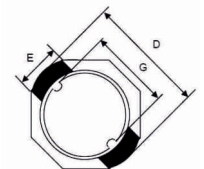
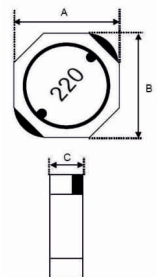
- Test Frequency:
SSPU0302, 0303 series: 0,47uH~8,2uH @100KHz 0,25V;
10uH~3300uH@1KHz 0,25V
SSPU0415 series: 100KHz 0,1V
- Tolerance of Inductance (for SSPU0415 series):
*0uH, 15uH (N±30%)
- Test equipment:
L/Q: HP4284A LCR meter
DCR: Milli-ohm meter
- Rated DC current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature range: -40°C~+105°C

SSPU Series (Shielded Type)

Electrical Characteristic

SSPU0502/0503/0603

Inductance value code	L (μH)	Tol. (%)	DC Resistance (mΩ)			Rated DC Current (mA) Ma		
			0502	0503	0603	0502	0503	0603
R47	0,47	N	0,015	0,010	-	2,330	4,820	-
R82	0,82	N	-	-	0,013	-	-	4,800
1R0	1,00	N	0,024	0,015	0,014	2,270	4,000	4,700
1R1	1,10	N	-	0,020	-	-	3,870	-
1R2	1,20	N	0,044	0,022	0,016	2,150	3,800	3,900
1R5	1,50	N	0,045	0,026	0,018	2,000	3,000	3,520
1R8	1,80	N	-	-	0,019	-	-	3,250
2R0	2,00	N	0,046	0,027	0,022	1,900	2,920	2,950
2R2	2,20	N	0,059	0,029	0,022	1,630	2,410	2,950
2R5	2,50	N	-	-	0,024	-	-	2,750
3R0	3,00	N	-	-	0,027	-	-	3,550
3R3	3,30	N	0,073	0,040	0,030	1,340	1,950	2,450
3R5	3,50	N	0,073	0,040	-	1,340	1,950	-
3R9	3,90	N	-	0,042	0,034	-	1,930	2,350
4R1	4,10	N	0,087	-	-	1,140	-	-
4R7	4,70	N	0,087	0,052	0,042	1,140	1,600	2,250
5R6	5,60	N	-	0,052	0,048	-	1,600	2,050
6R2	6,20	N	-	0,062	-	-	1,550	-
6R8	6,80	N	0,105	0,068	0,054	0,950	1,510	1,850
8R2	8,20	N	0,139	0,084	0,058	0,900	1,380	1,650
100,000	10,00	M	0,150	0,090	0,065	0,760	1,330	1,450
120,000	12,00	M	-	0,120	0,082	-	1,060	1,350
150,000	15,00	M	0,210	0,142	0,096	0,630	1,050	1,250
180,000	18,00	M	0,270	0,192	0,110	0,600	0,900	1,150
220,000	22,00	M	0,275	0,208	0,140	0,560	0,860	0,980
270,000	27,00	M	0,452	0,222	0,170	0,480	0,750	0,900
330,000	33,00	M	0,455	0,257	0,210	0,440	0,720	0,800
390,000	39,00	M	-	0,320	0,240	-	0,640	0,720
470,000	47,00	M	0,730	0,352	0,280	0,350	0,620	0,700
560,000	56,00	M	-	0,459	0,340	-	0,530	0,660
680,000	68,00	M	0,935	0,525	0,410	0,300	0,510	0,580
820,000	82,00	M	1,300	0,770	0,490	0,270	0,480	0,520
101,000	100,00	M	1,500	0,801	0,550	0,230	0,430	0,460
121,000	120,00	M	1,910	0,850	0,700	0,220	0,340	0,420
151,000	150,00	M	2,680	1,100	0,780	0,210	0,260	0,360
181,000	180,00	M	3,040	1,190	0,960	0,200	0,240	0,340
221,000	220,00	M	3,520	1,530	1,080	0,195	0,200	0,320
271,000	270,00	M	4,380	-	1,360	0,193	-	0,280
331,000	330,00	M	5,560	2,030	1,820	0,190	0,190	0,240
391,000	390,00	M	6,850	3,000	2,050	0,185	0,160	0,220
471,000	470,00	M	7,820	3,500	2,580	0,180	0,150	0,200
561,000	560,00	M	-	4,080	3,160	-	0,140	0,180
681,000	680,00	M	-	-	4,040	-	-	0,160
821,000	820,00	M	15,000	-	4,900	0,120	-	0,140
102,000	1000,00	M	-	-	6,000	-	-	0,130
122,000	1200,00	M	-	8,500	7,600	-	0,070	0,120
152,000	1500,00	M	-	10,000	9,440	-	0,650	0,100
182,000	1800,00	M	-	13,150	11,700	-	0,062	0,098
222,000	2200,00	M	-	19,000	13,400	-	0,050	0,095
252,000	2500,00	M	-	20,000	-	-	0,045	-
272,000	2700,00	M	-	-	17,300	-	-	0,086
332,000	3300,00	M	-	-	22,100	-	-	0,078



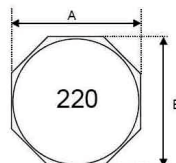
Notes:

1. Test Frequency: 0,47uH~8,,2uH @100KHz 0,25V; 10uH~3300uH@1KHz 0,25V
2. Rated DC current: The current when the inductance becomes 30% lower than its initial value.
3. Operating temperature range: -40°C~+105°C

SSPU Series (Shielded Type)

Electrical Characteristic

SSPU0830/0840/0845



Inductance value code	L (μH)	Tol. (%)	DC Resistance (mΩ)			Rated DC Current (mA) Max.		
			0830	0840	0845	0830	0840	0845
1R0	1,0	N	11,00	-	9,50	6,50	-	9,00
1R2	1,2	N	-	-	12,20	-	-	8,00
1R5	1,5	N	-	-	13,00	-	-	7,80
1R8	1,8	N	-	15,60	-	-	7,00	-
2R0	2,0	N	-	-	14,00	-	-	7,00
2R2	2,2	N	-	-	15,00	-	-	6,80
2R5	2,5	N	15,60	17,50	16,00	4,50	6,50	6,60
3R3	3,3	N	18,20	-	17,00	4,00	-	6,20
3R5	3,5	N	-	24,00	-	-	5,00	-
3R9	3,9	N	-	-	19,00	-	-	5,90
4R7	4,7	N	24,70	29,00	22,00	3,40	4,60	5,60
6R0	6,0	N	-	32,00	-	-	4,20	-
6R8	6,8	N	-	-	25,00	-	-	4,40
7R3	7,3	N	39,00	-	-	2,80	-	-
100,000	10,0	N	47,00	48,00	36,00	2,50	3,00	4,00
150,000	15,0	N	69,00	67,00	53,00	1,90	2,75	2,90
180,000	18,0	N	-	-	72,00	-	-	2,70
220,000	22,0	N	99,00	105,00	75,00	1,60	2,30	2,60
270,000	27,0	N	-	-	100,00	-	-	2,25
330,000	33,0	N	156,00	157,00	125,00	1,30	1,75	2,20
470,000	47,0	N	195,00	189,00	150,00	1,15	1,52	1,80
680,000	68,0	N	286,00	290,00	240,00	0,91	1,30	1,50
101,000	100,0	N	430,00	410,00	360,00	0,75	1,05	1,30

Notes:

1. Test Frequency: SSPU0830 series: 0,25V; SSPU0840, 0845 series: 100KHz 0,1V
- 2) Rated DC Current: The current when the inductance decrease to 65% of its initial value. (Ta=25°C)
3. Operating temperature range: -40~+ 105°C