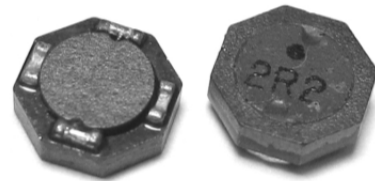


**5. SPU Series (Shielded Type)**

**Applications**

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



**Features**

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

**Inductance and Rated Current ranges**

Part Series	Inductances range	Rated Current range
* SPU3009	1.3~22μH	1.00~0.22A (Irms) ; 1.10~0.25A (Isat)
* SPU3011	1.5~10μH	1.10~0.40A (Irms) ; 1.00~0.35A (Isat)
* SPU3014	1.2~22μH	1.85~0.32A (Irms) ; 1.90~0.36A (Isat)
* SPU3017	2.2~47μH	1.70~0.36A (Irms) ; 0.98~0.21A (Isat)
* SPU3018	1.5~15μH	1.65~0.50A (Irms) ; 1.85~0.56A (Isat)
* SPU3028	10~100μH	0.72~0.19A (Irms) ; 0.86~0.21A (Isat)

*(Dimension data (Refer to Fig. 1))*

Part Series	Inductances range	Rated Current range
* SPU5011	1.5~100μH	1.80~0.20A (Irms) ; 1.50~0.18A (Isat)
* SPU5016	1.8~100μH	1.75~0.30A (Irms) ; 1.70~0.27A (Isat)
* SPU5018	1.0~100μH	2.80~0.32A (Irms) ; 2.85~0.31A (Isat)
* SPU5028	1.2~100μH	3.50~0.47A (Irms) ; 3.40~0.42A (Isat)

*(Dimension data (Refer to Fig. 2))*

Part Series	Inductances range	Rated Current range
* SPU8030	3.3~100μH	5.00~0.85A (Irms) ; 4.60~0.75A (Isat)
* SPU8040	3.3~150μH	6.00~0.90A (Irms) ; 5.00~0.77A (Isat)
* SPU8045	3.5~100μH	5.00~1.00A (Irms) ; 5.00~0.92A (Isat)
* SPU8058	3.9~100μH	6.50~1.70A (Irms) ; 4.50~0.90A (Isat)
* SPU1030	3.5~150μH	5.00~0.85A (Irms) ; 5.20~0.84A (Isat)
* SPU1040	3.8~330μH	6.60~0.62A (Irms) ; 5.80~0.60A (Isat)
* SPU1050	4.7~1000μH	5.20~0.47A (Irms) ; 5.10~0.40A (Isat)
* SPU1065	2.8~100μH	6.50~1.80A (Irms) ; 7.50~1.40A (Isat)

*(Dimension data (Refer to Fig. 3))*

**5. SPU Series (Shielded Type)**

**Inductance and Rated Current ranges (Cont'd)**

<b>Part Series</b>	<b>Inductances range</b>	<b>Rated Current range</b>
* SPU0830	1.0~100 $\mu$ H	6.50~0.75A
* SPU0840	1.8~100 $\mu$ H	7.00~1.05A
* SPU0845	1.0~100 $\mu$ H	9.00~1.30A

*(Dimension data (Refer to Fig. 4))*

<b>Part Series</b>	<b>Inductances range</b>	<b>Rated Current range</b>
* SPU0301	1.00~820 $\mu$ H	1.60~0.06A
* SPU0302	0.47~2200 $\mu$ H	1.84~0.035A
* SPU0303	1.00~6800 $\mu$ H	1.90~0.017A
* SPU0502	0.47~6800 $\mu$ H	2.33~0.03A
* SPU0503	0.47~2500 $\mu$ H	4.82~0.045A
* SPU0603	1.00~27000 $\mu$ H	4.70~0.026A

*(Dimension data (Refer to Fig. 5))*

Test equipment:

L: HP4284A LCR meter @100KHz 0.1V

DCR Resistance: Milli-ohm meter or equivalent.

Operating temperature range:

-40 ~+105 :

SPU3009, SPU3011, SPU3014, SPU3017, SPU3018, SPU3028, SPU5011, SPU5016, SPU5018, SPU5028  
SPU8030, SPU8040, SPU8045, SPU8058, SPU1030, SPU1040, SPU1050, SPU1065

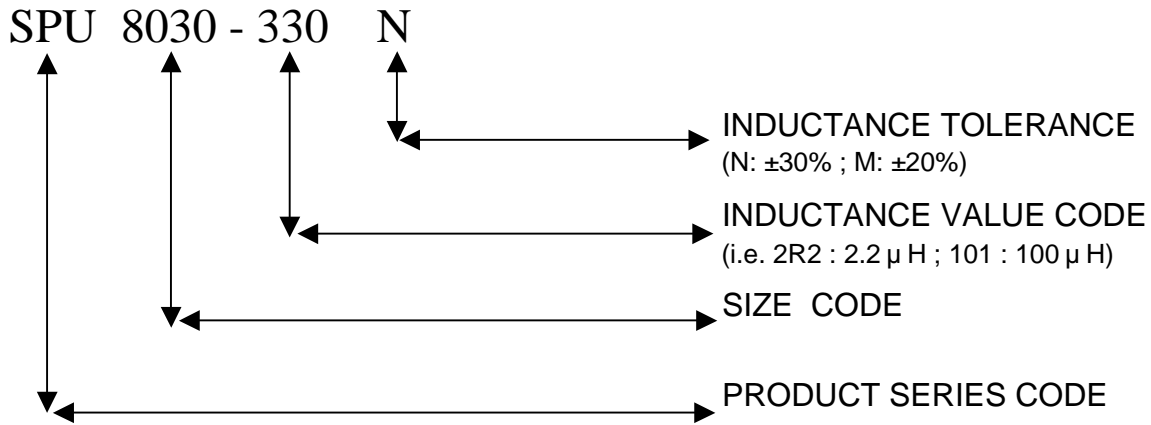
-40 ~+85 :

SPU0830, SPU0840, SPU0845

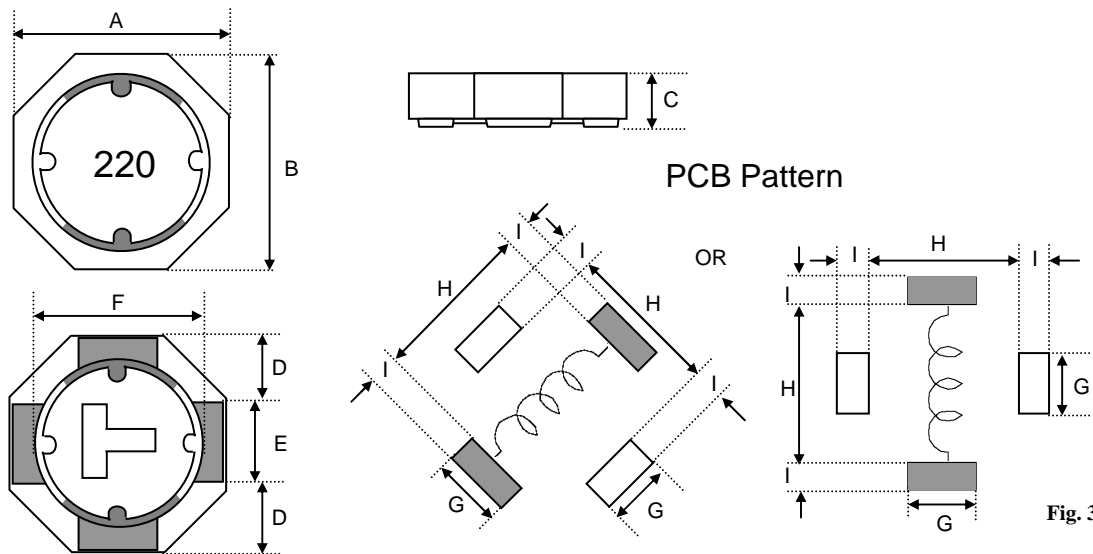
SPU0301, SPU0302, SPU0303, SPU0502, SPU0503, SPU0603

5. SPU Series (Shielded Type)

Part Numbering System



Dimensions (mm)



Series	A	B	C	D (typ.)	E (typ.)	F (typ.)	G (ref.)	H (ref.)	I (ref.)
SPU8030	8.00 $\pm$ 0.30	8.00 $\pm$ 0.30	2.80 $\pm$ 0.30	2.40	3.20	6.40	3.40	6.20	1.40
SPU8040	8.00 $\pm$ 0.30	8.00 $\pm$ 0.30	3.80 $\pm$ 0.30	2.40	3.20	6.40	3.40	6.20	1.40
SPU8045	8.00 $\pm$ 0.30	8.00 $\pm$ 0.30	4.50 $\pm$ 0.30	2.40	3.20	6.40	3.40	6.20	1.40
SPU8058	8.00 $\pm$ 0.30	8.00 $\pm$ 0.30	5.80 $\pm$ 0.30	2.40	3.20	6.40	3.40	6.20	1.40
SPU1030	10.00 $\pm$ 0.30	10.00 $\pm$ 0.30	2.80 $\pm$ 0.30	3.00	4.00	8.20	4.20	8.20	1.40
SPU1040	10.00 $\pm$ 0.30	10.00 $\pm$ 0.30	3.80 $\pm$ 0.30	3.00	4.00	8.20	4.20	8.20	1.40
SPU1050	10.00 $\pm$ 0.30	10.00 $\pm$ 0.30	4.80 $\pm$ 0.30	3.00	4.00	8.20	4.20	8.20	1.40
SPU1065	10.00 $\pm$ 0.30	10.00 $\pm$ 0.30	6.60 $\pm$ 0.30	3.00	4.00	8.20	4.20	8.20	1.40

5. SPU Series (Shielded Type)

Electrical Characteristics

SPU 8030 / 8040 / 8045 / 8058 TYPE

Inductance value code	L (μH)	DC Resistance (m Ω) Max.				Rated DC current (A) Max.							
						I rms				I sat			
		8030	8040	8045	8058	8030	8040	8045	8058	8030	8040	8045	8058
3R3N	3.3	22.0	18.0	-	-	5.00	6.00	-	-	4.60	5.00	-	-
3R5N	3.5	-	-	25.0	-	-	-	5.00	-	-	-	5.00	-
3R9N	3.9	-	-	-	16.0	-	-	-	6.50	-	-	-	4.50
4R2N	4.2	-	22.0	-	-	-	5.30	-	-	-	4.60	-	-
4R7N	4.7	30.0	-	27.5	-	4.60	-	4.60	-	3.80	-	4.40	-
5R2N	5.2	-	-	-	17.5	-	-	-	5.80	-	-	-	3.90
6R2N	6.2	-	32.0	36.0	-	-	4.20	4.20	-	-	4.00	3.80	-
6R8N	6.8	46.0	-	-	20.0	3.60	-	-	5.50	3.20	-	-	4.00
100N	10.0	60.0	42.0	48.0	25.0	3.00	3.70	3.50	4.60	2.60	2.90	3.30	3.00
150N	15.0	100.0	70.0	-	-	2.20	2.80	-	-	2.00	2.50	-	-
220N	22.0	130.0	110.0	122.0	52.0	2.00	2.20	2.25	3.40	1.75	2.05	2.15	1.80
330N	33.0	180.0	150.0	150.0	72.0	1.60	1.90	2.00	2.70	1.45	1.75	1.80	1.60
470N	47.0	260.0	190.0	270.0	100.0	1.45	1.55	1.45	2.30	1.25	1.45	1.40	1.50
680N	68.0	315.0	260.0	400.0	130.0	1.25	1.35	1.25	2.00	0.96	1.10	1.20	1.20
101N	100.0	520.0	410.0	500.0	160.0	0.85	1.05	1.00	1.70	0.75	0.92	0.92	0.90
151N	150.0	-	560.0	-	-	-	0.90	-	-	-	0.77	-	-

- 1. Test Frequency: 100KHz 0.1V
- 2a). I<sub>rms</sub>: base on temp. rise 40 Typ.
- 2b). I<sub>sat</sub>: base on L/L0A = 35% Typ.