

Unshielded Construction - SMT / SPT Series



Feature

1. High current and inductance capacity.
2. Specially designed for surface mounting.
equipment, good for high density applicaton.
3. Low profile very effective in space-conscious applications.
4. Low resistance and high-energy storage.

Application

Power supply for VCR, OA equipment, LCD TV, Notebook PC, DC/DC Conterver, DC/AC Inverter.

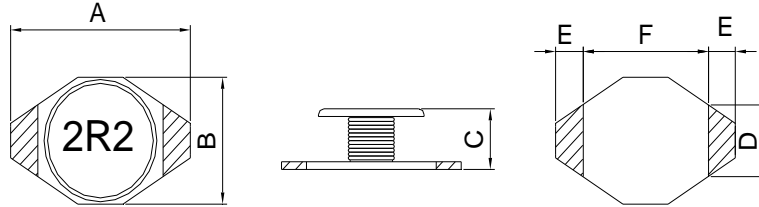
Product Identification

W SPT3316 - 2R2

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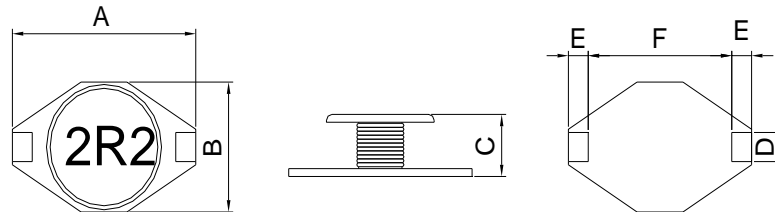
1. Lead-Free part number.
2. Series name.
3. Inductance. (See Details)
4. Tolerance. (See Details)

Configurations & Dimensions



Series Name	A	B	C	D	E	F
SPT1608	6.6(MAX)	4.45(MAX)	2.92(MAX)	1.57(MAX)	1.02(MAX)	4.32(MAX)

Unit: mm

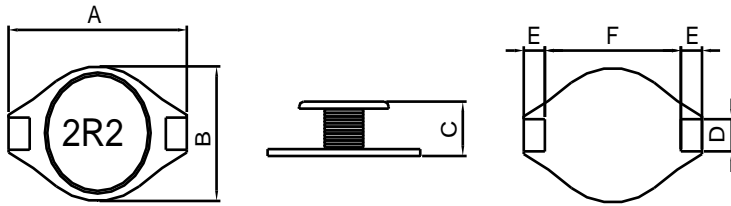


Series Name	A	B	C	D	E	F
SPT3316	13.0±0.5	9.3±0.3	5.0±0.3	2.5±0.2	2.5±0.2	7.5±0.2
SPT3340	13.0±0.5	9.3±0.3	11.0±0.3	2.5±0.2	2.5±0.2	7.5±0.2

Unit: mm

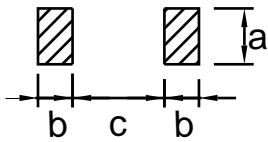
Unshielded Construction - SMT / SPT Series

Configurations & Dimensions



Series Name	A	B	C	D	E	F
SPT5022	18.5±0.5	14.0±0.3	6.3±0.3	2.5±0.2	2.5±0.2	13.0±0.2

Unit: mm



PCB Pattern

Series Name	a	b	c
SPT1608	1.5(REF)	1.5(REF)	4.0(REF)
SPT3316	2.80(REF)	2.80(REF)	7.20(REF)
SPT3340	2.80(REF)	2.80(REF)	7.20(REF)
SPT5022	2.80(REF)	2.80(REF)	12.7(REF)

Unit: mm

Unshielded Construction - SMT / SPT Series

Electrical Characteristics / SPT1608

Part Number	Inductance (μ H)	Test Condition (Volt / Hz)	DC Resistance Max. (m Ω)	Rated Current Max. (mA)
SPT1608-1R0 __	1.0	1.0 / 100K	50	2,900
SPT1608-1R5 __	1.8	1.0 / 100K	50	2,800
SPT1608-2R2 __	2.2	1.0 / 100K	70	2,400
SPT1608-3R3 __	3.3	1.0 / 100K	80	2,000
SPT1608-4R7 __	4.7	1.0 / 100K	90	1,500
SPT1608-5R6 __	5.6	1.0 / 100K	110	1,450
SPT1608-6R8 __	6.8	1.0 / 100K	130	1,400
SPT1608-8R2 __	8.2	1.0 / 100K	145	1,300
SPT1608-100 __	10.0	1.0 / 100K	160	1,100
SPT1608-120 __	12.0	1.0 / 100K	210	1,050
SPT1608-150 __	15.0	1.0 / 100K	230	1,000
SPT1608-180 __	18.0	1.0 / 100K	250	900
SPT1608-220 __	22.0	1.0 / 100K	270	800
SPT1608-270 __	27.0	1.0 / 100K	450	700
SPT1608-330 __	33.0	1.0 / 100K	510	600
SPT1608-390 __	39.0	1.0 / 100K	600	550
SPT1608-470 __	47.0	1.0 / 100K	640	500
SPT1608-560 __	56.0	1.0 / 100K	700	450
SPT1608-680 __	68.0	1.0 / 100K	860	400
SPT1608-820 __	82.0	1.0 / 100K	1,100	350
SPT1608-101 __	100.0	1.0 / 100K	1,270	300
SPT1608-121 __	120.0	1.0 / 100K	2,400	260
SPT1608-151 __	150.0	1.0 / 100K	2,000	250
SPT1608-181 __	180.0	1.0 / 100K	2,680	220
SPT1608-221 __	220.0	1.0 / 100K	3,110	200
SPT1608-271 __	270.0	1.0 / 100K	3,560	180
SPT1608-331 __	330.0	1.0 / 100K	3,800	160
SPT1608-391 __	390.0	1.0 / 100K	4,600	150
SPT1608-471 __	470.0	1.0 / 100K	5,060	150
SPT1608-561 __	560.0	1.0 / 100K	6,800	140
SPT1608-681 __	680.0	1.0 / 100K	9,200	120
SPT1608-821 __	820.0	1.0 / 100K	11,000	100
SPT1608-102 __	1000.0	1.0 / 100K	13,800	70

Rated current that will cause initial inductance value approximately 10% rolloff or temperature rise approximate 40°C without core loss.

Unshielded Construction - SMT / SPT Series

Electrical Characteristics / SPT3316

Part Number	Inductance (μ H)	Test Condition (Volt / Hz)	DC Resistance Max. (m Ω)	Rated Current Max. (mA)
SPT3316-1R0 __	1.0	1.0 / 100K	10	10,000
SPT3316-1R4 __	1.4	1.0 / 100K	10	10,000
SPT3316-1R8 __	1.8	1.0 / 100K	14	9,500
SPT3316-2R2 __	2.2	1.0 / 100K	15	9,000
SPT3316-2R7 __	2.7	1.0 / 100K	18	9,000
SPT3316-3R3 __	3.3	1.0 / 100K	18	9,000
SPT3316-3R9 __	3.9	1.0 / 100K	19	9,000
SPT3316-4R7 __	4.7	1.0 / 100K	20	9,000
SPT3316-5R6 __	5.6	1.0 / 100K	22	8,700
SPT3316-6R8 __	6.8	1.0 / 100K	25	8,000
SPT3316-8R2 __	8.2	1.0 / 100K	28	7,400
SPT3316-100 __	10.0	1.0 / 100K	30	7,000
SPT3316-120 __	12.0	1.0 / 100K	40	6,500
SPT3316-150 __	15.0	1.0 / 100K	50	6,000
SPT3316-180 __	18.0	1.0 / 100K	60	5,000
SPT3316-220 __	22.0	1.0 / 100K	70	4,000
SPT3316-270 __	27.0	1.0 / 100K	80	3,500
SPT3316-330 __	33.0	1.0 / 100K	90	3,500
SPT3316-390 __	39.0	1.0 / 100K	100	3,000
SPT3316-470 __	47.0	1.0 / 100K	120	2,500
SPT3316-560 __	56.0	1.0 / 100K	150	2,500
SPT3316-680 __	68.0	1.0 / 100K	200	2,000
SPT3316-820 __	82.0	1.0 / 100K	250	2,000
SPT3316-101 __	100.0	1.0 / 100K	300	2,000
SPT3316-121 __	120.0	1.0 / 100K	350	1,500
SPT3316-151 __	150.0	1.0 / 100K	400	1,500
SPT3316-181 __	180.0	1.0 / 100K	500	1,200
SPT3316-221 __	220.0	1.0 / 100K	600	1,200
SPT3316-271 __	270.0	1.0 / 100K	700	1,100
SPT3316-331 __	330.0	1.0 / 100K	800	1,000
SPT3316-391 __	390.0	1.0 / 100K	900	1,000
SPT3316-471 __	470.0	1.0 / 100K	1,000	1,000
SPT3316-561 __	560.0	1.0 / 100K	1,500	900
SPT3316-681 __	680.0	1.0 / 100K	1,500	900
SPT3316-821 __	820.0	1.0 / 100K	2,000	700
SPT3316-102 __	1000.0	1.0 / 100K	2,500	600

Rated current that will cause initial inductance value approximately 10% rolloff or temperature rise approximate 40°C

without core loss.

Unshielded Construction - SMT / SPT Series

Electrical Characteristics / SPT3340

Part Number	Inductance (μ H)	Test Condition (Volt / Hz)	DC Resistance Max. (m Ω)	Rated Current Max. (mA)
SPT3340-1R0 __	1.0	1.0 / 100K	6	24,000
SPT3340-1R4 __	1.4	1.0 / 100K	7	18,000
SPT3340-1R8 __	1.8	1.0 / 100K	9	15,000
SPT3340-2R2 __	2.2	1.0 / 100K	10	12,000
SPT3340-2R7 __	2.7	1.0 / 100K	15	11,000
SPT3340-3R3 __	3.3	1.0 / 100K	18	10,000
SPT3340-3R9 __	3.9	1.0 / 100K	22	10,000
SPT3340-4R7 __	4.7	1.0 / 100K	24	10,000
SPT3340-5R6 __	5.6	1.0 / 100K	25	10,000
SPT3340-6R8 __	6.8	1.0 / 100K	30	9,000
SPT3340-8R2 __	8.2	1.0 / 100K	36	8,400
SPT3340-100 __	10.0	1.0 / 100K	40	8,000
SPT3340-120 __	12.0	1.0 / 100K	45	7,400
SPT3340-150 __	15.0	1.0 / 100K	50	7,000
SPT3340-180 __	18.0	1.0 / 100K	60	6,200
SPT3340-220 __	22.0	1.0 / 100K	66	5,500
SPT3340-270 __	27.0	1.0 / 100K	72	5,000
SPT3340-330 __	33.0	1.0 / 100K	80	4,000
SPT3340-390 __	39.0	1.0 / 100K	100	4,100
SPT3340-470 __	47.0	1.0 / 100K	110	3,800
SPT3340-560 __	56.0	1.0 / 100K	150	3,500
SPT3340-680 __	68.0	1.0 / 100K	170	3,000
SPT3340-820 __	82.0	1.0 / 100K	200	2,800
SPT3340-101 __	100.0	1.0 / 100K	220	2,500
SPT3340-121 __	120.0	1.0 / 100K	310	2,200
SPT3340-151 __	150.0	1.0 / 100K	340	2,000
SPT3340-181 __	180.0	1.0 / 100K	400	1,800
SPT3340-221 __	220.0	1.0 / 100K	440	1,600
SPT3340-271 __	270.0	1.0 / 100K	560	1,400
SPT3340-331 __	330.0	1.0 / 100K	700	1,200
SPT3340-391 __	390.0	1.0 / 100K	860	1,100
SPT3340-471 __	470.0	1.0 / 100K	950	1,000
SPT3340-561 __	560.0	1.0 / 100K	1,100	1,000
SPT3340-681 __	680.0	1.0 / 100K	1,200	1,000
SPT3340-821 __	820.0	1.0 / 100K	1,600	900
SPT3340-102 __	1000.0	1.0 / 100K	2,000	800

Rated current that will cause initial inductance value approximately 10% rolloff or temperature rise approximate 40°C without core loss.

Unshielded Construction - SMT / SPT Series

Electrical Characteristics / SPT5022

Part Number	Inductance (μH)	Test Condition (Volt / Hz)	DC Resistance Max. (m Ω)	Rated Current Max. (mA)
SPT5022-1R0 __	1.0	1.0 / 100K	10	17,000
SPT5022-1R4 __	1.4	1.0 / 100K	12	16,000
SPT5022-1R8 __	1.8	1.0 / 100K	14	16,000
SPT5022-2R2 __	2.2	1.0 / 100K	14	16,000
SPT5022-2R7 __	2.7	1.0 / 100K	14	15,000
SPT5022-3R3 __	3.3	1.0 / 100K	15	14,000
SPT5022-3R9 __	3.9	1.0 / 100K	16	13,000
SPT5022-4R7 __	4.7	1.0 / 100K	18	12,000
SPT5022-5R6 __	5.6	1.0 / 100K	20	12,000
SPT5022-6R8 __	6.8	1.0 / 100K	25	10,000
SPT5022-8R2 __	8.2	1.0 / 100K	38	10,000
SPT5022-100 __	10.0	1.0 / 100K	40	8,000
SPT5022-120 __	12.0	1.0 / 100K	44	7,600
SPT5022-150 __	15.0	1.0 / 100K	48	7,000
SPT5022-180 __	18.0	1.0 / 100K	54	6,500
SPT5022-220 __	22.0	1.0 / 100K	60	6,000
SPT5022-270 __	27.0	1.0 / 100K	70	5,600
SPT5022-330 __	33.0	1.0 / 100K	75	5,000
SPT5022-390 __	39.0	1.0 / 100K	85	4,600
SPT5022-470 __	47.0	1.0 / 100K	100	4,000
SPT5022-560 __	56.0	1.0 / 100K	125	3,700
SPT5022-680 __	68.0	1.0 / 100K	140	3,000
SPT5022-820 __	82.0	1.0 / 100K	180	2,800
SPT5022-101 __	100.0	1.0 / 100K	210	2,400
SPT5022-121 __	120.0	1.0 / 100K	260	2,200
SPT5022-151 __	150.0	1.0 / 100K	300	2,100
SPT5022-181 __	180.0	1.0 / 100K	400	2,000
SPT5022-221 __	220.0	1.0 / 100K	470	1,900
SPT5022-271 __	270.0	1.0 / 100K	600	1,600
SPT5022-331 __	330.0	1.0 / 100K	780	1,100
SPT5022-391 __	390.0	1.0 / 100K	900	1,100
SPT5022-471 __	470.0	1.0 / 100K	1,080	1,100
SPT5022-561 __	560.0	1.0 / 100K	1,250	1,000
SPT5022-681 __	680.0	1.0 / 100K	1,400	960
SPT5022-821 __	820.0	1.0 / 100K	1,600	850
SPT5022-102 __	1000.0	1.0 / 100K	2,000	800

Rated current that will cause initial inductance value approximately 10% rolloff or temperature rise approximate 40°C without core loss.