

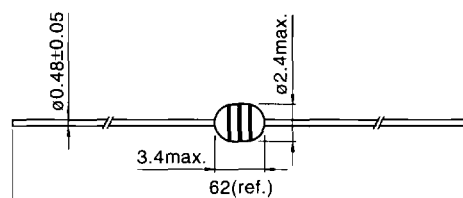
Inductors (Coils)
Fixed
RF-frequency

AXIAL LEADED INDUCTORS

SP series

SP0203 TYPE

SHAPES AND DIMENSIONS



Dimensions in mm

CHARACTERISTICS

Operating temperature range	-20 to +80°C (Including self-temperature rise, 20°C max.)
Dielectric withstand voltage Erms	250V
Rated current	Based on the temperature rise
Terminal tensile strength	9.8N min.
Terminal bending strength	2.94N min.
Moisture resistance characteristics	$\Delta L/L \leq \pm 5\%$ $\Delta Q/Q \leq \pm 20\%$

ELECTRICAL CHARACTERISTICS

Inductance (μ H)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
0.1	$\pm 10\%$	40	25.2	600	0.16	800	SP0203-R10K-7
0.12	$\pm 10\%$	40	25.2	520	0.16	800	SP0203-R12K-7
0.15	$\pm 10\%$	40	25.2	500	0.16	790	SP0203-R15K-7
0.18	$\pm 10\%$	40	25.2	480	0.18	745	SP0203-R18K-7
0.22	$\pm 10\%$	40	25.2	420	0.2	705	SP0203-R22K-7
0.27	$\pm 10\%$	40	25.2	390	0.22	670	SP0203-R27K-7
0.33	$\pm 10\%$	40	25.2	350	0.24	645	SP0203-R33K-7
0.39	$\pm 10\%$	50	25.2	320	0.27	605	SP0203-R39K-7
0.47	$\pm 10\%$	50	25.2	300	0.3	575	SP0203-R47K-7
0.56	$\pm 10\%$	50	25.2	280	0.34	540	SP0203-R56K-7
0.68	$\pm 10\%$	50	25.2	240	0.38	510	SP0203-R68K-7
0.82	$\pm 10\%$	50	25.2	210	0.43	480	SP0203-R82K-7
1	$\pm 5\%$	50	25.2	190	0.46	465	SP0203-1R0J-7
1.2	$\pm 5\%$	50	7.96	110	0.52	435	SP0203-1R2J-7
1.5	$\pm 5\%$	50	7.96	80	0.57	415	SP0203-1R5J-7
1.8	$\pm 5\%$	50	7.96	66	0.6	405	SP0203-1R8J-7
2.2	$\pm 5\%$	50	7.96	60	0.65	390	SP0203-2R2J-7
2.7	$\pm 5\%$	50	7.96	54	0.73	370	SP0203-2R7J-7
3.3	$\pm 5\%$	50	7.96	48	0.82	345	SP0203-3R3J-7
3.9	$\pm 5\%$	50	7.96	44	0.9	330	SP0203-3R9J-7
4.7	$\pm 5\%$	50	7.96	38	1	315	SP0203-4R7J-7
5.6	$\pm 5\%$	50	7.96	34	1.1	300	SP0203-5R6J-7
6.8	$\pm 5\%$	50	7.96	30	1.2	285	SP0203-6R8J-7
8.2	$\pm 5\%$	50	7.96	26	1.3	275	SP0203-8R2J-7
10	$\pm 5\%$	50	7.96	24	1.4	265	SP0203-100J-7
12	$\pm 5\%$	50	2.52	22	1.5	255	SP0203-120J-7
15	$\pm 5\%$	50	2.52	20	1.65	245	SP0203-150J-7
18	$\pm 5\%$	50	2.52	18	1.9	225	SP0203-180J-7
22	$\pm 5\%$	50	2.52	17	2.2	210	SP0203-220J-7
27	$\pm 5\%$	50	2.52	16	2.5	200	SP0203-270J-7
33	$\pm 5\%$	50	2.52	14	3.8	160	SP0203-330J-7
39	$\pm 5\%$	50	2.52	13	4.2	150	SP0203-390J-7
47	$\pm 5\%$	50	2.52	12	4.6	145	SP0203-470J-7
56	$\pm 5\%$	40	2.52	11	5.1	140	SP0203-560J-7
68	$\pm 5\%$	40	2.52	10	5.6	130	SP0203-680J-7
82	$\pm 5\%$	40	2.52	9.5	9.6	100	SP0203-820J-7



Specifications which provide more details for the proper and safe use of the described product are available upon request.

All specifications are subject to change without notice.

Inductors (Coils)
Fixed
RF-frequency

AXIAL LEADED INDUCTORS

SP series

SP0203 TYPE ELECTRICAL CHARACTERISTICS

Inductance (μ H)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
100	$\pm 5\%$	40	2.52	8	10.8	95	SP0203-101J-7
120	$\pm 5\%$	40	0.796	6.5	12.5	85	SP0203-121J-7
150	$\pm 5\%$	40	0.796	6	14.5	80	SP0203-151J-7
180	$\pm 5\%$	40	0.796	5.5	16.3	75	SP0203-181J-7
220	$\pm 5\%$	40	0.796	5	20	70	SP0203-221J-7



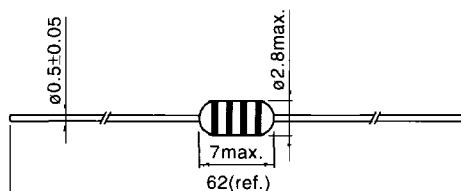
AXIAL LEADED INDUCTORS

Inductors (Coils)
Fixed
RF-frequency

SP series

SP0305 TYPE

SHAPES AND DIMENSIONS



Dimensions in mm

CHARACTERISTICS

Operating temperature range	-20 to +80°C (Including self-temperature rise, 20°C max.)
Dielectric withstand voltage Erms	250V
Rated current	Based on the temperature rise
Terminal tensile strength	9.8N min.
Terminal bending strength	2.94N min.
Moisture resistance characteristics	$\Delta L/L \leq \pm 5\%$ $\Delta Q/Q \leq \pm 20\%$

ELECTRICAL CHARACTERISTICS

Inductance (μ H)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
0.22	$\pm 10\%$	40	25.2	380	0.075	1150	SP0305-R22K-2
0.27	$\pm 10\%$	40	25.2	360	0.08	1110	SP0305-R27K-2
0.33	$\pm 10\%$	40	25.2	350	0.08	1110	SP0305-R33K-2
0.39	$\pm 10\%$	40	25.2	320	0.09	1000	SP0305-R39K-2
0.47	$\pm 10\%$	40	25.2	300	0.1	1000	SP0305-R47K-2
0.56	$\pm 10\%$	40	25.2	280	0.11	950	SP0305-R56K-2
0.68	$\pm 10\%$	40	25.2	250	0.12	900	SP0305-R68K-2
0.82	$\pm 10\%$	40	25.2	200	0.13	875	SP0305-R82K-2
1	$\pm 10, \pm 5\%$	40	25.2	180	0.15	815	SP0305-1R0□*-2
1.2	$\pm 10, \pm 5\%$	40	7.96	165	0.18	740	SP0305-1R2□-2
1.5	$\pm 10, \pm 5\%$	45	7.96	150	0.2	700	SP0305-1R5□-2
1.8	$\pm 10, \pm 5\%$	50	7.96	125	0.23	655	SP0305-1R8□-2
2.2	$\pm 10, \pm 5\%$	50	7.96	110	0.25	630	SP0305-2R2□-2
2.7	$\pm 10, \pm 5\%$	50	7.96	95	0.28	595	SP0305-2R7□-2
3.3	$\pm 10, \pm 5\%$	50	7.96	70	0.3	575	SP0305-3R3□-2
3.9	$\pm 10, \pm 5\%$	45	7.96	65	0.32	555	SP0305-3R9□-2
4.7	$\pm 10, \pm 5\%$	45	7.96	50	0.35	530	SP0305-4R7□-2
5.6	$\pm 10, \pm 5\%$	45	7.96	40	0.4	500	SP0305-5R6□-2
6.8	$\pm 10, \pm 5\%$	40	7.96	30	0.45	470	SP0305-6R8□-2
8.2	$\pm 10, \pm 5\%$	40	7.96	28	0.55	425	SP0305-8R2□-2
10	$\pm 10, \pm 5\%$	40	7.96	22	0.72	370	SP0305-100□-2
12	$\pm 10, \pm 5\%$	45	2.52	20	0.8	350	SP0305-120□-2
15	$\pm 10, \pm 5\%$	50	2.52	16	0.88	335	SP0305-150□-2
18	$\pm 10, \pm 5\%$	50	2.52	15	1	315	SP0305-180□-2
22	$\pm 10, \pm 5\%$	50	2.52	13	1.2	285	SP0305-220□-2
27	$\pm 10, \pm 5\%$	50	2.52	11	1.35	270	SP0305-270□-2
33	$\pm 10, \pm 5\%$	50	2.52	10	1.5	255	SP0305-330□-2
39	$\pm 10, \pm 5\%$	50	2.52	9.5	1.7	240	SP0305-390□-2
47	$\pm 10, \pm 5\%$	60	2.52	8.5	2.3	205	SP0305-470□-2
56	$\pm 10, \pm 5\%$	60	2.52	7.5	2.6	195	SP0305-560□-2
68	$\pm 10, \pm 5\%$	60	2.52	6.5	2.9	185	SP0305-680□-2
82	$\pm 10, \pm 5\%$	60	2.52	6	3.2	175	SP0305-820□-2
100	$\pm 10, \pm 5\%$	60	2.52	5.5	3.5	165	SP0305-101□-2
120	$\pm 10, \pm 5\%$	60	0.796	5.4	3.8	160	SP0305-121□-2
150	$\pm 10, \pm 5\%$	60	0.796	4.75	4.4	150	SP0305-151□-2
180	$\pm 10, \pm 5\%$	60	0.796	4.35	5	140	SP0305-181□-2
220	$\pm 10, \pm 5\%$	60	0.796	4	5.7	130	SP0305-221□-2

*□: Please specify inductance tolerance, K($\pm 10\%$) or J($\pm 5\%$)



Specifications which provide more details for the proper and safe use of the described product are available upon request.

All specifications are subject to change without notice.

Inductors (Coils)
Fixed
RF-frequency

AXIAL LEADED INDUCTORS

SP series

SP0305 TYPE

ELECTRICAL CHARACTERISTICS

Inductance (μ H)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
270	$\pm 10, \pm 5\%$	60	0.796	3.7	6.5	120	SP0305-271□*-2
330	$\pm 10, \pm 5\%$	60	0.796	3.4	9.5	100	SP0305-331□-2
390	$\pm 10, \pm 5\%$	60	0.796	2.8	10.5	95	SP0305-391□-2
470	$\pm 10, \pm 5\%$	60	0.796	2.55	11.6	90	SP0305-471□-2
560	$\pm 10, \pm 5\%$	60	0.796	2.35	13	85	SP0305-561□-2
680	$\pm 10, \pm 5\%$	60	0.796	2	18	75	SP0305-681□-2
820	$\pm 10, \pm 5\%$	60	0.796	1.5	23	65	SP0305-821□-2
1000	$\pm 10, \pm 5\%$	60	0.796	1.2	26	60	SP0305-102□-2

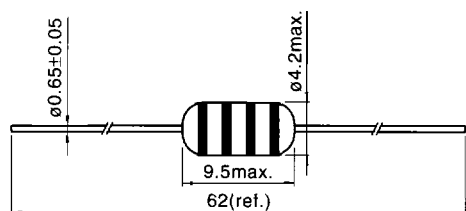
*□: Please specify inductance tolerance, K($\pm 10\%$) or J($\pm 5\%$)



AXIAL LEADED INDUCTORS

SP series

Inductors (Coils)
Fixed
RF-frequency

SP0406 TYPE
SHAPES AND DIMENSIONS

Dimensions in mm

CHARACTERISTICS

Operating temperature range	-20 to +80°C (Including self-temperature rise, 20°C max.)
Dielectric withstand voltage Erms	250V
Rated current	Based on the temperature rise
Terminal tensile strength	24.5N min.
Terminal bending strength	4.9N min.
Moisture resistance characteristics	$\Delta L/L \leq \pm 5\%$ $\Delta Q/Q \leq \pm 20\%$

ELECTRICAL CHARACTERISTICS

Inductance (μ H)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
0.22	$\pm 10\%$	25	25.2	380	0.21	880	SP0406-R22K-6Z
0.27	$\pm 10\%$	25	25.2	340	0.24	800	SP0406-R27K-6Z
0.33	$\pm 10\%$	25	25.2	300	0.28	750	SP0406-R33K-6Z
0.39	$\pm 10\%$	25	25.2	280	0.32	680	SP0406-R39K-6Z
0.47	$\pm 10\%$	25	25.2	250	0.36	650	SP0406-R47K-6Z
0.56	$\pm 10\%$	25	25.2	230	0.41	600	SP0406-R56K-6Z
0.68	$\pm 10\%$	25	25.2	210	0.47	550	SP0406-R68K-6Z
0.82	$\pm 10, \pm 5\%$	45	25.2	172	0.17	980	SP0406-R82□*-6
1	$\pm 10, \pm 5\%$	45	25.2	157	0.19	920	SP0406-1R0□-6
1.2	$\pm 10, \pm 5\%$	50	7.96	144	0.21	880	SP0406-1R2□-6
1.5	$\pm 10, \pm 5\%$	50	7.96	131	0.23	830	SP0406-1R5□-6
1.8	$\pm 10, \pm 5\%$	55	7.96	121	0.25	790	SP0406-1R8□-6
2.2	$\pm 10, \pm 5\%$	55	7.96	110	0.28	750	SP0406-2R2□-6
2.7	$\pm 10, \pm 5\%$	60	7.96	100	0.3	720	SP0406-2R7□-6
3.3	$\pm 10, \pm 5\%$	65	7.96	94	0.34	670	SP0406-3R3□-6
3.9	$\pm 10, \pm 5\%$	65	7.96	86	0.37	640	SP0406-3R9□-6
4.7	$\pm 10, \pm 5\%$	70	7.96	80	0.39	620	SP0406-4R7□-6
5.6	$\pm 10, \pm 5\%$	70	7.96	74	0.43	590	SP0406-5R6□-6
6.8	$\pm 10, \pm 5\%$	75	7.96	68	0.48	550	SP0406-6R8□-6
8.2	$\pm 10, \pm 5\%$	80	7.96	53	0.52	530	SP0406-8R2□-6
10	$\pm 10, \pm 5\%$	85	7.96	45	0.58	500	SP0406-100□-6
12	$\pm 10, \pm 5\%$	75	2.52	34	0.63	480	SP0406-120□-6
15	$\pm 10, \pm 5\%$	70	2.52	20	0.72	460	SP0406-150□-6
18	$\pm 10, \pm 5\%$	65	2.52	14	0.77	430	SP0406-180□-6
22	$\pm 10, \pm 5\%$	60	2.52	9.9	0.84	410	SP0406-220□-6
27	$\pm 10, \pm 5\%$	55	2.52	7.6	0.94	390	SP0406-270□-6
33	$\pm 10, \pm 5\%$	55	2.52	6.3	1.03	370	SP0406-330□-6
39	$\pm 10, \pm 5\%$	50	2.52	6.3	1.12	350	SP0406-390□-6
47	$\pm 10, \pm 5\%$	45	2.52	6.3	1.22	340	SP0406-470□-6
56	$\pm 10, \pm 5\%$	40	2.52	6.2	1.34	320	SP0406-560□-6
68	$\pm 10, \pm 5\%$	40	2.52	5.7	1.47	305	SP0406-680□-6
82	$\pm 10, \pm 5\%$	35	2.52	5.3	1.62	290	SP0406-820□-6
100	$\pm 10, \pm 5\%$	30	2.52	4.8	1.8	275	SP0406-101□-6
120	$\pm 10, \pm 5\%$	70	0.796	3.8	3.7	185	SP0406-121□-6
150	$\pm 10, \pm 5\%$	70	0.796	3.5	4.2	175	SP0406-151□-6
180	$\pm 10, \pm 5\%$	70	0.796	3.3	4.6	165	SP0406-181□-6
220	$\pm 10, \pm 5\%$	70	0.796	3	5.1	155	SP0406-221□-6

*□: Please specify inductance tolerance, K($\pm 10\%$) or J($\pm 5\%$)

Specifications which provide more details for the proper and safe use of the described product are available upon request.

All specifications are subject to change without notice.

Inductors (Coils)
Fixed
RF-frequency

AXIAL LEADED INDUCTORS

SP series

SP0406 TYPE

ELECTRICAL CHARACTERISTICS

Inductance (μ H)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
270	$\pm 10, \pm 5\%$	65	0.796	2.8	5.8	145	SP0406-271□*-6
330	$\pm 10, \pm 5\%$	65	0.796	2.6	6.4	137	SP0406-331□-6
390	$\pm 10, \pm 5\%$	65	0.796	2.4	7	133	SP0406-391□-6
470	$\pm 10, \pm 5\%$	60	0.796	2.25	7.7	126	SP0406-471□-6
560	$\pm 10, \pm 5\%$	60	0.796	2.1	8.5	120	SP0406-561□-6
680	$\pm 10, \pm 5\%$	55	0.796	1.95	9.4	113	SP0406-681□-6
820	$\pm 10, \pm 5\%$	55	0.796	1.85	10.5	100	SP0406-821□-6
1000	$\pm 10, \pm 5\%$	50	0.796	1.7	12	100	SP0406-102□-6

*□: Please specify inductance tolerance, K($\pm 10\%$) or J($\pm 5\%$)

