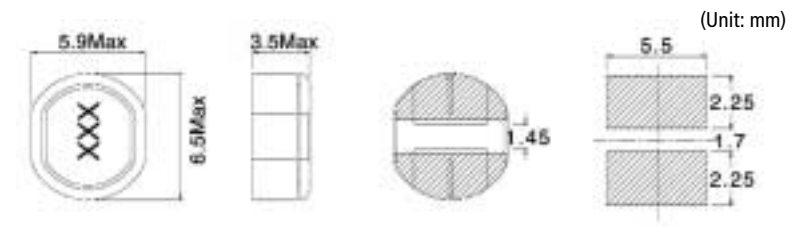
POWER CHOKE - SD0603 SERIES

EXTERNAL DIMENSIONS



Test Equipment and Conditions

- Inductance is measured with HP-4286A LCR meter or equivalent.
- Inductance drops 10% typical at Isat level with temperature rise under 40°C in accordance with Irms measurement.
- Operating Temperature Range : -25°C to +85°C.

Features

- Suitable for lead free soldering.

Applications

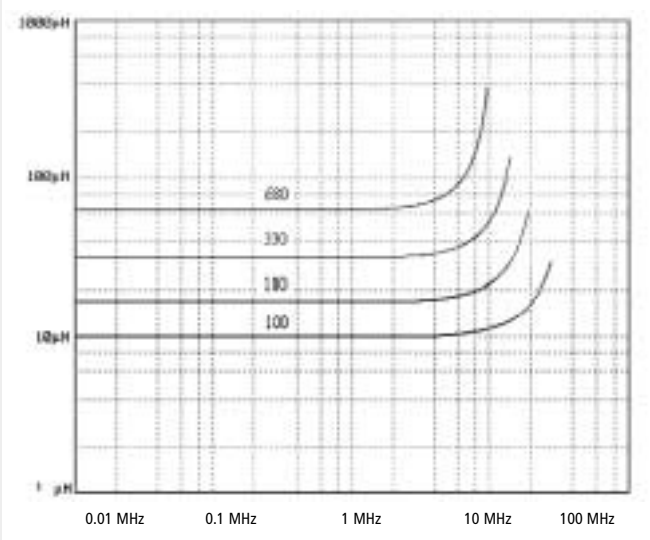
- VTR, OA equipment, LCD television sets, notebook PC, portable communication equipments, DC/DC converters, etc.

Specifications

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (Ω) max.	Rated DC Current (A) max.
SD0603-100 ❑	10	2.52	0.14	1.00
SD0603-120 ❑	12	2.52	0.16	0.94
SD0603-150 ❑	15	2.52	0.18	0.86
SD0603-180 ❑	18	2.52	0.25	0.78
SD0603-220 ❑	22	2.52	0.32	0.76
SD0603-270 ❑	27	2.52	0.36	0.64
SD0603-330 ❑	33	2.52	0.41	0.61
SD0603-390 ❑	39	2.52	0.47	0.53
SD0603-470 ❑	47	2.52	0.51	0.50
SD0603-560 ❑	56	2.52	0.72	0.46
SD0603-680 ❑	68	2.52	0.82	0.42

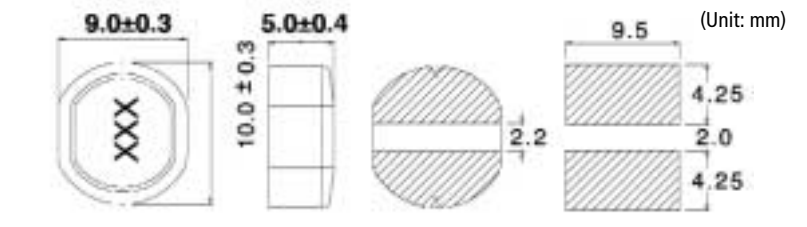
NOTE: ❑ Tolerance value:M = ±20%, N = ±30%.

Impedance-Frequency Characteristics



POWER CHOKE - SD1005 SERIES

EXTERNAL DIMENSIONS



Test Equipment and Conditions

- Inductance is measured with HP-4284A LCR meter or equivalent.
- Maximum allowable DC current is that which causes a 10% inductance reduction of the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).
- Operating Temperature Range : -25°C to +85°C.

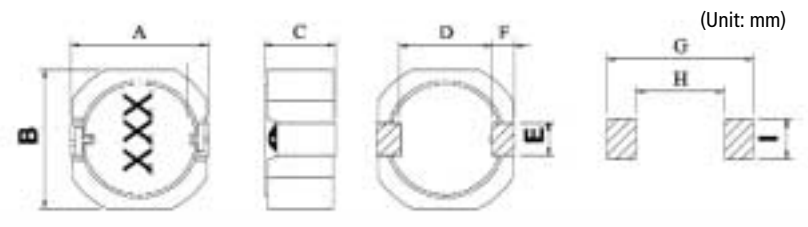
Specifications

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (Ω) max.	Rated DC Current (A) max.
SD1005-100 ❑	10	100	0.06	2.06
SD1005-120 ❑	12	100	0.07	1.84
SD1005-150 ❑	15	100	0.07	1.72
SD1005-180 ❑	18	100	0.08	1.58
SD1005-220 ❑	22	100	0.09	1.42
SD1005-270 ❑	27	100	0.10	1.32
SD1005-330 ❑	33	100	0.11	1.16
SD1005-390 ❑	39	100	0.12	1.10
SD1005-470 ❑	47	100	0.14	1.00
SD1005-560 ❑	56	100	0.19	0.93
SD1005-680 ❑	68	100	0.21	0.85
SD1005-820 ❑	82	100	0.28	0.79
SD1005-101 ❑	100	100	0.34	0.72
SD1005-121 ❑	120	100	0.37	0.63
SD1005-151 ❑	150	100	0.51	0.56
SD1005-181 ❑	180	100	0.57	0.50
SD1005-221 ❑	220	100	0.73	0.47
SD1005-271 ❑	270	100	0.87	0.41
SD1005-331 ❑	330	100	1.20	0.37
SD1005-391 ❑	390	100	1.34	0.35
SD1005-471 ❑	470	100	1.50	0.27

NOTE: ❑ Tolerance value: K= ±10%, L = ±15%, M = ±20%.

POWER CHOKE - SD1006C/SD1206C SERIES

EXTERNAL DIMENSIONS



Test Equipment and Conditions

- Inductance is measured with HP-4284A LCR meter or equivalent.
- Maximum allowable DC current which causes 10% inductance reduction of the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).
- Operating Temperature Range : -25°C to +85°C.

Features

- Low profile.
- Magnetically shielded with low DC resistance.
- Suitable for large currents.
- Available on tape and reel for auto-insertion.
- Suitable for lead free soldering.

Applications

- Ideal use in variety of DC-DC converter inductor applications.

Solder Land Information

Type	A	B	C	D	E	F	G	H	I
SD1006C	10.4max.	10.4max.	6.8max.	6.0	3.0	2.0	10.7	5.4	3.6
SD1206C	12.8max.	12.8max.	6.8max.	8.5	3.0	2.0	13.1	7.9	3.6

POWER CHOKE - SD1006C/SD1206C SERIES

Specifications

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ) max.	Rated DC Current (A) max.
SD1006C-1R2 ❑	1.2	100	10	10.5
SD1006C-2R0 ❑	2.0	100	12	9.0
SD1006C-2R7 ❑	2.7	100	14	8.0
SD1006C-3R9 ❑	3.9	100	16	7.0
SD1006C-5R6 ❑	5.6	100	19	6.0
SD1006C-6R8 ❑	6.8	100	21	5.5
SD1006C-8R2 ❑	8.2	100	24	4.5
SD1006C-100 ❑	10	100	32	4.0
SD1006C-120 ❑	12	100	35	3.8
SD1006C-150 ❑	15	100	47	3.5
SD1006C-180 ❑	18	100	64	3.3
SD1006C-220 ❑	22	100	74	3.1
SD1006C-270 ❑	27	100	99	2.8
SD1006C-330 ❑	33	100	124	2.5
SD1006C-390 ❑	39	100	148	2.2
SD1006C-470 ❑	47	100	162	2.0
SD1006C-560 ❑	56	100	180	1.8
SD1006C-680 ❑	68	100	195	1.5
SD1006C-820 ❑	82	100	282	1.3
SD1006C-101 ❑	100	100	300	1.0

NOTE: ❑ Tolerance value: K= ±10%, M = ±20%, N = ±30%.

Specifications

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ) max.	Isat (A) max.	Irms (A) max.
SD1206C-1R5 ❑	1.5	100	10	11.8	7.7
SD1206C-2R5 ❑	2.5	100	11	9.0	7.0
SD1206C-3R9 ❑	3.9	100	14	7.9	6.0
SD1206C-4R7 ❑	4.7	100	16	6.8	5.6
SD1206C-6R8 ❑	6.8	100	17	5.7	5.1
SD1206C-8R2 ❑	8.2	100	20	5.6	4.7
SD1206C-100 ❑	10	100	25	5.5	4.4
SD1206C-120 ❑	12	100	30	5.0	4.0
SD1206C-150 ❑	15	100	35	4.5	3.6
SD1206C-180 ❑	18	100	40	4.1	3.2
SD1206C-220 ❑	22	100	46	3.6	2.9
SD1206C-270 ❑	27	100	50	3.2	2.8
SD1206C-330 ❑	33	100	64	3.0	2.4
SD1206C-390 ❑	39	100	74	2.7	2.2
SD1206C-470 ❑	47	100	90	2.4	2.1

NOTE: ❑ Tolerance value: K= ±10%, M = ±20%, N = ±30%.

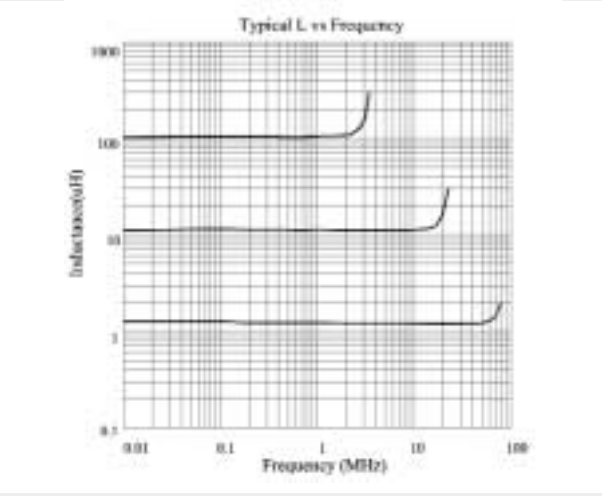
POWER CHOKE - SD1206C SERIES

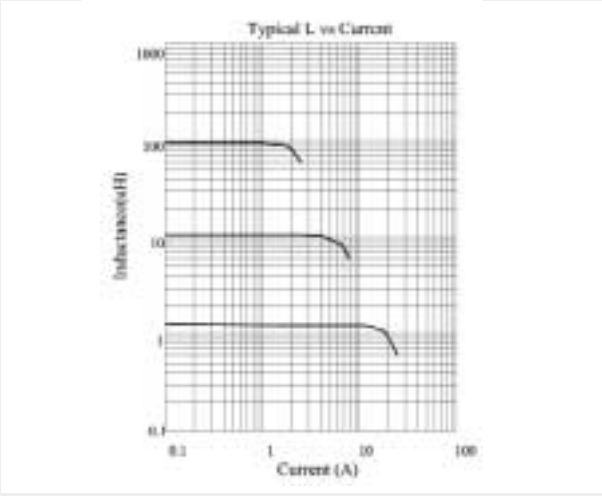
Specifications

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ) max.	Isat (A) max.	Irms (A) max.
SD1206C-560 ❑	56	100	113	2.0	1.9
SD1206C-680 ❑	68	100	120	1.7	1.7
SD1206C-820 ❑	82	100	170	1.6	1.6
SD1206C-101 ❑	100	100	190	1.5	1.4
SD1206C-121 ❑	120	100	210	1.3	1.3
SD1206C-151 ❑	150	100	270	1.2	1.2
SD1206C-181 ❑	180	100	320	1.1	1.1
SD1206C-221 ❑	220	100	420	1.0	1.0
SD1206C-271 ❑	270	100	480	0.93	0.92
SD1206C-331 ❑	330	100	570	0.83	0.83
SD1206C-391 ❑	390	100	685	0.76	0.77
SD1206C-471 ❑	470	100	816	0.67	0.70
SD1206C-561 ❑	560	100	1030	0.62	0.64
SD1206C-681 ❑	680	100	1120	0.55	0.58
SD1206C-821 ❑	820	100	1500	0.50	0.53

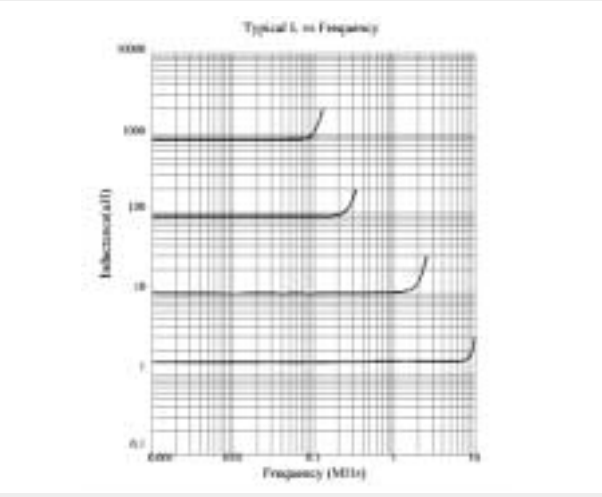
NOTE: ❑ Tolerance value: K= ±10%, M = ±20%, N = ±30%.

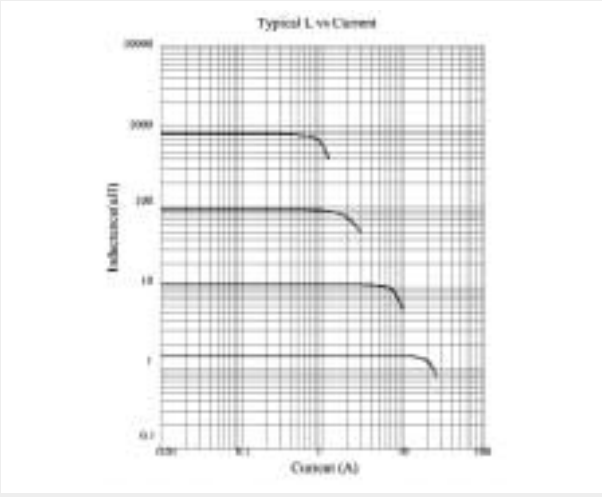
SD1006C Series





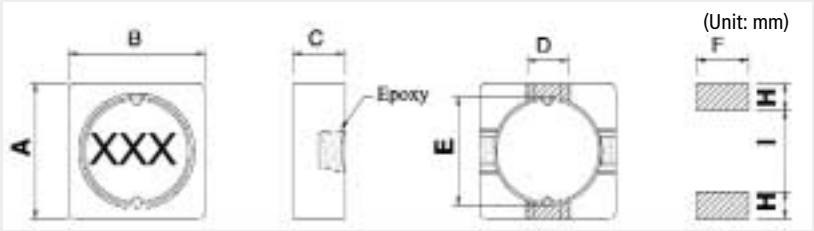
SD1206C Series





POWER CHOKE - FPS73R/104R/123R SERIES

EXTERNAL DIMENSIONS



Test Equipment and Conditions

- Inductance is measured with HP-4284A LCR meter or equivalent.
- Maximum allowable DC current is that which causes a 10% inductance reduction of the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).
- Operating Temperature Range : -25°C to +85°C.

Features

- Low profile very effective in space-conscious applications.
- Magnetic Shielded surface mount inductor with high current rating.
- Low resistance to keep power loss minimum.
- Suitable for lead free soldering.

Applications

- For power line DC-DC conversion application used in hard disk, notebook computers and other electronic equipment.

Solder Land Information

Type	A	B	C	D	E	F	G	H
FPS73R	7.3±0.5	7.3±0.3	3.0±0.5	2.0	6.0	2.5	1.2	5.5
FPS104R	10.0±0.5	10.0±0.3	3.8±0.5	3.0	8.0	3.5	1.5	7.5
FPS123R	12.2±0.5	12.2±0.3	3.0±0.5	5.0	10.4	5.5	1.35	10.0

POWER CHOKE - FPS73R/104R SERIES

Specifications

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ) max.	Rated DC Current (A) max.
FPS73R-1R2 ❑	**1.2**	**100**	**12**	**8.0**
FPS73R-1R8 ❑	**1.8**	**100**	**15**	**6.7**
FPS73R-2R2 ❑	**2.2**	**100**	**20**	**6.0**
FPS73R-3R9 ❑	**3.9**	**100**	**34**	**4.5**
FPS73R-4R7 ❑	**4.7**	**100**	**42**	**4.0**
FPS73R-5R6 ❑	**5.6**	**100**	**51**	**3.6**
FPS73R-6R8 ❑	**6.8**	**100**	**59**	**3.3**
FPS73R-8R2 ❑	**8.2**	**100**	**69**	**2.7**
FPS73R-100 ❑	**10**	**100**	**72**	**2.5**
FPS73R-120 ❑	**12**	**100**	**98**	**2.3**
FPS73R-150 ❑	**15**	**100**	**130**	**2.1**
FPS73R-180 ❑	**18**	**100**	**140**	**2.0**
FPS73R-220 ❑	**22**	**100**	**190**	**1.7**
FPS73R-270 ❑	**27**	**100**	**210**	**1.6**
FPS73R-330 ❑	**33**	**100**	**270**	**1.4**
FPS73R-390 ❑	**39**	**100**	**320**	**1.3**
FPS73R-470 ❑	**47**	**100**	**360**	**1.1**
FPS73R-560 ❑	**56**	**100**	**470**	**0.9**
FPS73R-680 ❑	**68**	**100**	**540**	**0.8**
FPS73R-820 ❑	**82**	**100**	**690**	**0.8**
FPS73R-101 ❑	**100**	**100**	**960**	**0.7**
FPS104R-1R0 ❑	**1.0**	**100**	**6.5**	**8.0**
FPS104R-1R5 ❑	**1.8**	**100**	**8.0**	**6.8**
FPS104R-2R5 ❑	**2.2**	**100**	**9.5**	**5.6**
FPS104R-3R3 ❑	**3.9**	**100**	**11.4**	**5.2**
FPS104R-4R7 ❑	**4.7**	**100**	**15.2**	**4.2**
FPS104R-5R6 ❑	**5.6**	**100**	**19.5**	**3.8**
FPS104R-6R8 ❑	**6.8**	**100**	**23.6**	**3.5**
FPS104R-8R2 ❑	**8.2**	**100**	**28.5**	**3.1**
FPS104R-100 ❑	**10**	**100**	**32.0**	**2.8**
FPS104R-120 ❑	**12**	**100**	**36.4**	**2.3**
FPS104R-150 ❑	**15**	**100**	**42.0**	**2.2**
FPS104R-180 ❑	**18**	**100**	**51.8**	**2.0**
FPS104R-220 ❑	**22**	**100**	**61.0**	**1.9**
FPS104R-270 ❑	**27**	**100**	**68.0**	**1.7**
FPS104R-330 ❑	**33**	**100**	**81.5**	**1.6**
FPS104R-390 ❑	**39**	**100**	**101.0**	**1.4**
FPS104R-470 ❑	**47**	**100**	**127.0**	**1.3**
FPS104R-560 ❑	**56**	**100**	**145.6**	**1.1**
FPS104R-680 ❑	**68**	**100**	**173.8**	**1.0**

NOTE: ❑ Tolerance value: K = ±10%, M = ±20%, N = ±30%.

POWER CHOKE - FPS104R/123R SERIES

Specifications

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ) max.	Rated DC Current (A) max.
FPS104R-820 ❑	**82**	**100**	**204.7**	**0.9**
FPS104R-101 ❑	**100**	**100**	**262.5**	**0.8**
FPS104R-121 ❑	**120**	**100**	**276.0**	**0.7**
FPS104R-151 ❑	**150**	**100**	**384.0**	**0.6**
FPS104R-181 ❑	**180**	**100**	**444.0**	**0.5**
FPS104R-221 ❑	**220**	**100**	**564.0**	**0.45**
FPS104R-271 ❑	**270**	**100**	**684.0**	**0.4**
FPS104R-331 ❑	**330**	**100**	**816.0**	**0.35**
FPS104R-391 ❑	**390**	**100**	**912.0**	**0.3**
FPS104R-471 ❑	**470**	**100**	**1236.0**	**0.25**
FPS104R-561 ❑	**560**	**100**	**1368.0**	**0.20**
FPS123R-1R2 ❑	**□1.2**	**100**	**6**	**10.0**
FPS123R-1R8 ❑	**□1.8**	**100**	**10**	**8.5**
FPS123R-2R7 ❑	**□2.7**	**100**	**12**	**6.6**
FPS123R-3R3 ❑	**□3.3**	**100**	**15**	**6.0**
FPS123R-4R7 ❑	**□4.7**	**100**	**22**	**5.0**
FPS123R-6R1 ❑	**□6.1**	**100**	**30**	**4.2**
FPS123R-8R2 ❑	**□8.2**	**100**	**34**	**4.0**
FPS123R-100 ❑	**□10**	**100**	**42**	**3.4**
FPS123R-120 ❑	**□12**	**100**	**47**	**3.0**
FPS123R-150 ❑	**□15**	**100**	**59**	**2.8**
FPS123R-180 ❑	**□18**	**100**	**72**	**2.5**
FPS123R-220 ❑	**□22**	**100**	**90**	**2.2**
FPS123R-270 ❑	**□27**	**100**	**110**	**2.0**
FPS123R-330 ❑	**□33**	**100**	**120**	**1.8**
FPS123R-390 ❑	**□39**	**100**	**150**	**1.7**
FPS123R-470 ❑	**□47**	**100**	**180**	**1.6**
FPS123R-560 ❑	**□56**	**100**	**210**	**1.5**
FPS123R-680 ❑	**□68**	**100**	**260**	**1.3**
FPS123R-820 ❑	**□82**	**100**	**330**	**1.2**
FPS123R-101 ❑	**□100**	**100**	**380**	**1.1**
FPS123R-121 ❑	**□120**	**100**	**480**	**1.0**
FPS123R-151 ❑	**□150**	**100**	**580**	**0.89**
FPS123R-181 ❑	**□180**	**100**	**690**	**0.82**
FPS123R-221 ❑	**□220**	**100**	**870**	**0.72**
FPS123R-271 ❑	**□270**	**100**	**980**	**0.67**
FPS123R-331 ❑	**□330**	**100**	**1420**	**0.60**
FPS123R-391 ❑	**□390**	**100**	**1620**	**0.54**
FPS123R-471 ❑	**□470**	**100**	**2000**	**0.48**

NOTE: ❑ Tolerance value: K = ±10%, M = ±20%, N = ±30%.