

SURFACE-MOUNT POWER INDUCTORS

SPI0402T SERIES



FEATURES:

- Very Small Foot Print
- Flat-top for Pick & Place
- Increased Size Selection Guide

APPLICATIONS:

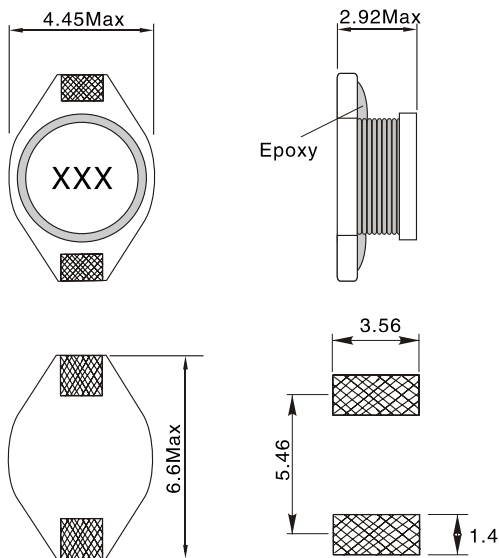
- Ideal for Palm-Top and Laptop DC to DC converters
- PDA's flash memory
- Step-up, step-down Converters

STANDARD SPECIFICATION:

Part Number SPI0402T-	Inductance(μ H) $\pm 20\%$	DCR (Ω) Max	Rated current (A) Max
1R0M	1.0	0.05	2.90
1R5M	1.5	0.05	2.60
2R2M	2.2	0.06	2.30
3R3M	3.3	0.07	2.00
4R7M	4.7	0.08	1.50
6R8M	6.8	0.11	1.20
100M	10	0.14	1.10
150M	15	0.20	0.90
220M	22	0.32	0.70
330M	33	0.44	0.58
470M	47	0.56	0.50
680M	68	0.75	0.40
101M	100	1.10	0.31
151M	150	1.70	0.27
221M	220	2.30	0.22
331M	330	3.30	0.18
471M	470	4.40	0.16
681M	680	6.80	0.14
102M	1000	12.00	0.10

PHYSICAL CHARACTERISTICS

TECHNICAL INFORMATION:



Winding



- measuring Frequency(L):1KHz,0.1Vrms,HP4284A
- Operating Temperature:-40°C to+85°C
- Storage Temperature: -40°C to +105°C
- Solder methods: Vapor Phase,Infrared Reflow
- Resistance to soldering heat:260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities

Note: All specifications subject to change without notice.

SURFACE-MOUNT HIGH CURRENT INDUCTORS SPI0605HC SERIES



FEATURES:

- Current up to 6A
- Flat-top for Pick & Place
- Very low DC Resistance
- Low profile

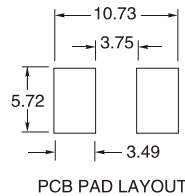
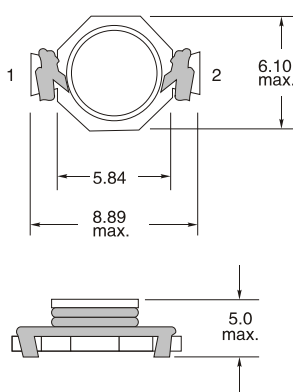
APPLICATIONS:

- Ideal for High Current, Low Voltage DC – DC Converters
- Designed for 3.3V Microprocessor

STANDARD SPECIFICATION:

Part Number SPI0605HC-	L (μ H) \pm 20%	IRMS (A)max	I SAT (A)max	DCR (Ω) max.
R47M	0.47	6.0	7.7	0.0097
1R0M	1.0	4.4	5.3	0.0177
1R5M	1.5	4.2	4.5	0.0200
2R2M	2.2	3.1	3.5	0.0363
3R3M	3.3	2.9	3.0	0.0428
4R7M	4.7	2.2	2.6	0.0544
6R8M	6.8	1.7	2.2	0.0897
100M	10.0	1.5	1.9	0.1107
150M	15.0	1.2	1.5	0.1747
220M	22.0	1.0	1.2	0.2541
330M	33.0	0.82	0.99	0.3670
470M	47.0	0.72	0.87	0.4740
680M	68.0	0.58	0.67	0.7320
101M	100.0	0.47	0.53	1.1090

PHYSICAL CHARACTERISTICS Dimensions(mm):



Winding



- Notes: (1)Open Circuit Inductance Test Parameters: 100KHz, .250Vrms, 0.0Aac.
 (2)RMS current for an approximate Δ T of 40°C. at an ambient temperature of 85°C.
 (3)Peak current for approximately 30% rolloff.
 (4)DCR limits 20°C.
 (5)Operating Temperature: -40°C to + 85°C
 (6)Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities
 All specifications subject to change without notice.

SURFACE-MOUNT POWER INDUCTORS

SPI0802T SERIES



FEATURES:

- Very Small Foot Print
- Flat-top for Pick & Place
- Increased Size Selection Guide

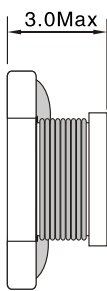
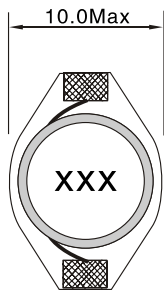
APPLICATIONS:

- Ideal for Palm-Top and Laptop DC to DC converters
- PDA's flash memory
- Step-up, step-down Converters

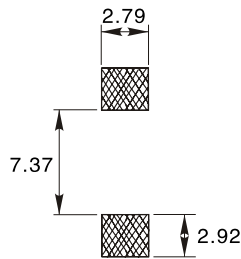
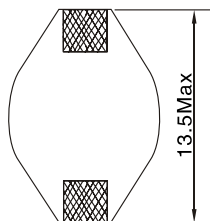
STANDARD SPECIFICATION:

Part Number SPI0802T-	Inductance(μ H) $\pm 20\%$	DCR (Ω) Max	Rated current (A) Max
100M	10	0.09	2.40
150M	15	0.12	2.00
220M	22	0.19	1.60
330M	33	0.25	1.40
470M	47	0.32	1.00
680M	68	0.55	0.90
101M	100	0.70	0.70
151M	150	1.00	0.60
221M	220	1.60	0.50
331M	330	2.20	0.40
471M	470	3.30	0.30
681M	680	4.40	0.20
102M	1000	7.00	0.10

PHYSICAL CHARACTERISTICS TECHNICAL INFORMATION:



Winding



- measuring Frequency(L): 1KHz, 0.1Vrms, HP4284A
- Operating Temperature: -40°C to $+85^{\circ}\text{C}$
- Storage Temperature: -40°C to $+105^{\circ}\text{C}$
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities

Note: All specifications subject to change without notice.

SURFACE-MOUNT POWER INDUCTORS

SPI0804T SERIES



FEATURES:

- Very Small Foot Print
- Flat-top for Pick & Place
- Increased Size Selection Guide

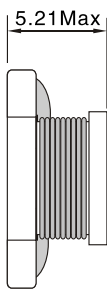
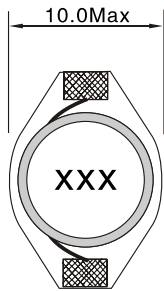
APPLICATIONS:

- Ideal for Palm-Top and Laptop DC to DC converters
- PDA's flash memory
- Step-up, step-down Converters

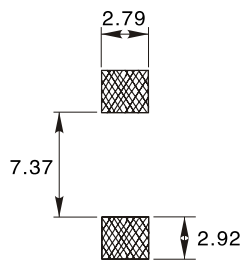
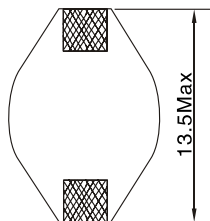
STANDARD SPECIFICATION:

Part Number SPI0804T-	Inductance(μ H) $\pm 20\%$	DCR (Ω) Max	Rated current (A) Max
1R0M	1.0	0.009	9.0
1R5M	1.5	0.010	8.0
2R2M	2.2	0.012	7.0
3R3M	3.3	0.015	6.4
4R7M	4.7	0.018	5.4
5R6M	5.6	0.025	5.0
6R8M	6.8	0.027	4.6
100M	10	0.038	3.8
150M	15	0.046	3.0
220M	22	0.085	2.6
330M	33	0.10	2.0
470M	47	0.14	1.6
680M	68	0.20	1.4
101M	100	0.28	1.2
151M	150	0.40	1.0
221M	220	0.61	0.8
331M	330	1.02	0.6
471M	470	1.27	0.5
681M	680	2.02	0.4
102M	1000	3.00	0.3

PHYSICAL CHARACTERISTICS TECHNICAL INFORMATION:



Winding



- measuring Frequency(L):1KHz,0.1Vrms,HP4284A
- Operating Temperature:-40°C to+85°C
- Storage Temperature: -40°C to +105°C
- Solder methods: Vapor Phase,Infrared Reflow
- Resistance to soldering heat:260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities

Note: All specifications subject to change without notice.

SURFACE-MOUNT POWER INDUCTORS

SPI0810T SERIES



FEATURES:

- Very Small Foot Print
- Flat-top for Pick & Place
- Increased Size Selection Guide

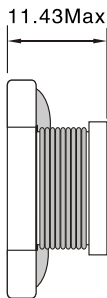
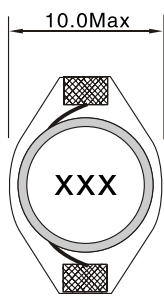
APPLICATIONS:

- Ideal for Palm-Top and Laptop DC to DC converters
- PDA's flash memory
- Step-up,step-down Converters

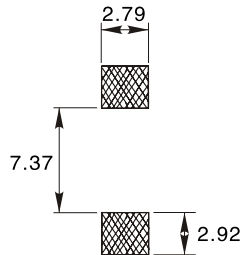
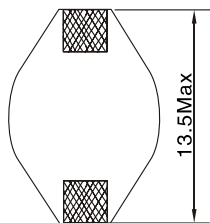
STANDARD SPECIFICATION:

Part Number SPI0810T-	Inductance(μ H) $\pm 20\%$	DCR (Ω) Max	Rated current (A) Max
100M	10	0.033	8.00
150M	15	0.042	7.00
220M	22	0.054	5.50
330M	33	0.08	4.00
470M	47	0.10	3.80
680M	68	0.17	3.00
101M	100	0.22	2.50
151M	150	0.34	2.00
221M	220	0.44	1.60
331M	330	0.70	1.20
471M	470	0.95	1.00
681M	680	1.20	1.00
102M	1000	2.00	0.80

PHYSICAL CHARACTERISTICS TECHNICAL INFORMATION:



Winding



- measuring Frequency(L):1KHz,0.1Vrms,HP4284A
- Operating Temperature:-40°C to+85°C
- Storage Temperature: -40°C to +105°C
- Solder methods: Vapor Phase,Infrared Reflow
- Resistance to soldering heat:260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities

Note: All specifications subject to change without notice.

SURFACE-MOUNT HIGH CURRENT INDUCTORS SPI1006HC SERIES



FEATURES:

- Current up to 10.6A
- Flat-top for Pick & Place
- Very low DC Resistance
- Low profile

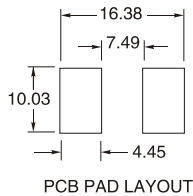
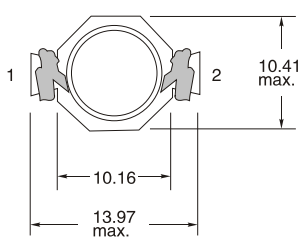
APPLICATIONS:

- Ideal for High Current, Low Voltage DC – DC Converters
- Designed for 3.3V Microprocessor

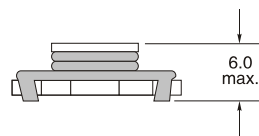
STANDARD SPECIFICATION:

Part Number SPI1006HC-	L (μ H) \pm 20%	IRMS (A)max	I SAT (A)max	DCR (Ω) max.
R47M	0.47	10.6	11.4	0.0049
1R0M	1.0	9.3	9.9	0.0065
1R5M	1.5	8.3	7.9	0.0081
2R2M	2.2	7.2	6.1	0.0107
3R3M	3.3	6.5	5.1	0.0128
4R7M	4.7	5.5	4.2	0.0165
6R8M	6.8	5.0	3.6	0.0202
100M	10.0	4.3	3.3	0.0267
150M	15.0	3.5	2.4	0.0410
220M	22.0	2.8	2.0	0.0617
330M	33.0	2.1	1.7	0.0917
470M	47.0	1.7	1.4	0.1388
680M	68.0	1.5	1.2	0.1787
101M	100.0	1.2	0.95	0.2707

PHYSICAL CHARACTERISTICS Dimensions(mm):



Winding



- Notes: (1)Open Circuit Inductance Test Parameters: 100KHz,.250Vrms,0.0Adc.
 (2)RMS current for an approximate Δ T of 40°C. at an ambient temperature of 85°C.
 (3)Peak current for approximately 30% rolloff.
 (4)DCR limits 20°C.
 (5)Operating Temperature:-40°C to + 85°C
 (6)Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities
 All specifications subject to change without notice.

SURFACE-MOUNT HIGH CURRENT INDUCTORS SPI1306HC SERIES



FEATURES:

- Current up to 16A
- Flat-top for Pick & Place
- Very low DC Resistance
- Low profile

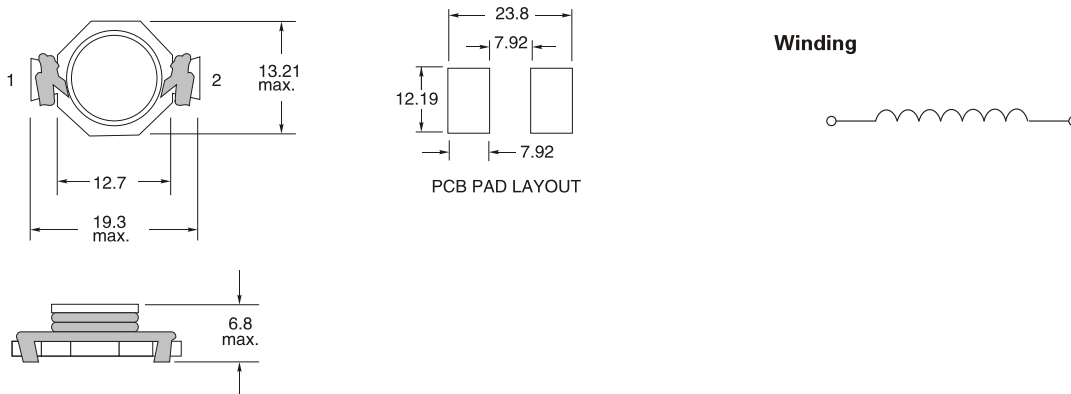
APPLICATIONS:

- Ideal for High Current, Low Voltage DC – DC Converters
- Designed for 3.3V Microprocessor

STANDARD SPECIFICATION:

Part Number SPI1306HC-	L (μ H) \pm 20%	IRMS (A)max	I SAT (A)max	DCR (Ω) max.
R47M	0.47	16.0	25.1	0.0021
1R0M	1.0	12.5	15.2	0.0034
1R5M	1.5	10.0	12.0	0.0053
2R2M	2.2	9.2	10.2	0.0074
3R3M	3.3	8.0	9.3	0.0083
4R7M	4.7	6.5	7.7	0.0114
6R8M	6.8	5.8	6.2	0.0183
100M	10.0	4.3	5.2	0.0261
150M	15.0	3.9	4.3	0.0317
220M	22.0	3.1	3.7	0.0491
330M	33.0	2.4	3.0	0.0688
470M	47.0	1.9	2.4	0.1082
680M	68.0	1.6	2.0	0.1558
101M	100.0	1.4	1.8	0.2053

PHYSICAL CHARACTERISTICS Dimensions(mm):



- Notes: (1)Open Circuit Inductance Test Parameters: 100KHz,.250Vrms,0.0Adc.
 (2)RMS current for an approximate Δ T of 40°C. at an ambient temperaturer of 85°C.
 (3)Peak current for approximately 30% rolloff.
 (4)DCR limits 20°C.
 (5)Operating Temperature:-40°C to + 85°C
 (6)Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities
 All specifications subject to change without notice.

SURFACE-MOUNT POWER INDUCTORS

SPI1306T SERIES



FEATURES:

- Very Small Foot Print
- Flat-top for Pick & Place
- Increased Size Selection Guide

APPLICATIONS:

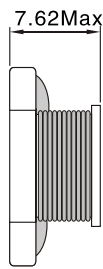
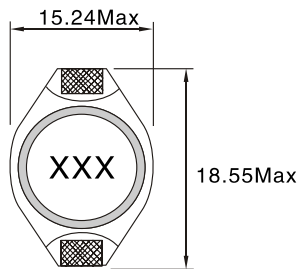
- Ideal for Palm-Top and Laptop DC to DC converters
- PDA's flash memory
- Step-up, step-down Converters

STANDARD SPECIFICATION:

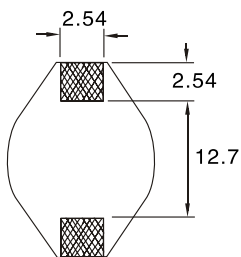
Part Number SPI1306T-	Inductance(μ H) $\pm 20\%$	DCR (Ω) Max	Rated current (A) Max
1R0M	1.0	0.011	20.00
2R2M	2.2	0.014	16.00
3R3M	3.3	0.016	14.00
5R6M	5.6	0.022	12.00
100M	10	0.032	10.00
150M	15	0.036	8.00
220M	22	0.047	7.00
330M	33	0.066	5.50
470M	47	0.087	4.50
680M	68	0.13	3.50
101M	100	0.19	3.00
151M	150	0.25	2.60
221M	220	0.38	2.40
331M	330	0.56	1.90
471M	470	0.85	1.40
681M	680	1.2	1.20
102M	1000	1.8	1.00

PHYSICAL CHARACTERISTICS

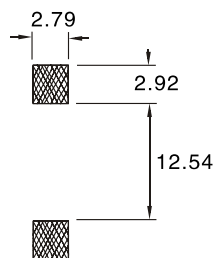
TECHNICAL INFORMATION:



Winding



land pattern



- measuring Frequency(L):1KHz,0.1Vrms,HP4284A
- Operating Temperature:-40°C to+85°C
- Storage Temperature: -40°C to +105°C
- Solder methods: Vapor Phase,Infrared Reflow
- Resistance to soldering heat:260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities

Note: All specifications subject to change without notice.

SURFACE-MOUNT HIGH CURRENT INDUCTORS SPI1608HC SERIES



FEATURES:

- Current up to 19.2A
- Flat-top for Pick & Place
- Very low DC Resistance
- Low profile

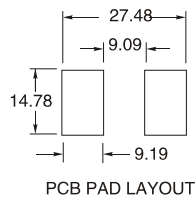
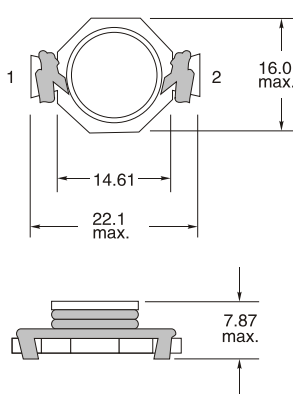
APPLICATIONS:

- Ideal for High Current, Low Voltage DC – DC Converters
- Designed for 3.3V Microprocessor

STANDARD SPECIFICATION:

Part Number SPI1608HC-	L (μ H) \pm 20%	IRMS (A)max	I SAT (A)max	DCR (Ω) max.
R47M	0.47	19.2	51.7	0.0019
1R0M	1.0	17.3	37.3	0.0023
1R5M	1.5	13.4	28.9	0.0039
2R2M	2.2	12.0	23.7	0.0048
3R3M	3.3	11.0	20.2	0.0057
4R7M	4.7	8.6	15.6	0.0093
6R8M	6.8	8.3	14.1	0.0100
100M	10.0	6.8	11.5	0.0150
150M	15.0	5.5	9.1	0.0230
220M	22.0	4.5	7.6	0.0340
330M	33.0	3.7	6.1	0.0520
470M	47.0	3.1	5.2	0.0740
680M	68.0	2.4	4.3	0.1200
101M	100.0	2.0	3.6	0.1700

PHYSICAL CHARACTERISTICS Dimensions(mm):



Winding



- Notes: (1)Open Circuit Inductance Test Parameters: 100KHz, .250Vrms, 0.0Aac.
 (2)RMS current for an approximate Δ T of 40°C. at an ambient temperature of 85°C.
 (3)Peak current for approximately 30% rolloff.
 (4)DCR limits 20°C.
 (5)Operating Temperature: -40°C to + 85°C
 (6)Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities
 All specifications subject to change without notice.