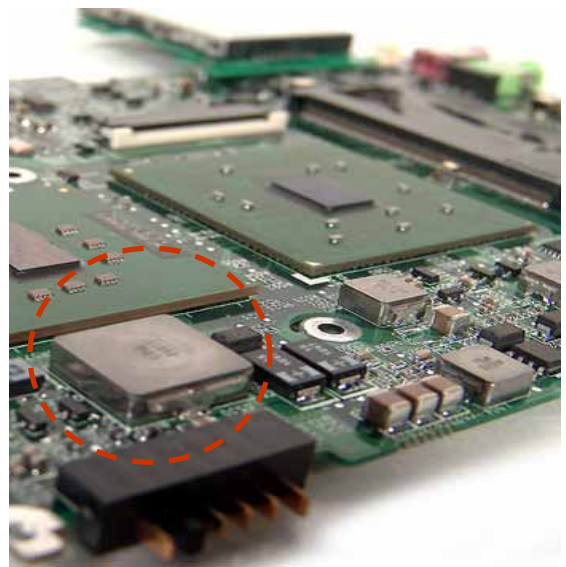
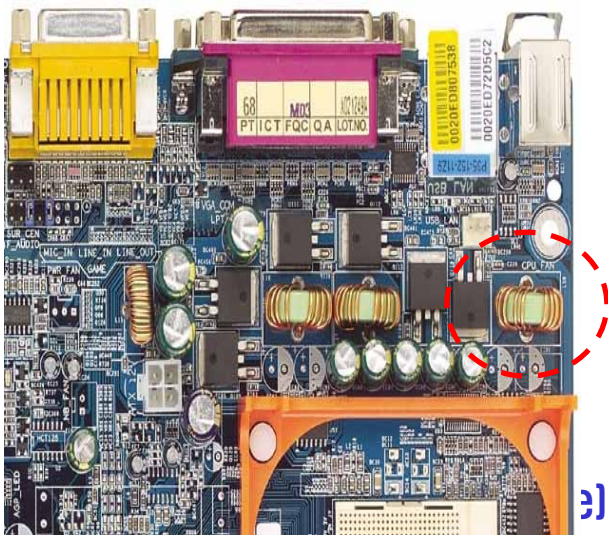


# SMD High Current Power Inductor

[www.datasheet4u.com](http://www.datasheet4u.com)

–Shield Type–



Challenge the Future! Share the Future!



## Advantage of SPI power inductor

Low profile

High current capability

[www.datasheet4u.com](http://www.datasheet4u.com)

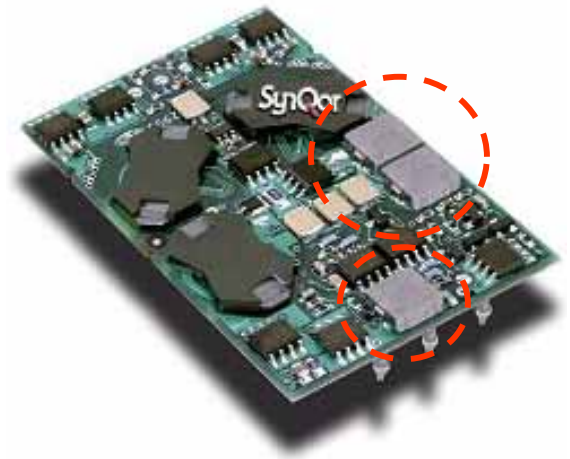
Low DCR

Low temperature rise

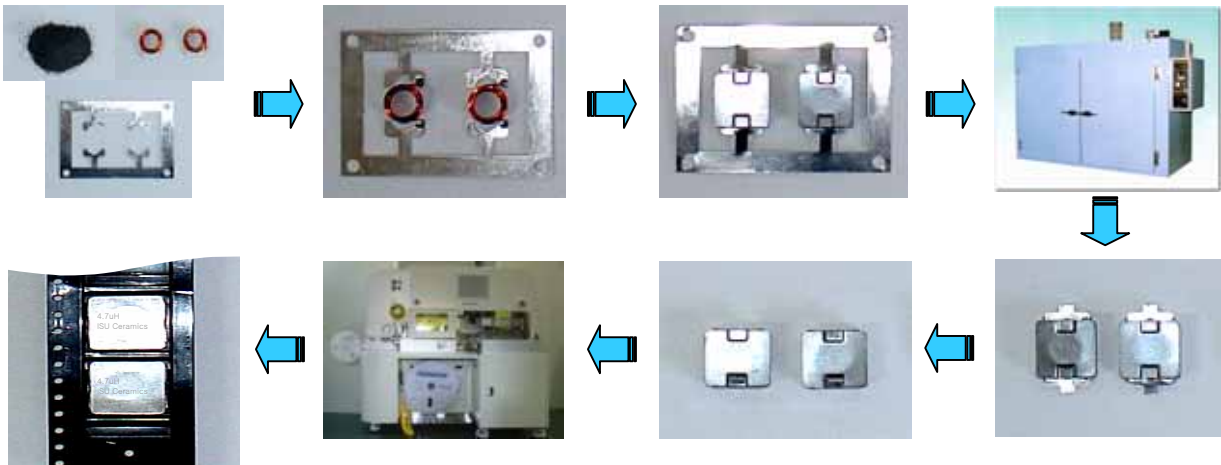
Increased thermal efficiency

Low installing cost

Reduced stray field emission



## Process



## Application

Switching-mode power supply

High current DC-DC and AC-DC converters

Voltage regulator module (VRM)

Desktop and notebook PC

Car Navigation system, VGA card, UMPC

Potable electronics

## Patent

Coil integrated Inductor

Korea Registration No. : 10-0655418



# High Current Power Inductor

## 1. Specifications

Part No	Inductance (μH)	DCR (Typical, mΩ)	DCR (Max, mΩ)	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-070-24-R47	0.47	5.5	6.5	19.0	14.0
SPI-070-24-R68	0.68	7.5	9.4	18.0	11.5
SPI-070-24-R82	0.82	8.0	11.8	16.0	10.5
SPI-070-24-1R0	1.00	9.0	14.2	15.0	10.0
SPI-070-24-1R5	1.50	19.0	21.2	13.0	8.0
SPI-070-24-2R2	2.20	25.0	34.0	12.0	7.0
SPI-070-24-3R3	3.30	48.0	51.6	9.0	5.5
SPI-070-24-4R7	4.70	55.0	63.0	7.5	5.0
SPI-070-24-6R8	6.80	82.0	95.0	6.0	4.0
SPI-070-24-8R2	8.20	98.0	106.0	5.5	3.5
SPI-070-24-100	10.00	112.0	129.0	5.0	3.0

### NOTES :

- Inductance : 100kHz, 100mV
- Tolerance of inductance : ± 20%
- Saturation rated current : 20% lower than its initial value
- Temperature rise current : ΔT = 40°C
- Operating temperature : -55°C ~ 120°C
- All test data is referenced to 25°C ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/uH
- Low buzz noise
- Lead free

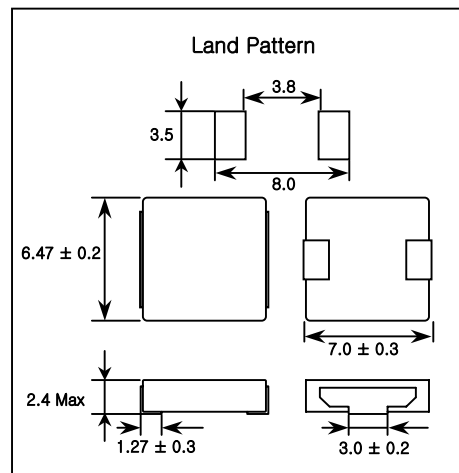
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 1,000 pcs/Reel

## 5. Dimensions [unit:mm]



# High Current Power Inductor

## 1. Specifications

Part No	Inductance (μH)	DCR (Typical, mΩ)	DCR (Max, mΩ)	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-070-30-R47	0.47	4.0	4.2	26.0	17.5
SPI-070-30-R68	0.68	5.0	5.5	25.0	15.5
SPI-070-30-R82	0.82	6.7	8.0	24.0	13.0
SPI-070-30-1R0	1.00	9.0	10.0	22.0	11.0
SPI-070-30-1R5	1.50	14.0	15.0	18.0	9.0
SPI-070-30-2R2	2.20	18.0	20.0	14.0	8.0
SPI-070-30-3R3	3.30	28.0	30.0	13.5	6.0
SPI-070-30-4R7	4.70	37.0	40.0	10.0	5.5
SPI-070-30-6R8	6.80	54.0	60.0	8.0	4.5
SPI-070-30-8R2	8.20	64.0	68.0	7.5	4.0
SPI-070-30-100	10.00	102.0	105.0	7.0	3.0

**NOTES :**

- Inductance : 100kHz, 100mV
- Tolerance of inductance : ± 20%
- Saturation rated current : 20% lower than its initial value
- Temperature rise current : ΔT = 40°C
- Operating temperature : -55°C ~ 120°C
- All test data is referenced to 25°C ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/uH
- Low buzz noise
- Lead free

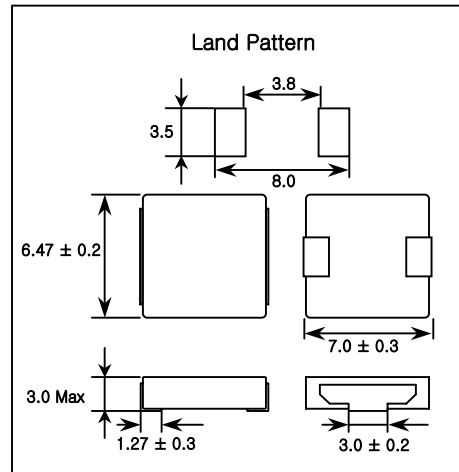
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 1,000 pcs/Reel

## 5. Dimensions [unit:mm]



# High Current Power Inductor

## 1. Specifications

Part No <small>www.datasheet4u.com</small>	Inductance ( $\mu$ H)	DCR (Typical, m $\Omega$ )	DCR (Max, m $\Omega$ )	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-070-40-R47	0.47	2.5	3.0	22.0	20.0
SPI-070-40-R68	0.68	4.0	5.0	20.0	18.0
SPI-070-40-R82	0.82	5.5	6.5	18.0	16.0
SPI-070-40-1R0	1.00	6.0	7.0	17.0	14.0
SPI-070-40-1R5	1.50	7.0	8.5	15.0	12.0
SPI-070-40-2R2	2.20	15.0	17.0	13.0	10.0
SPI-070-40-3R3	3.30	24.0	27.0	11.0	9.0
SPI-070-40-4R7	4.70	32.0	35.0	9.0	7.0
SPI-070-40-6R8	6.80	42.0	45.0	8.0	6.0
SPI-070-40-8R2	8.20	53.0	60.0	7.0	5.0
SPI-070-40-100	10.00	65.0	70.0	6.0	4.0

### NOTES :

- Inductance : 100kHz, 100mV
- Tolerance of inductance :  $\pm 20\%$
- Saturation rated current : 20% lower than its initial value
- Temperature rise current :  $\Delta T = 40^\circ\text{C}$
- Operating temperature :  $-55^\circ\text{C} \sim 120^\circ\text{C}$
- All test data is referenced to  $25^\circ\text{C}$  ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/ $\mu$ H
- Low buzz noise
- Lead free

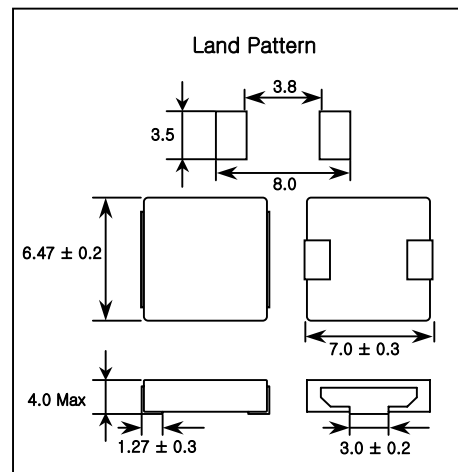
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 1,000 pcs/Reel

## 5. Dimensions [unit:mm]



## High Current Power Inductor

## 1. Specifications

Part No <small>www.datasheet4u.com</small>	Inductance ( $\mu\text{H}$ )	DCR (Typical, $\text{m}\Omega$ )	DCR (Max, $\text{m}\Omega$ )	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-070-50-R47	0.47	2.3	3.0	23.0	20.0
SPI-070-50-R68	0.68	3.8	4.5	20.5	18.5
SPI-070-50-R82	0.82	5.0	6.0	18.5	16.5
SPI-070-50-1R0	1.00	5.5	6.8	17.5	14.5
SPI-070-50-1R5	1.50	6.5	7.5	16.0	13.0
SPI-070-50-2R2	2.20	10.5	12.5	13.5	11.0
SPI-070-50-3R3	3.30	16.3	18.0	11.0	10.0
SPI-070-50-4R7	4.70	19.3	21.0	10.0	9.0
SPI-070-50-6R8	6.80	35.0	39.0	8.5	7.0
SPI-070-50-8R5	8.20	47.0	52.0	7.5	5.5
SPI-070-50-100	10.00	60.0	65.0	6.0	4.5
SPI-070-50-220	22.00	142.0	145.0	1.5	1.5

## NOTES :

- Inductance : 100kHz, 100mV
- Tolerance of inductance :  $\pm 20\%$
- Saturation rated current : 20% lower than its initial value
- Temperature rise current :  $\Delta T = 40^\circ\text{C}$
- Operating temperature :  $-55^\circ\text{C} \sim 120^\circ\text{C}$
- All test data is referenced to  $25^\circ\text{C}$  ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/ $\mu\text{H}$
- Low buzz noise
- Lead free

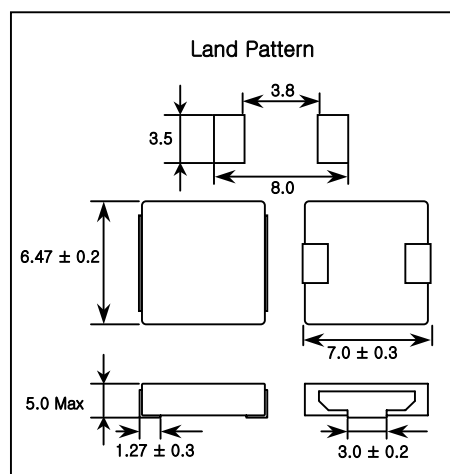
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 1,000 pcs/Reel

## 5. Dimensions [unit:mm]



# High Current Power Inductor

## 1. Specifications

Part No	Inductance (μH)	DCR (Typical, mΩ)	DCR (Max, mΩ)	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-100-40-R22	0.22	1.1	1.5	50.0	32.0
SPI-100-40-R36	0.36	1.3	1.4	60.0	31.5
SPI-100-40-R56	0.56	1.7	1.8	49.0	27.5
SPI-100-40-1R0	1.00	3.7	4.1	36.0	17.5
SPI-100-40-1R5	1.50	5.3	5.8	27.5	15.0
SPI-100-40-2R2	2.20	8.2	9.0	25.6	12.0
SPI-100-40-3R3	3.30	10.8	11.8	18.6	10.0
SPI-100-40-4R7	4.70	15.0	16.5	17.0	9.5
SPI-100-40-5R6	5.60	17.6	19.3	16.0	8.5
SPI-100-40-8R2	8.20	21.2	23.3	13.5	8.0
SPI-100-40-100	10.00	33.2	36.5	12.0	6.8
SPI-100-40-150	15.00	85.0	90.0	7.0	3.5
SPI-100-40-220	22.00	116.5	120.0	3.0	2.0

**NOTES :**

- Inductance : 100kHz, 100mV
- Tolerance of inductance : ± 20%
- Saturation rated current : 20% lower than its initial value
- Temperature rise current : ΔT = 40°C
- Operating temperature : -55°C ~ 120°C
- All test data is referenced to 25°C ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/uH
- Low buzz noise
- Lead free

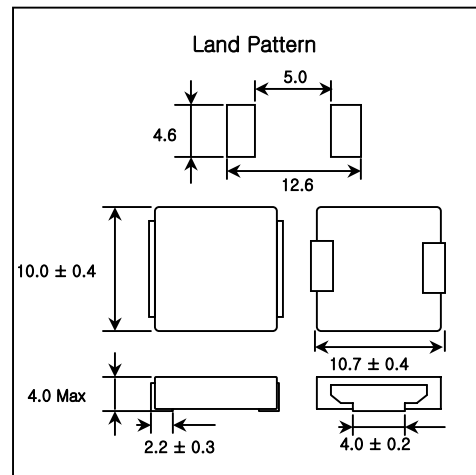
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 500 pcs/Reel

## 5. Dimensions [unit:mm]



# High Current Power Inductor

## 1. Specifications

Part No	Inductance (μH)	DCR (Typical, mΩ)	DCR (Max, mΩ)	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-100-60-R47	0.47	2.5	3.2	38.0	21.0
SPI-100-60-R82	0.82	3.5	4.0	32.0	19.0
SPI-100-60-1R5	1.50	4.5	5.0	28.0	17.0
SPI-100-60-2R2	2.20	7.5	9.0	26.0	14.0
SPI-100-60-3R3	3.30	10.0	12.0	19.0	11.0
SPI-100-60-4R7	4.70	13.0	14.0	15.0	9.5
SPI-100-60-6R8	6.80	15.0	17.0	12.5	8.5
SPI-100-60-8R6	8.60	17.3	19.0	11.0	8.0
SPI-100-60-110	11.00	22.3	24.0	9.0	7.5

**NOTES :**

- Inductance : 100kHz, 100mV
- Tolerance of inductance : ± 20%
- Saturation rated current : 20% lower than its initial value
- Temperature rise current : ΔT = 40°C
- Operating temperature : -55°C ~ 120°C
- All test data is referenced to 25°C ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/uH
- Low buzz noise
- Lead free

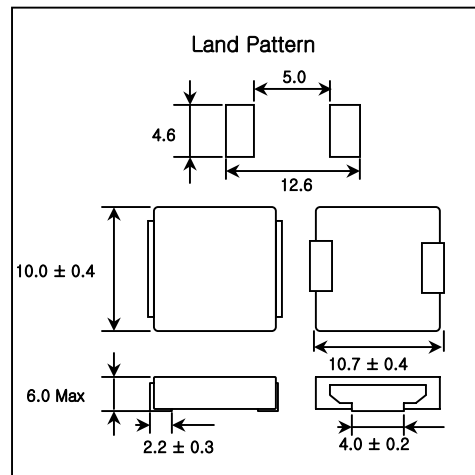
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 500 pcs/Reel

## 5. Dimensions [unit:mm]





## High Current Power Inductor

## 1. Specifications

Part No	Inductance ( $\mu\text{H}$ )	DCR (Typical, $\text{m}\Omega$ )	DCR (Max, $\text{m}\Omega$ )	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-130-35-R47	0.47	1.6	2.0	55.0	32.0
SPI-130-35-R60	0.60	1.8	2.2	51.0	29.0
SPI-130-35-R68	0.68	2.3	2.5	49.0	28.0
SPI-130-35-R82	0.82	2.6	3.0	44.0	25.0
SPI-130-35-1R0	1.00	3.3	3.5	40.0	24.0
SPI-130-35-1R5	1.50	5.1	5.5	35.0	19.0
SPI-130-35-1R8	1.80	6.5	7.0	30.0	16.5
SPI-130-35-2R2	2.20	7.2	8.0	29.0	16.0
SPI-130-35-3R3	3.30	11.0	12.0	27.0	12.0
SPI-130-35-4R7	4.70	14.3	15.0	24.0	10.0
SPI-130-35-5R6	5.60	18.3	19.0	19.0	9.5
SPI-130-35-6R8	6.80	19.8	22.0	18.0	9.0
SPI-130-35-8R2	8.20	24.8	28.0	16.0	8.5
SPI-130-35-100	10.00	30.4	34.0	14.0	7.0
SPI-130-35-220	22.00	86.1	90.0	4.5	3.0

## NOTES :

- Inductance : 100kHz, 100mV
- Tolerance of inductance :  $\pm 20\%$
- Saturation rated current : 20% lower than its initial value
- Temperature rise current :  $\Delta T = 40^\circ\text{C}$
- Operating temperature :  $-55^\circ\text{C} \sim 120^\circ\text{C}$
- All test data is referenced to  $25^\circ\text{C}$  ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/ $\mu\text{H}$
- Low buzz noise
- Lead free

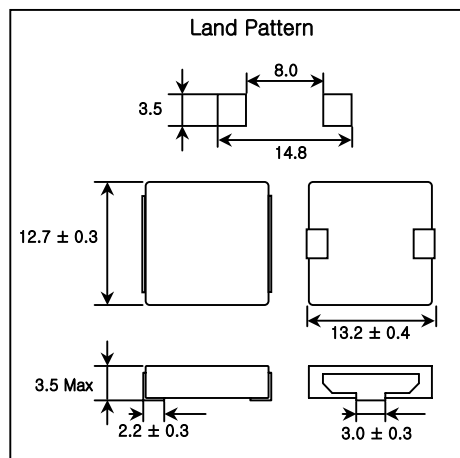
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 500 pcs/Reel

## 5. Dimensions [unit:mm]



# High Current Power Inductor

## 1. Specifications

Part No <small>www.datasheet4u.com</small>	Inductance ( $\mu$ H)	DCR (Typical, m $\Omega$ )	DCR (Max, m $\Omega$ )	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPI-130-50-R47	0.47	1.1	1.3	65.0	38.0
SPI-130-50-R82	0.82	2.0	2.3	53.0	31.0
SPI-130-50-1R0	1.00	2.1	2.5	50.0	29.0
SPI-130-50-1R5	1.50	3.4	4.1	48.0	23.0
SPI-130-50-1R8	1.80	4.2	4.9	40.0	19.0
SPI-130-50-2R2	2.20	4.6	5.5	32.0	20.0
SPI-130-50-3R3	3.30	7.7	9.2	32.0	15.0
SPI-130-50-4R7	4.70	12.8	15.0	27.0	12.0
SPI-130-50-5R6	5.60	14.0	16.5	22.0	11.5
SPI-130-50-6R8	6.80	15.4	18.5	21.0	11.0
SPI-130-50-8R2	8.20	18.9	22.5	18.0	9.5
SPI-130-50-100	10.00	21.4	25.5	16.0	9.0

### NOTES :

- Inductance : 100kHz, 100mV
- Tolerance of inductance :  $\pm 20\%$
- Saturation rated current : 20% lower than its initial value
- Temperature rise current :  $\Delta T = 40^\circ\text{C}$
- Operating temperature :  $-55^\circ\text{C} \sim 120^\circ\text{C}$
- All test data is referenced to  $25^\circ\text{C}$  ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/ $\mu$ H
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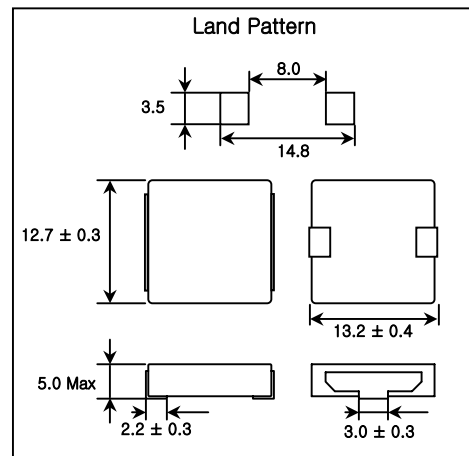
## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 4. Standard packing quantity

- 500 pcs/Reel

## 5. Dimensions [unit:mm]



## High Current Power Inductor

## 1. Specifications

Part No	Inductance (μH)	DCR (Typical, mΩ)	DCR (Max, mΩ)	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
GPI-100-1R0	1.00	6.5	7.5	13.0	7.8
GPI-100-1R5	1.50	10.0	12.0	11.0	7.0
GPI-100-2R2	2.20	14.0	16.0	10.0	6.2
GPI-100-3R3	3.30	26.0	29.0	9.0	5.6
GPI-100-4R7	4.70	39.0	43.0	8.0	5.0
GPI-100-5R6	5.60	44.0	46.0	6.5	4.5
GPI-100-6R8	6.80	47.0	50.0	5.0	4.0
GPI-100-8R2	8.20	49.0	55.0	4.0	3.5
GPI-100-100	10.00	51.0	60.0	3.0	3.0
GPI-100-120	12.00	72.0	80.0	2.0	2.5
GPI-100-150	15.00	101.0	115.0	1.5	2.0

## NOTES :

- Inductance : 100kHz, 100mV
- Tolerance of inductance : ± 20%
- Saturation rated current : 20% lower than its initial value
- Temperature rise current : ΔT = 40°C
- Operating temperature : -55°C ~ 120°C
- All test data is referenced to 25°C ambient

## 2. Features

- Shield construction
- Frequency range up to 5 MHz
- Lowest DCR/uH
- Low buzz noise
- Lead free

## 3. Applications

- PDA/Notebook/Desktop/Server applications
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters for power system distribution

## 5. Dimensions [unit:mm]

