

# Inductors for Power Circuits

## Radial lead

### SL series

Type:           SL1215  
                  SL1720  
                  SL1923  
                  SL2125

Issue date:     September 2011

- All specifications are subject to change without notice.
  - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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# Inductors for Power Circuits

## Radial Lead

Conformity to RoHS Directive

### SL Series SL1215

#### FEATURES

- This is a low Rdc, best for the power supply line.
- It has an open magnetic circuit for large current.
- There is a series of many types from low inductance to high inductance in large current.
- It is a product conforming to RoHS directive.

#### APPLICATIONS

Televisions, CRT displays, printers, and various types of electronic products.

#### SPECIFICATIONS

Operating temperature range	−40 to +85°C [Including self-temperature rise]
Storage temperature range	−40 to +85°C [Unit of products]
Terminal strength	9.8N min.*
Flow soldering condition	260°C /10 seconds

\* Only for lead type specification. Wire type's specification depends on the vibration test.

#### PRODUCT IDENTIFICATION

SL	1215	-	100	K	3R6	-	PF
(1)	(2)		(3)	(4)	(5)		(6)

(1)Series name

(2)Dimensions

Type	Dimension	Lead pitch
1215	ø12×14.5mm	11mm (10 to 100μH for wire type) 7.5mm (150 to 5600μH for lead type)

(3)Inductance value

100	10μH
102	1000μH

(4)Inductance tolerance

K	±10%
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(5)Rated current

3R6	3.6A
R20	0.2A

(6)Lead-free compatible product

PF	Lead-free compatible product
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#### PACKAGING STYLE AND QUANTITIES

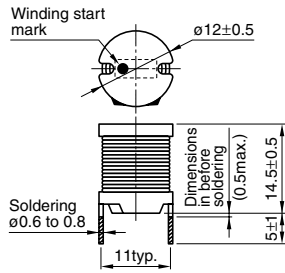
Packaging style	Quantity
Bulk	100 pieces/tray

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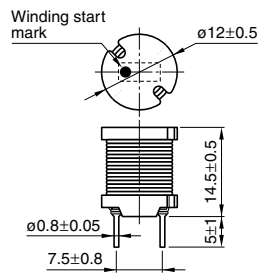
• All specifications are subject to change without notice.

## SHAPES AND DIMENSIONS

### WIRE TYPE (10 to 100 $\mu$ H)



### LEAD TYPE (150 to 5600 $\mu$ H)



Weight: 7g typ.

Dimensions in mm

## ELECTRICAL CHARACTERISTICS

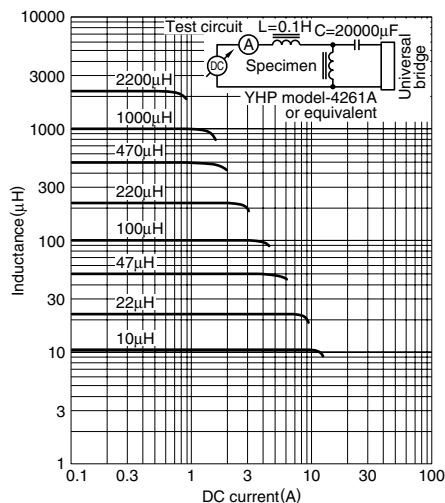
Inductance ( $\mu$ H)	Inductance tolerance	DC resistance ( $\Omega$ )max.	Rated current(A)*max.		Part No.	Lead wire style
			Based on inductance change	Based on temperature rise		
10	±10%	0.019	9.8	3.6	SL1215-100K3R6-PF	Wire type
15	±10%	0.022	8.9	3.3	SL1215-150K3R3-PF	Wire type
22	±10%	0.031	7.2	2.8	SL1215-220K2R8-PF	Wire type
33	±10%	0.044	6	2.3	SL1215-330K2R3-PF	Wire type
47	±10%	0.059	4.9	2	SL1215-470K2R0-PF	Wire type
68	±10%	0.073	4.2	1.8	SL1215-680K1R8-PF	Wire type
100	±10%	0.1	3.4	1.5	SL1215-101K1R5-PF	Wire type
150	±10%	0.15	2.8	1.3	SL1215-151K1R3-PF	Lead type
220	±10%	0.26	1.9	1	SL1215-221K1R0-PF	Lead type
330	±10%	0.32	1.8	0.91	SL1215-331KR91-PF	Lead type
470	±10%	0.48	1.6	0.72	SL1215-471KR72-PF	Lead type
680	±10%	0.73	1.3	0.58	SL1215-681KR58-PF	Lead type
1000	±10%	0.96	1.1	0.51	SL1215-102KR51-PF	Lead type
1500	±10%	1.4	0.9	0.42	SL1215-152KR42-PF	Lead type
2200	±10%	2.5	0.7	0.31	SL1215-222KR31-PF	Lead type
3300	±10%	3.3	0.6	0.27	SL1215-332KR27-PF	Lead type
5600	±10%	6.4	0.47	0.2	SL1215-562KR20-PF	Lead type

\* Rated current: Value obtained when current flows and self-temperature has risen to 25°C.

- Test equipment Inductance: LCR METER YHP4261A, or equivalent  
Rdc: MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



# Inductors for Power Circuits

## Radial Lead

Conformity to RoHS Directive

### SL Series SL1720

#### FEATURES

- This is a low Rdc, best for the power supply line.
- It has an open magnetic circuit for large current.
- There is a series of many types from low inductance to high inductance in large current.
- It is a product conforming to RoHS directive.

#### APPLICATIONS

Televisions, CRT displays, printers, and various types of electronic products.

#### SPECIFICATIONS

Operating temperature range	−40 to +85°C [Including self-temperature rise]
Storage temperature range	−40 to +85°C [Unit of products]
Terminal strength	9.8N min.
Flow soldering condition	260°C /10 seconds

#### PRODUCT IDENTIFICATION

SL	1720	-	151	K	2R1	-	PF
(1)	(2)		(3)	(4)	(5)		(6)

(1)Series name

(2)Dimensions

Type	Dimension	Lead pitch
1720	ø16.9×20.5mm	10mm

(3)Inductance value

151	150μH
102	1000μH

(4)Inductance tolerance

K	±10%
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(5)Rated current

2R1	2.1A
R60	0.6A

(6)Lead-free compatible product

PF	Lead-free compatible product
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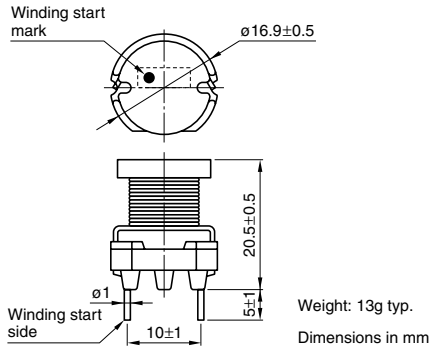
#### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Bulk	100 pieces/tray

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

## SHAPES AND DIMENSIONS



## ELECTRICAL CHARACTERISTICS

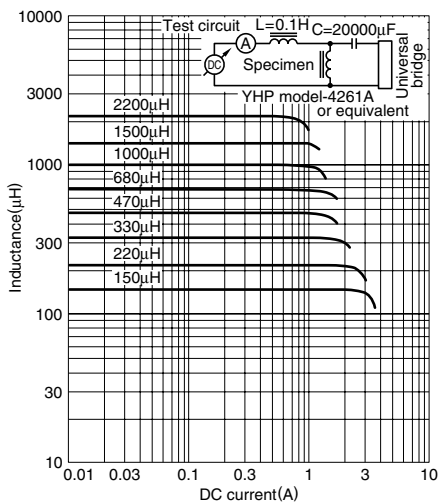
Inductance ( $\mu\text{H}$ )	Inductance tolerance	DC resistance ( $\Omega$ ) max.	Rated current(A)*max.		Part No.
			Based on inductance change	Based on temperature rise	
150	$\pm 10\%$	0.1	3	2.1	SL1720-151K2R1-PF
220	$\pm 10\%$	0.13	2.6	1.8	SL1720-221K1R8-PF
330	$\pm 10\%$	0.18	2	1.5	SL1720-331K1R5-PF
470	$\pm 10\%$	0.27	1.7	1.3	SL1720-471K1R3-PF
680	$\pm 10\%$	0.38	1.4	1	SL1720-681K1R0-PF
1000	$\pm 10\%$	0.54	1.1	0.9	SL1720-102KR90-PF
1500	$\pm 10\%$	0.86	0.98	0.72	SL1720-152KR72-PF
2200	$\pm 10\%$	1.22	0.81	0.6	SL1720-222KR60-PF

\* Rated current: Value obtained when current flows and self-temperature has risen to 25°C.

- Test equipment Inductance: LCR METER YHP4261A, or equivalent  
Rdc: MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



# Inductors for Power Circuits

## Radial Lead

Conformity to RoHS Directive

### SL Series SL1923

#### FEATURES

- This is a low Rdc, best for the power supply line.
- It has an open magnetic circuit for large current.
- There is a series of many types from low inductance to high inductance in large current.
- It is a product conforming to RoHS directive.

#### APPLICATIONS

Televisions, CRT displays, printers, and various types of electronic products.

#### SPECIFICATIONS

Operating temperature range	−40 to +85°C [Including self-temperature rise]
Storage temperature range	−40 to +85°C [Unit of products]
Terminal strength	9.8N min.
Flow soldering condition	260°C /10 seconds

#### PRODUCT IDENTIFICATION

SL	1923	-	471	K	1R5	-	PF
(1)	(2)		(3)	(4)	(5)		(6)

(1)Series name

(2)Dimensions

Type	Dimension	Lead pitch
1923	ø18.8×23.5mm	10mm

(3)Inductance value

471	470μH
102	1000μH

(4)Inductance tolerance

K	±10%
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(5)Rated current

1R5	1.5A
R26	0.26A

(6)Lead-free compatible product

PF	Lead-free compatible product
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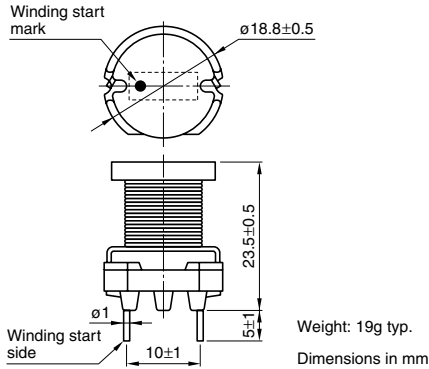
#### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Bulk	100 pieces/tray

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

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## SHAPES AND DIMENSIONS



## ELECTRICAL CHARACTERISTICS

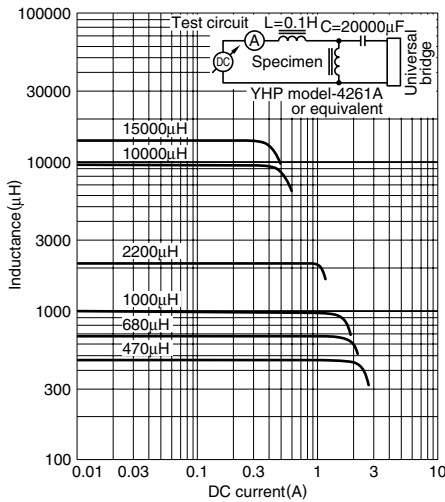
Inductance ( $\mu\text{H}$ )	Inductance tolerance	DC resistance ( $\Omega$ )max.	Rated current(A)*max.		Part No.
			Based on inductance change	Based on temperature rise	
470	$\pm 10\%$	0.2	2.1	1.5	SL1923-471K1R5-PF
680	$\pm 10\%$	0.29	1.8	1.3	SL1923-681K1R3-PF
1000	$\pm 10\%$	0.41	1.4	1.1	SL1923-102K1R1-PF
2200	$\pm 10\%$	1	1	0.7	SL1923-222KR70-PF
10000	$\pm 10\%$	4.3	0.46	0.33	SL1923-103KR33-PF
15000	$\pm 10\%$	7.1	0.38	0.26	SL1923-153KR26-PF

\* Rated current: Value obtained when current flows and self-temperature has risen to 25°C.

- Test equipment Inductance:LCR METER YHP4261A, or equivalent  
Rdc: MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



# Inductors for Power Circuits

## Radial Lead

Conformity to RoHS Directive

### SL Series SL2125

#### FEATURES

- This is a low Rdc, best for the power supply line.
- It has an open magnetic circuit for large current.
- There is a series of many types from low inductance to high inductance in large current.
- It is a product conforming to RoHS directive.

#### APPLICATIONS

Televisions, CRT displays, printers, and various types of electronic products.

#### SPECIFICATIONS

Operating temperature range	−40 to +85°C [Including self-temperature rise]
Storage temperature range	−40 to +85°C [Unit of products]
Terminal strength	9.8N min.
Flow soldering condition	260°C /10 seconds

#### PRODUCT IDENTIFICATION

SL	2125	-	102	K	1R3	-	PF
(1)	(2)		(3)	(4)	(5)		(6)

(1)Series name

(2)Dimensions

Type	Dimension	Lead pitch
2125	ø20.8×25.5mm	10mm

(3)Inductance value

102	1000μH
103	10000μH

(4)Inductance tolerance

K	±10%
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(5)Rated current

1R3	1.3A
R41	0.41A

(6)Lead-free compatible product

PF	Lead-free compatible product
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#### PACKAGING STYLE AND QUANTITIES

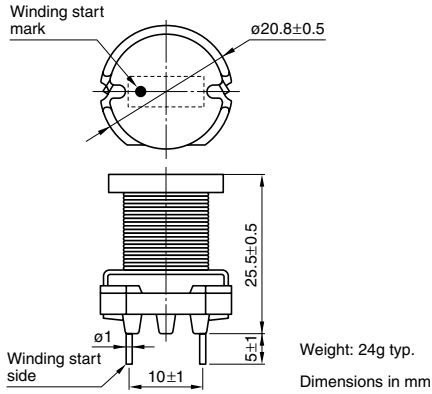
Packaging style	Quantity
Bulk	100 pieces/tray

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

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## SHAPES AND DIMENSIONS



## ELECTRICAL CHARACTERISTICS

Inductance ( $\mu\text{H}$ )	Inductance tolerance	Test frequency L (kHz)	DC resistance ( $\Omega$ )max.	Rated current(A)*max.		Part No.
				Based on inductance change	Based on temperature rise	
1000	$\pm 10\%$	1	0.35	1.7	1.3	SL2125-102K1R3-PF
1500	$\pm 10\%$	1	0.61	1.3	0.99	SL2125-152KR99-PF
2200	$\pm 10\%$	1	0.78	1.1	0.87	SL2125-222KR87-PF
3300	$\pm 10\%$	1	1.15	0.95	0.72	SL2125-332KR72-PF
4700	$\pm 10\%$	1	1.71	0.78	0.59	SL2125-472KR59-PF
6800	$\pm 10\%$	1	2.61	0.66	0.47	SL2125-682KR47-PF
10000	$\pm 10\%$	1	3.41	0.55	0.41	SL2125-103KR41-PF

\* Rated current: Value obtained when current flows and self-temperature has risen to 25°C.

- Test equipment Inductance: LCR METER YHP4261A, or equivalent  
Rdc: MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS

