TDK

Radial Lead Inductors(Coils) For Power Line

Conformity to RoHS Directive

TSL Series TSL1315

FEATURES

- The TSL series feature low DC resistance and high current handling capacities, making them ideal for power supply line applications.
- These parts are manufactured to a high degree of dimensional accuracy using non-flammable material (UL94V-0).
- Available in tape packaging to support automated mounting machines.
- This product conforms to the standards that are slated to be introduced under the RoHS Directive.

APPLICATIONS

Televisions, VCRs, personal computers, and other electronic equipments.

SPECIFICATIONS

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

PRODUCT IDENTIFICATION

TSL	1315	RA-	100	K	5R1	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1)Series name

(2)Dimensions

1315	ø14×17mm (lead pitch 7.5mm)

(3)Packaging style

RA	Taping(Ammo-pack)
S	Bulk

(4)Inductance value

100	10µH
102	1000µH

(5)Inductance tolerance

J	±5%
K	±10%

(6)Rated current

5R1	5.1A
R99	0.99A

(7)Lead-free compatible product

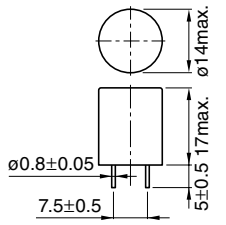
PF	Lead-free compatible product

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping (Ammo-pack)	200 pieces/box
Bulk	50 pieces/pack

- 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.

SHAPES AND DIMENSIONS



Weight: 7.5g

Dimensions in mm

ELECTRICAL CHARACTERISTICS

Inductance (µH)	Inductance tolerance	Q min.	Test frequency L/Q (Hz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (A)*1max.		Part No.
						Based on inductance change	Based on temperature rise	
10	±10%	90	1k/2.52M	19	0.023	12	5.1	TSL1315□*2-100K5R1-PF
15	±10%	90	1k/2.52M	12	0.028	9.5	4.5	TSL1315□-150K4R5-PF
22	±10%	80	1k/2.52M	7.6	0.035	8.2	4.2	TSL1315□-220K4R2-PF
33	±10%	70	1k/2.52M	6.9	0.043	6.8	3.7	TSL1315□-330K3R7-PF
47	±10%	50	1k/2.52M	5.6	0.052	5.7	3.4	TSL1315□-470K3R4-PF
68	±10%	40	1k/2.52M	4.4	0.068	4.8	3	TSL1315□-680K3R0-PF
100	±10%	50	1k/796k	3.3	0.097	3.9	2.5	TSL1315□-101K2R5-PF
150	±10%	50	1k/796k	2.6	0.14	3.2	2.1	TSL1315□-151K2R1-PF
220	±10%	40	1k/796k	2.2	0.2	2.7	1.7	TSL1315□-221K1R7-PF
330	±10%	30	1k/796k	1.8	0.3	2.1	1.4	TSL1315□-331K1R4-PF
470	±10%	30	1k/796k	1.5	0.43	1.8	1.1	TSL1315□-471K1R1-PF
680	±10%	30	1k/796k	1.2	0.61	1.5	0.99	TSL1315□-681KR99-PF
1000	±5%	30	1k/252k	1	1	1.2	0.78	TSL1315□-102JR78-PF
1500	±5%	40	1k/252k	0.83	1.3	1	0.68	TSL1315□-152JR68-PF
2200	±5%	40	1k/252k	0.7	2	0.83	0.55	TSL1315□-222JR55-PF
3300	±5%	40	1k/252k	0.6	3.1	0.69	0.44	TSL1315□-332JR44-PF
4700	±5%	40	1k/252k	0.43	4.4	0.58	0.37	TSL1315□-472JR37-PF
6800	±5%	30	1k/252k	0.38	6.5	0.46	0.3	TSL1315□-682JR30-PF
10000	±5%	70	1k/79.6k	0.3	10	0.4	0.24	TSL1315□-103JR24-PF

*1 Rated current: Value obtained when current flows and the temperature has risen to 25°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

*2 □: Please specify packaging style, S(Bulk) or RA(Taping).

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS