

WIS Series

Wound Chip Inductor

Size 1812

CHARACTERISTICS

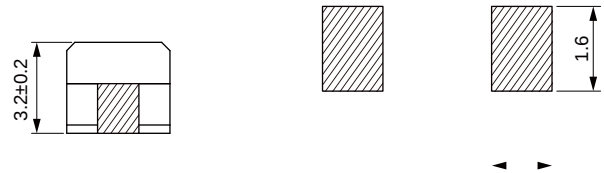
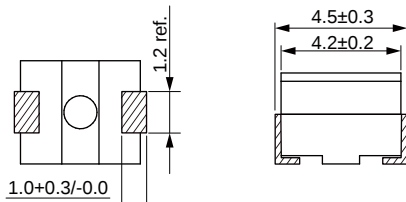
- Small size and higher inductance available
- Small tolerance available
- Operating temperature: -40 to +125 °C
- Quantity: 500 PCS

APPLICATION

- Filter
- General circuit application

Dimensions: [mm]

Land Pattern: [mm]



Electrical Properties:

Part Number	Inductance (μH)	Tolerance (%)	Q Factor	DC Resistance (mΩ)	Rated Current (mA)	Inductance (μH)	Rated Current (mA)
WIS1812-R10K	0.10	±10%	35	25.2	780	0.18	800
WIS1812-R12K	0.12	±10%	35	25.2	735	0.20	770
WIS1812-R15K	0.15	±10%	35	25.2	615	0.22	730
WIS1812-R18K	0.18	±10%	35	25.2	570	0.24	700
WIS1812-R22K	0.22	±10%	40	25.2	505	0.25	665
WIS1812-R27K	0.27	±10%	40	25.2	450	0.26	635
WIS1812-R33K	0.33	±10%	40	25.2	425	0.28	605
WIS1812-R39K	0.39	±10%	40	25.2	390	0.30	575
WIS1812-R47K	0.47	±10%	40	25.2	350	0.32	545
WIS1812-R56K	0.56	±10%	40	25.2	325	0.36	520
WIS1812-R68K	0.68	±10%	40	25.2	300	0.40	500
WIS1812-R82K	0.82	±10%	40	25.2	275	0.45	475
WIS1812-1R0K	1.00	±10%	50	7.96	250	0.50	450
WIS1812-1R2K	1.20	±10%	50	7.96	240	0.55	430
WIS1812-1R5K	1.50	±10%	50	7.96	210	0.60	410

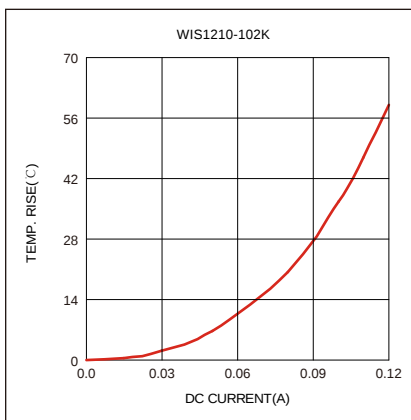
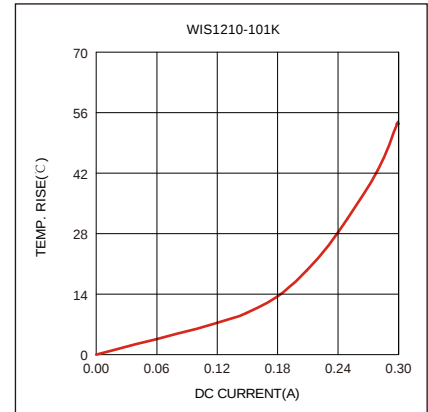
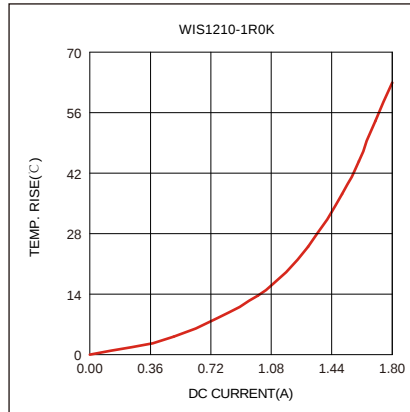
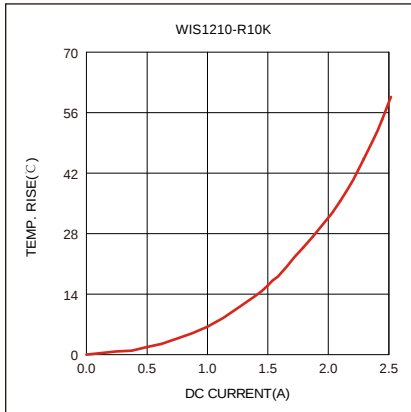
Electrical Properties:

WIS1812-1R8K	1.80	±10%	50	7.960	190	0.65	390
WIS1812-2R2K	2.20	±10%	50	7.960	160	0.70	380
WIS1812-2R7K	2.70	±10%	50	7.960	150	0.75	370
WIS1812-3R3K	3.30	±10%	50	7.960	110	0.80	355
WIS1812-3R9K	3.90	±10%	50	7.960	100	0.90	330
WIS1812-4R7K	4.70	±10%	50	7.960	80.0	1.00	315
WIS1812-5R6K	5.60	±10%	50	7.960	50.0	1.10	300
WIS1812-6R8K	6.80	±10%	50	7.960	35.0	1.20	285
WIS1812-8R2K	8.20	±10%	50	7.960	28.0	1.40	270
WIS1812-100K	10.0	±10%	50	2.520	22.0	1.60	250
WIS1812-120K	12.0	±10%	50	2.520	20.0	2.00	225
WIS1812-150K	15.0	±10%	50	2.520	18.0	2.50	200
WIS1812-180K	18.0	±10%	50	2.520	16.0	2.80	190
WIS1812-220K	22.0	±10%	50	2.520	14.0	3.20	180
WIS1812-270K	27.0	±10%	50	2.520	13.0	3.60	170
WIS1812-330K	33.0	±10%	50	2.520	12.0	4.00	160
WIS1812-390K	39.0	±10%	50	2.520	11.0	4.50	150
WIS1812-470K	47.0	±10%	50	2.520	10.5	5.00	140
WIS1812-560K	56.0	±10%	50	2.520	10.0	5.50	135
WIS1812-680K	68.0	±10%	50	2.520	9.5	6.00	130
WIS1812-820K	82.0	±10%	50	2.520	8.5	7.00	120
WIS1812-101K	100	±10%	40	0.796	8.0	8.00	110
WIS1812-121K	120	±10%	40	0.796	7.0	8.00	110
WIS1812-151K	150	±10%	40	0.796	6.0	9.00	105
WIS1812-181K	180	±10%	40	0.796	5.5	9.50	102
WIS1812-221K	220	±10%	40	0.796	5.0	10.0	100
WIS1812-271K	270	±10%	40	0.796	4.5	12.0	92
WIS1812-331K	330	±10%	40	0.796	4.0	14.0	85
WIS1812-391K	390	±10%	40	0.796	3.5	18.0	80
WIS1812-471K	470	±10%	40	0.796	3.5	26.0	62
WIS1812-561K	560	±10%	30	0.796	3.0	30.0	50
WIS1812-681K	680	±10%	30	0.796	3.0	30.0	50
WIS1812-821K	820	±10%	30	0.796	2.5	35.0	30
WIS1812-102K	1000	±10%	20	0.252	2.5	40.0	30

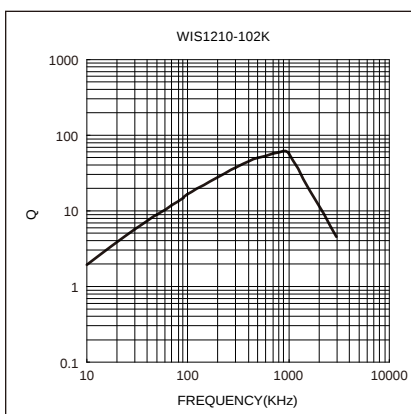
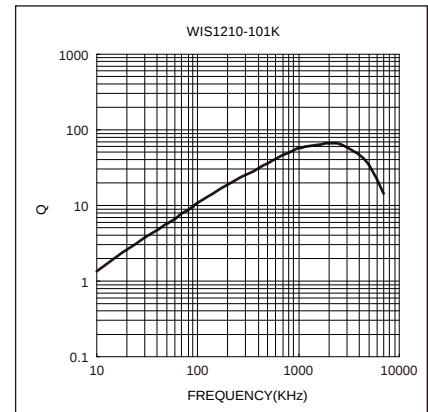
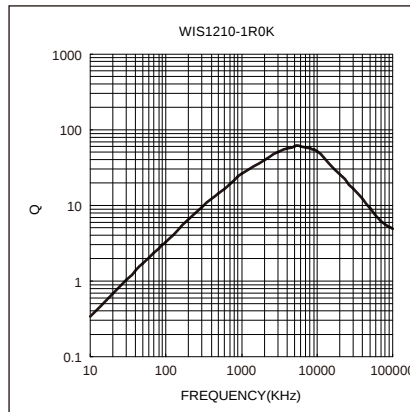
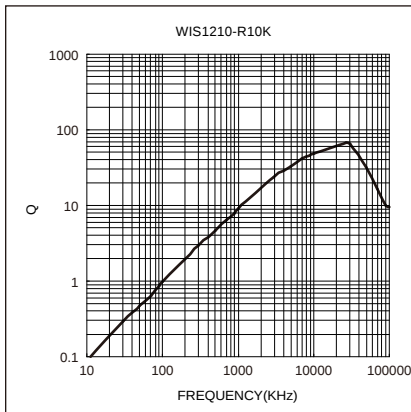
Rated Current: The actual value of DC current when the temperature rise is $\Delta T=20^{\circ}\text{C}$

Typical Electrical Characteristics:

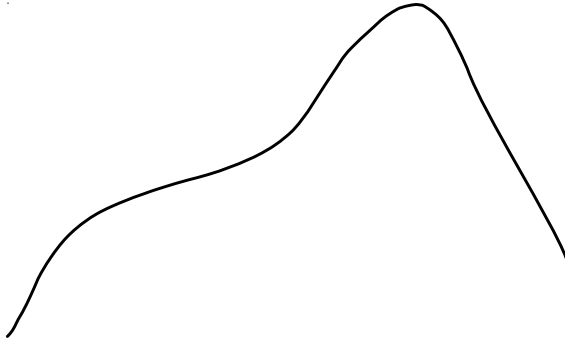
Temperture Rise VS. Current Characteristics:



Q VS. Frequency Characteristics:



Soldering Reflow:



Preheat condition: 150 ~200 °C / 60~180 sec.

Allowed time above 217 °C : 60~150 sec.

Max temperature: 250 °C .

Cautions and Warnings:

Storage Conditions :

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max). If the storage period elapses, the soldering of the terminal electrodes may deteriorate. The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does. As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.