

4c). WGI Series (Molded Ferrite Type, High Current)

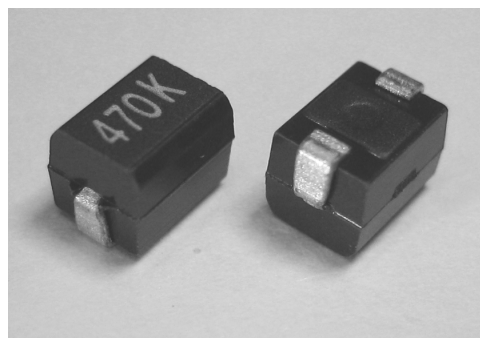
Range of Size: (1210(3225)~1812(4532))

Test Equipment: **HP4194A** - Inductance & Q measurement

HP4291A - SRF measurement

CH-502AC - DCR measurement

Operating Temperature : -40 ~+125



Applications

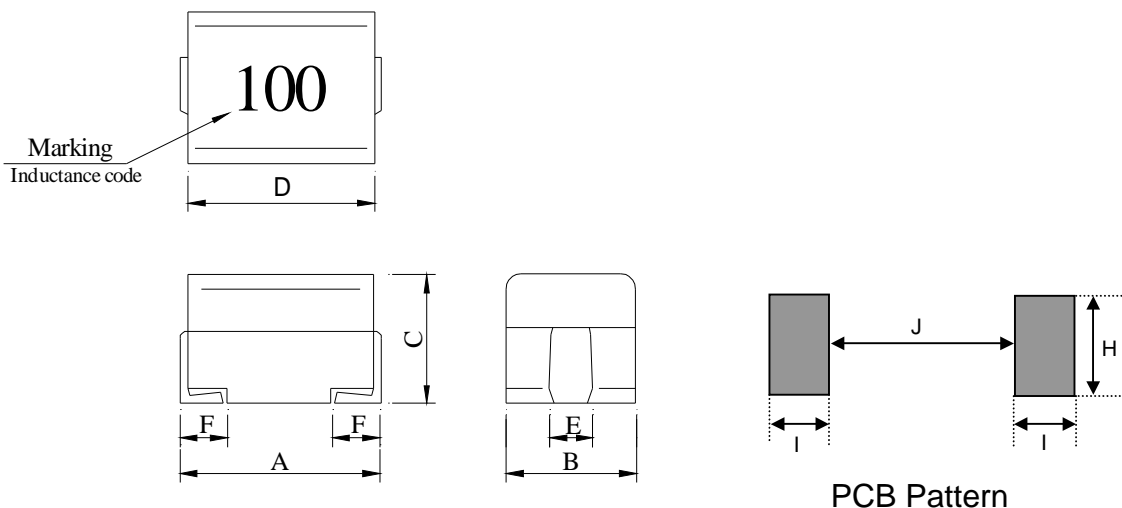
- > Personal computers, hard disk drives.
- > ADSL modem and cable modem.
- > Digital camera, LCD TV, GPS receiver.
- > Other electronic equipment.

Features

- > Utilizing a miniaturized winding structure.
- > These products provide high current characteristics.
- > Resin-coated surface enable excellent mounting.
- > Low DC resistance design is ideal for low loss.
- > Precision inductance tolerance is available.
- > Excellent solderability and resistance to soldering heat impact.

General Dimensions and Configuration

SHAPE:



DIMENSIONS:

SERIES	A (m/m)	B (m/m)	C (m/m)	D (m/m)	E (m/m)	F (m/m)	H (m/m)	I (m/m)	J (m/m)
WGI-3225	3.20±0.40	2.50±0.20	2.20±0.20	2.90±0.20	1.00±0.20	0.60 +0.30-0.00	1.40	1.00	1.80
WGI-4532	4.50±0.30	3.20±0.20	3.20±0.20	4.20±0.20	1.20	1.00 +0.30-0.00	1.60	1.50	2.20

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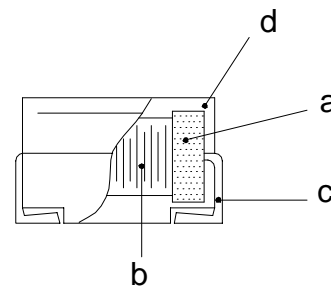
Inductance, SRF, Q and Rated Current ranges

SERIES	Inductance (μH)	SRF (Min.) (MHz)	Q (Min.)	I (Rated) (mA)
WGI-3225	1.0~100.0	100~8.0	10~20	770~75
WGI-4532	1.0~680.0	180~2.5	10~20	1050~65

Characteristics & Material's Construction

MATERIAL'S CONSTRUCTION:

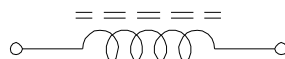
- a. Core : Ferrite DR Core
- b. Wire : Enamelled copper wire (Class H)
- c. Terminal : Cu / Sn
- d. Encapsulate : Epoxy novolac molding compound



CHARACTERISTICS:

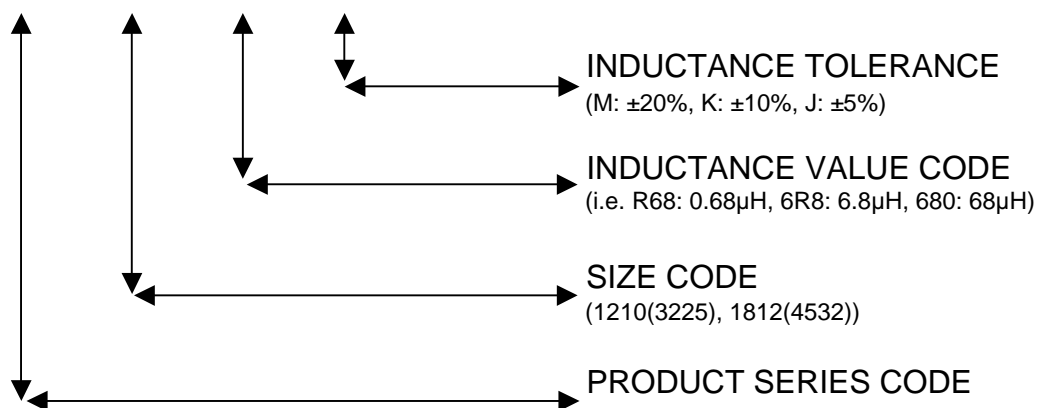
- 1. Ambient Temperature : 100 (Max.)
- 2. Terminal pull strength : 1.5 Kg (Min.)
- 3. Rated Current :
The current when the inductance drops within 10% of its initial value
- 4. Resistance to solder heat : 250 . 10 seconds

SCHEMATIC DIAGRAM:



Part Numbering Systems

WGI -3225 -101 K



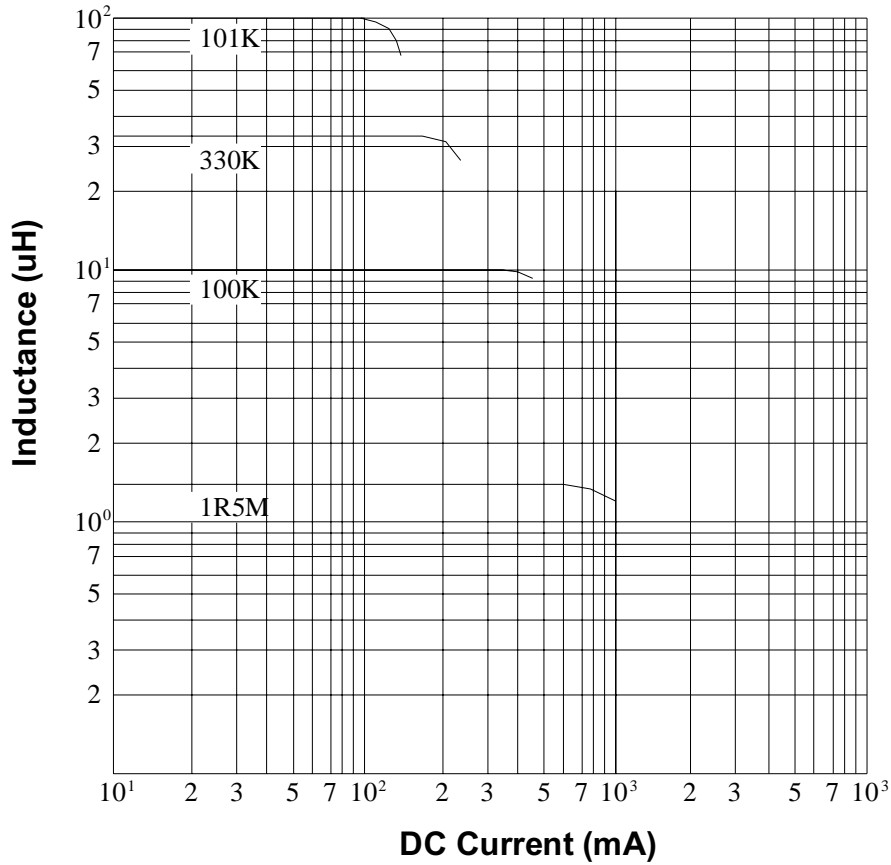
4c). WGI Series (Molded Ferrite Type, High Current) (Size: 1210 (3225))**Electrical Characteristics**

Part No.	L (μH) @ _MHz	Inductance Tolerance	Q (Min.) @ _MHz	SRF (Min.) (MHz)	DCR (Ω) (Max.)	Rated current (mA) (Max.)
WGI-3225-1R0	1.0 @ 7.96	J, K, M	10 @ 7.96	100	0.156	770
WGI-3225-1R5	1.5 @ 7.96	J, K, M	10 @ 7.96	80	0.195	580
WGI-3225-2R2	2.2 @ 7.96	J, K, M	10 @ 7.96	65	0.260	480
WGI-3225-3R3	3.3 @ 7.96	J, K, M	10 @ 7.96	55	0.325	400
WGI-3225-4R7	4.7 @ 7.96	J, K, M	10 @ 7.96	45	0.520	320
WGI-3225-6R8	6.8 @ 7.96	J, K, M	10 @ 7.96	35	0.650	280
WGI-3225-100	10.0 @ 2.52	J, K, M	15 @ 2.52	28	1.105	220
WGI-3225-150	15.0 @ 2.52	J, K, M	15 @ 2.52	25	1.690	180
WGI-3225-220	22.0 @ 2.52	J, K, M	15 @ 2.52	20	2.600	145
WGI-3225-270	27.0 @ 2.52	J, K, M	15 @ 2.52	17	3.000	125
WGI-3225-330	33.0 @ 2.52	J, K, M	15 @ 2.52	15	3.640	115
WGI-3225-470	47.0 @ 2.52	J, K, M	20 @ 2.52	13	5.460	105
WGI-3225-680	68.0 @ 2.52	J, K, M	20 @ 2.52	10	8.450	85
WGI-3225-820	82.0 @ 2.52	J, K, M	20 @ 2.52	9	8.710	80
WGI-3225-101	100.0 @ 0.796	J, K, M	20 @ 0.796	8	10.140	75

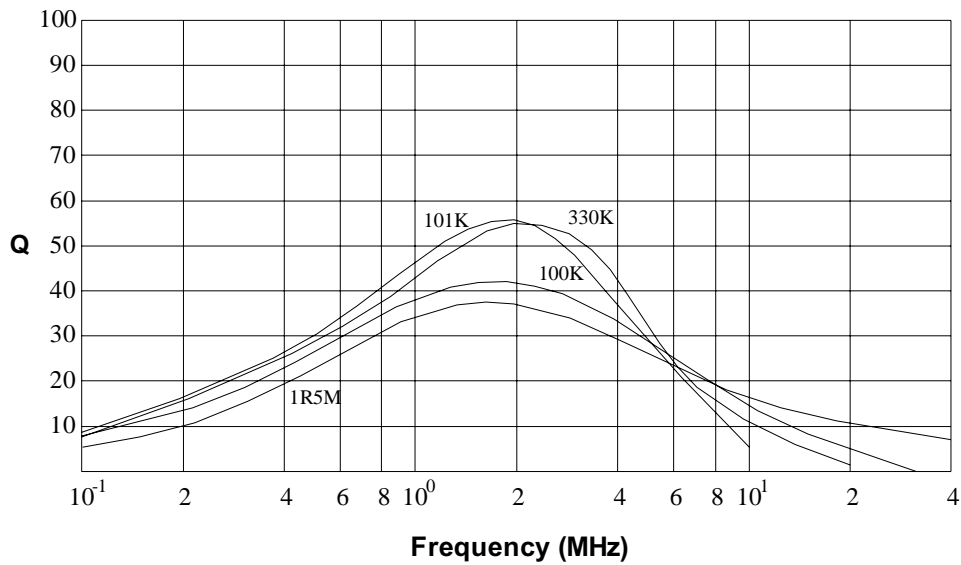
4c). WGI Series (Molded Ferrite Type, High Current) (Size: 1210 (3225))

Rating Curves

Inductance VS. DC Superposition Characteristics



Q VS. Frequency Response



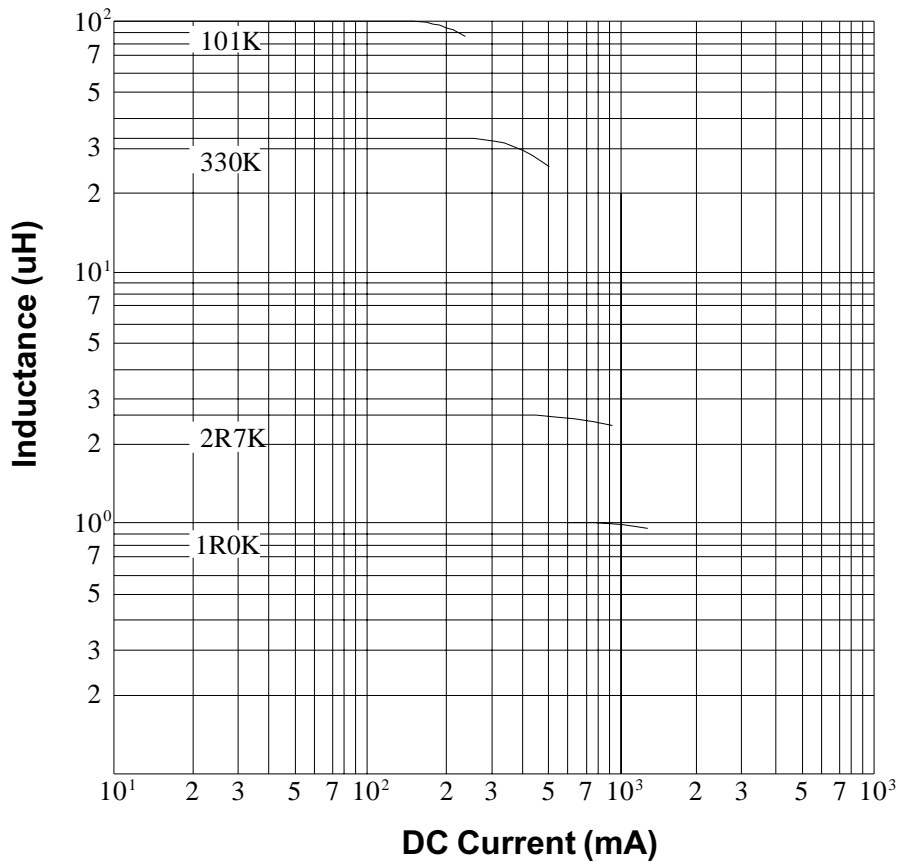
4c). WGI Series (Molded Ferrite Type, High Current) (Size: 1812 (4532))**Electrical Characteristics**

Part No.	L (μH) @ _MHz	Inductance Tolerance	Q (Min.) @ _MHz	SRF (Min.) (MHz)	DCR () (Max.)	Rated current (mA) (Max.)
WGI-4532-1R0	1.0 @ 7.96	J, K, M	10 @ 7.96	180.0	0.11	1050
WGI-4532-1R2	1.2 @ 7.96	J, K, M	10 @ 7.96	160.0	0.12	1000
WGI-4532-1R5	1.5 @ 7.96	J, K, M	10 @ 7.96	130.0	0.15	950
WGI-4532-1R8	1.8 @ 7.96	J, K, M	10 @ 7.96	100.0	0.16	900
WGI-4532-2R2	2.2 @ 7.96	J, K, M	10 @ 7.96	80.0	0.18	850
WGI-4532-2R7	2.7 @ 7.96	J, K, M	10 @ 7.96	60.0	0.20	800
WGI-4532-3R3	3.3 @ 7.96	J, K, M	10 @ 7.96	45.0	0.22	750
WGI-4532-3R9	3.9 @ 7.96	J, K, M	10 @ 7.96	40.0	0.24	700
WGI-4532-4R7	4.7 @ 7.96	J, K, M	10 @ 7.96	35.0	0.27	650
WGI-4532-5R6	5.6 @ 7.96	J, K, M	10 @ 7.96	30.0	0.30	650
WGI-4532-6R8	6.8 @ 7.96	J, K, M	10 @ 7.96	28.0	0.35	600
WGI-4532-8R2	8.2 @ 7.96	J, K, M	10 @ 7.96	25.0	0.40	600
WGI-4532-100	10.0 @ 2.52	J, K, M	10 @ 2.52	22.0	0.50	550
WGI-4532-120	12.0 @ 2.52	J, K, M	10 @ 2.52	21.0	0.60	500
WGI-4532-150	15.0 @ 2.52	J, K, M	10 @ 2.52	20.0	0.70	450
WGI-4532-180	18.0 @ 2.52	J, K, M	10 @ 2.52	19.0	0.80	400
WGI-4532-220	22.0 @ 2.52	J, K, M	10 @ 2.52	18.0	0.90	370
WGI-4532-270	27.0 @ 2.52	J, K, M	10 @ 2.52	16.0	1.20	330
WGI-4532-330	33.0 @ 2.52	J, K, M	10 @ 2.52	14.0	1.40	300
WGI-4532-390	39.0 @ 2.52	J, K, M	10 @ 2.52	12.0	1.60	280
WGI-4532-470	47.0 @ 2.52	J, K, M	10 @ 2.52	11.5	1.90	260
WGI-4532-560	56.0 @ 2.52	J, K, M	10 @ 2.52	11.0	2.20	240
WGI-4532-680	68.0 @ 2.52	J, K, M	10 @ 2.52	10.0	2.60	220
WGI-4532-820	82.0 @ 2.52	J, K, M	10 @ 2.52	9.0	3.50	200
WGI-4532-101	100.0 @ 0.796	J, K, M	20 @ 0.796	8.0	4.00	180
WGI-4532-121	120.0 @ 0.796	J, K, M	20 @ 0.796	7.5	4.50	160
WGI-4532-151	150.0 @ 0.796	J, K, M	20 @ 0.796	7.0	6.50	140
WGI-4532-181	180.0 @ 0.796	J, K, M	20 @ 0.796	6.5	7.50	120
WGI-4532-221	220.0 @ 0.796	J, K, M	20 @ 0.796	5.5	9.00	120
WGI-4532-271	270.0 @ 0.796	J, K, M	20 @ 0.796	5.0	11.00	100
WGI-4532-331	330.0 @ 0.796	J, K, M	20 @ 0.796	4.0	13.00	90
WGI-4532-391	390.0 @ 0.796	J, K, M	20 @ 0.796	3.0	14.00	85
WGI-4532-471	470.0 @ 0.796	J, K, M	20 @ 0.796	3.0	16.00	75
WGI-4532-561	560.0 @ 0.796	J, K, M	20 @ 0.796	3.0	21.00	70
WGI-4532-681	680.0 @ 0.796	J, K, M	20 @ 0.796	2.5	24.20	65

4c). WGI Series (Molded Ferrite Type, High Current) (Size: 1812 (4532))

Rating Curves

Inductance VS. DC Superposition Characteristics



Q VS. Frequency Response

