Gausstek Corp.

WIRE WOUND INDUCTORS

Ferrite cores / Large currents

Series WI - C

OUTLINE

- The characteristics of this series perform low RDC and carry large current.
- Best for power supply applications such as PC, conveyable telephone, and other.

FEATURES

- Very strong solderability by reflow soldering and soldering iron.
- Highly accurate dimensions can be mounted automatically
- Terminals are highly resistant to pull forces.
- Highly resistant to mechanical shoks and pressure.
- Highly reliable in environments of sudden temperature change and humidity.
- Superior IDC for DC to DC converter.

APPLICATIONS

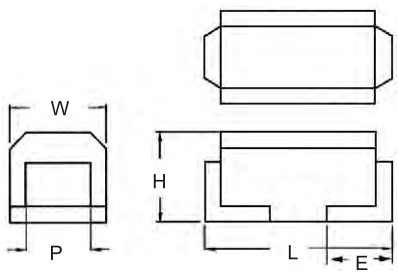
- Microtelevisions, liquid crystal televisions,video cameras, portable VCRs, car radios,car stereos, thin tape radios, television tuners, mobile telephones, radio and other electronic devices.

PRODUCT IDENTIFICATION

WI	32	C	32	I	J	1U
a	b	c	d	e	f	g

a : Type of Products - SMD Wire wound inductors with Ferrite Base
b : Dimension - 32:453232 50:565050
c : Materials - C - Ferrite Base for High Current Application.
d : Thickness - 32 = 3.2mm±0.2, 50 = 5.0mm±0.2
e : Packing - PCS/REEL - G = 400, I = 500
f : Tolerance - J : ±5% K : ±10% M : ±20%
g : Inductance - 1N2 = 0.0012 μH, 100N = 0.1 μH, 1U = 1.0 μH, 1U2 = 1.2 μH, 1M = 1000 μH, 1M2 = 1200 μH

SHAPES & DIMENSIONS



In mm

Type	Alias in mm	Alias in inch	L	W	H	P	E
WI32C32	453232	1812	4.5±0.3	3.2±0.3	3.2±0.2	1.4±0.4	0.9±0.2
WI50C50	565050	2220	5.6±0.3	5.0±0.3	5.0±0.2	1.8±0.3	1.3±0.2

Series WI - C
ELECTRICAL CHARACTERISTICS
WI32C32

Part Number	L (μ H)	Tolerance (±%)	Q min.	Test Frequency (MHz)	SRF (MHz) min.	RDC (Ω) max.	IDC (mA) max.
WI32C32IK1U	1.00	K	10	7.96	200.0	0.11	1050
WI32C32IK1U2	1.20	K	10	7.96	155.0	0.12	1000
WI32C32IK1U5	1.50	K	10	7.96	130.0	0.15	950
WI32C32IK1U8	1.80	K	10	7.96	100.0	0.16	900
WI32C32IK2U2	2.20	K	10	7.96	80.0	0.18	850
WI32C32IK2U7	2.70	K	10	7.96	55.0	0.20	800
WI32C32IK3U3	3.30	K	10	7.96	45.0	0.22	750
WI32C32IK3U9	3.90	K	10	7.96	40.0	0.24	700
WI32C32IK4U7	4.70	K	10	7.96	35.0	0.27	650
WI32C32IK5U6	5.60	K	10	7.96	30.0	0.30	650
WI32C32IK6U8	6.80	K	10	7.96	28.0	0.35	600
WI32C32IK8U2	8.20	K	10	7.96	25.0	0.40	600
WI32C32IK10U	10.00	K	10	2.52	22.0	0.50	550
WI32C32IK12U	12.00	K	10	2.52	21.0	0.60	500
WI32C32IK15U	15.00	K	10	2.52	20.0	0.70	450
WI32C32IK18U	18.00	K	10	2.52	18.0	0.80	400
WI32C32IK22U	22.00	K	10	2.52	17.0	0.90	370
WI32C32IK27U	27.00	K	10	2.52	15.0	1.20	330
WI32C32IK33U	33.00	K	10	2.52	14.0	1.40	300
WI32C32IK39U	39.00	K	10	2.52	12.0	1.60	280
WI32C32IK47U	47.00	K	10	2.52	11.5	1.90	260
WI32C32IK56U	56.00	K	10	2.52	10.5	2.20	240
WI32C32IK68U	68.00	K	10	2.52	9.0	2.60	220
WI32C32IK82U	82.00	K	10	2.52	8.5	3.50	200
WI32C32IK100U	100.00	K	20	0.796	7.0	4.00	180
WI32C32IK120U	120.00	K	20	0.796	6.5	4.50	160
WI32C32IK150U	150.00	K	20	0.796	6.0	6.50	140
WI32C32IK180U	180.00	K	20	0.796	5.5	7.50	120
WI32C32IK220U	220.00	K	20	0.796	5.0	9.00	120
WI32C32IK270U	270.00	K	20	0.796	4.5	11.00	100
WI32C32IK330U	330.00	K	20	0.796	4.0	13.00	90

Tolerance: J = ±5%, K = ±10%

Operating temperature range from -25°C to 85°C.

L/Q' SRF : HP4286A RF Impedance Analyzer

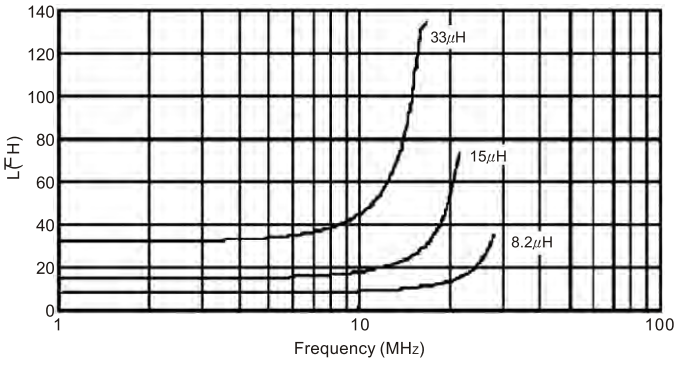
L/Q : HP4284A LF Impedance Analyzer

RDC: DIGITAL MULTIMETER HP4338B / CH502BC

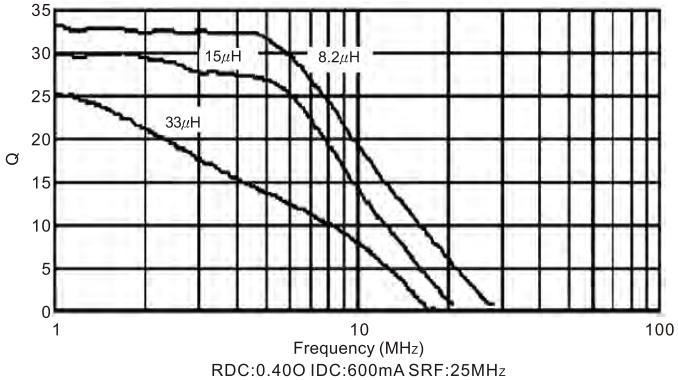
IDC : HP4284A & HP42841A

Test Instruments : HP4291A Impedance / Material Analyzer

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



RDC:0.40O IDC:600mA SRF:25MHz

Series WI - C
ELECTRICAL CHARACTERISTICS
WI50C50

Part Number	L (μ H)	Tolerance (±%)	Q min.	Test Frequency (MHz)	SRF (MHz) min.	RDC (Ω) max.	IDC (mA) max.
WI50C50GK1U	1.00	K	10	7.96	95.0	0.030	1800
WI50C50GK1U2	1.20	K	10	7.96	70.0	0.035	1700
WI50C50GK1U5	1.50	K	10	7.96	55.0	0.040	1600
WI50C50GK1U8	1.80	K	10	7.96	47.0	0.050	1400
WI50C50GK2U	2.20	K	10	7.96	42.0	0.060	1300
WI50C50GK2U7	2.70	K	10	7.96	37.0	0.070	1200
WI50C50GK3U3	3.30	K	10	7.96	34.0	0.080	1120
WI50C50GK3U9	3.90	K	10	7.96	32.0	0.090	1050
WI50C50GK4U7	4.70	K	10	7.96	29.0	0.110	950
WI50C50GK5U6	5.60	K	10	7.96	26.0	0.130	880
WI50C50GK6U8	6.80	K	10	7.96	24.0	0.150	810
WI50C50GK8U2	8.20	K	10	7.96	22.0	0.180	750
WI50C50GK10U	10.00	K	10	2.52	19.0	0.210	690
WI50C50GK12U	12.00	K	10	2.52	17.0	0.250	630
WI50C50GK15U	15.00	K	10	2.52	16.0	0.300	580
WI50C50GK18U	18.00	K	10	2.52	14.0	0.360	530
WI50C50GK22U	22.00	K	10	2.52	13.0	0.430	480
WI50C50GK27U	27.00	K	10	2.52	11.5	0.520	440
WI50C50GK33U	33.00	K	10	2.52	10.5	0.620	400
WI50C50GK39U	39.00	K	10	2.52	9.5	0.720	370
WI50C50GK47U	47.00	K	10	2.52	8.5	0.850	340
WI50C50GK56U	56.00	K	10	2.52	7.8	1.000	310
WI50C50GK68U	68.00	K	10	2.52	7.0	1.200	290
WI50C50GK82U	82.00	K	10	2.52	6.4	1.400	270
WI50C50GK100U	100.00	K	20	0.796	6.0	1.600	250
WI50C50GK120U	120.00	K	20	0.796	5.4	1.900	230
WI50C50GK150U	150.00	K	20	0.796	4.8	2.200	210
WI50C50GK180U	180.00	K	20	0.796	4.4	2.800	190
WI50C50GK220U	220.00	K	20	0.796	3.9	3.400	170
WI50C50GK270U	270.00	K	20	0.796	3.6	4.200	155
WI50C50GK330U	330.00	K	20	0.796	3.2	4.900	140
WI50C50GK390U	390.00	K	20	0.796	2.9	5.800	130
WI50C50GK470U	470.00	K	20	0.796	2.6	7.000	120
WI50C50GK560U	560.00	K	20	0.796	2.4	8.500	110
WI50C50GK680U	680.00	K	20	0.796	2.2	10.000	100
WI50C50GK820U	820.00	K	20	0.796	2.0	13.000	90
WI50C50GK1M	1000	K	20	0.252	1.8	15.000	85

Tolerance: J = ±5%, K = ±10%

Operating temperature range from -25°C to 85°C.

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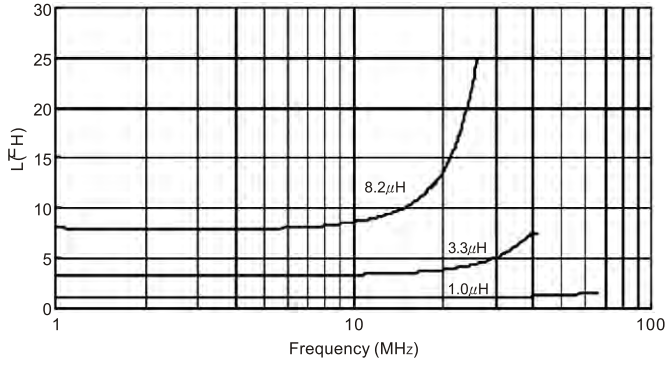
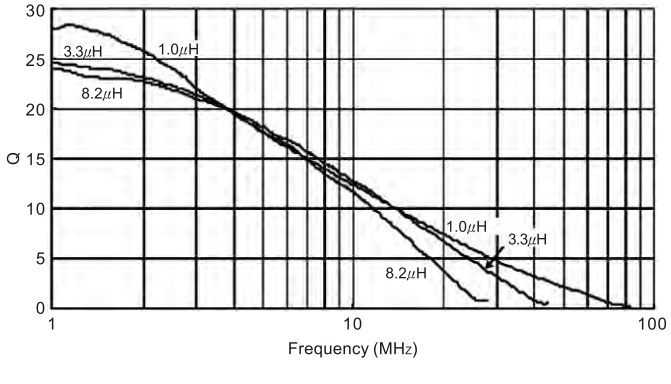


Q vs. Frequency Characteristics



Series WI - C

PACKAGING

Type	Alias in mm	Alais in inch	Bulk	PCS/REEL
WI32C32	453232	1812	✓	500
WI50C50	565050	2220	✓	400

REEL DIMENSIONS

Figure 1

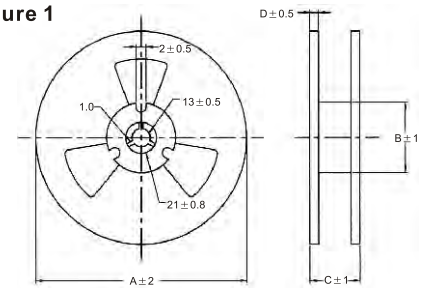
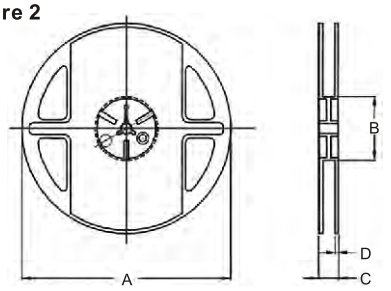
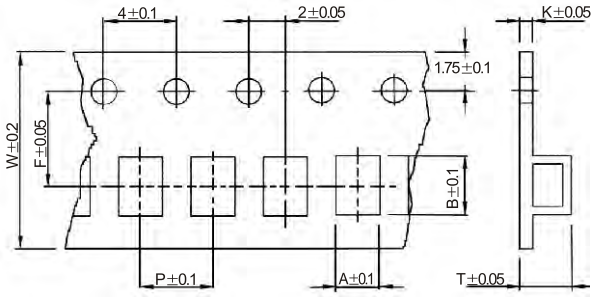


Figure 2



TAPE DIMENSIONS



Dimensions in mm

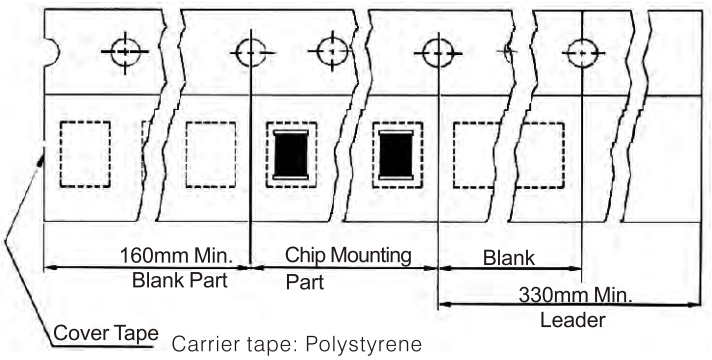
Type	Alias in mm	Alias in inch	A	B	T	W	P	F	K
WI32C32	453232	1812	3.30	5.00	3.50	12	8	5.5	0.30
WI50C50	565050	2220	5.35	6.10	5.50	16	12	7.5	0.35

REEL DIMENSIONS

Dimensions in mm

Type	Alias in mm	Alias in inch	Fig	A	B	C	D
WI32C32	453232	1812	2	178	60	16	1.4
WI50C50	565050	2220	1	330	100	22	2.3

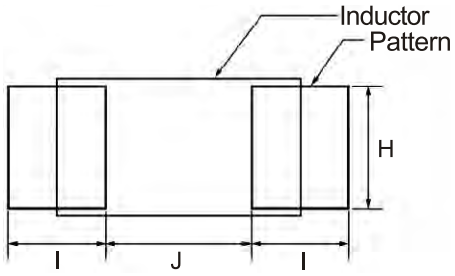
TAPE MATERIALS



Carrier tape: Polystyrene

Cover type: Polystyrene

RECOMMENDED PATTERN



PATTERN DIMENSIONS

In mm

Type	Alias in mm	Alias in inch	I	J	H
WI32C32	453232	1812	1.50	3.00	2.80
WI50C50	565050	2220	2.00	4.00	4.50