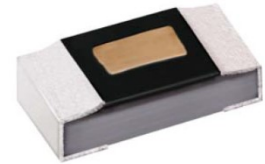


Features:

- Exceptional Q values for small package sizes
- SRF controlled within 10%
- Stable inductance in high frequency circuits
- Highly stable design for critical requirements
- Tight tolerances down to 1% or $\pm 0.1\text{nH}$
- 100% RoHS compliant and lead free without exemption
- Halogen free
- REACH compliant
- Contact Stackpole for additional inductance values



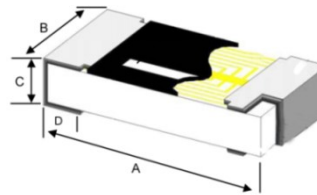
Applications:

- Wearable devices
- Wireless LANs
- Cable/Satellite receivers
- Security systems
- Smart meters
- Connected appliances
- Various IoT devices

Inductance and Current Ranges

Type / Code	Inductance (nH)	Current Range (mA)
LTF0201	0.1 ~ 10	400 ~ 80
LTF0402	0.2 ~ 33	800 ~ 75

Mechanical Specifications



Type / Code	Weight (g) (1000 pc.)	A	B	C	D	Unit
LTF0201	0.23	0.024 $\pm$ 0.002 0.60 $\pm$ 0.05	0.012 $\pm$ 0.002 0.30 $\pm$ 0.05	0.009 $\pm$ 0.002 0.23 $\pm$ 0.05	0.006 $\pm$ 0.002 0.15 $\pm$ 0.05	inches mm
LTF0402	0.9	0.039 $\pm$ 0.002 1.00 $\pm$ 0.05	0.020 $\pm$ 0.002 0.50 $\pm$ 0.05	0.013 $\pm$ 0.002 0.32 $\pm$ 0.05	0.008 $\pm$ 0.004 0.20 $\pm$ 0.10	inches mm

Performance Characteristics

Test	Test Specification	Test Condition
Inductance	as specified	Measuring equipment and fixture: 0201: HP4287 + Agilent 16196C 0402: HP4287 + Agilent 16196B
Insulation Resistance	> 1000 Mohm	MIL-STD-202 Method 302 Apply 100 V _{DC} for 1 minute
Damp Heat with Load	$\Delta L \leq 10\%$	MIL-STD-202 Method 103B 40 $\pm$ 2°C, 90 ~ 95% R.H. Max working voltage for 1000 hours with 1.5 hours "ON" and 0.5 hour "OFF"
Bending Strength	as specified	JIS-C-5201-1 6.1.4 Bending amplitude 3 mm for 10 seconds
Solderability	95% min. coverage	MIL-STD-202 Method 208H 245 $\pm$ 5°C for 3 seconds
Resistance to Soldering Heat	$\Delta L \leq 10\%$	MIL-STD-202 Method 210E 260 $\pm$ 5°C for 10 seconds

Performance Characteristics (cont.)

Test	Test Specification	Test Condition
Dielectric Withstand Voltage	> 100V	MIL-STD-202 Method 301 Apply 100 VA (rms) for 1 minute
High Temperature Exposure	$\Delta L \leq 10\%$	JIS-C-5201-1 7.2 85 $\pm$ 2°C, 1000 +48 / -0 hours
Low Temperature Storage	$\Delta L \leq 10\%$	JIS-C-5201-1 7.1 -40 $\pm$ 3°C, 1000 +48 / -0 hours
Temperature Cycle	$\Delta L \leq 10\%$	JIS-C-5201-1 7.4 -40 / RT / 85 / RT, 10 cycles

Storage Temperature: 15 ~ 28°C; Humidity < 80%RH

Electrical Specifications – LTF0201

Part Number	Inductance (nH)	Inductance Tolerance (nH or %)	Quality Factor (MHz) min.	SRF (GHz) min.	DCR (Ω) max.	IDC (mA) max.
LTF0201 T0N1	0.1	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.2	400
LTF0201 T0N2	0.2	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.2	400
LTF0201 T0N3	0.3	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.2	400
LTF0201 T0N4	0.4	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.25	350
LTF0201 T0N5	0.5	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.25	350
LTF0201 T0N6	0.6	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.25	350
LTF0201 T0N7	0.7	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.3	300
LTF0201 T0N8	0.8	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.3	300
LTF0201 T0N9	0.9	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.3	300
LTF0201 T1N0	1	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.3	300
LTF0201 T1N1	1.1	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.35	300
LTF0201 T1N2	1.2	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.35	300
LTF0201 T1N3	1.3	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.45	250
LTF0201 T1N4	1.4	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.45	250
LTF0201 T1N5	1.5	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.45	250
LTF0201 T1N6	1.6	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.55	200
LTF0201 T1N7	1.7	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.55	200
LTF0201 T1N8	1.8	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.55	200
LTF0201 T1N9	1.9	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	9	0.55	200
LTF0201 T2N0	2	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.7	200
LTF0201 T2N1	2.1	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.7	200
LTF0201 T2N2	2.2	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.7	200
LTF0201 T2N3	2.3	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.8	150
LTF0201 T2N4	2.4	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.8	150
LTF0201 T2N5	2.5	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.8	150
LTF0201 T2N6	2.6	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.8	150
LTF0201 T2N7	2.7	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	8	0.8	150
LTF0201 T2N8	2.8	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1	150
LTF0201 T2N9	2.9	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1	150
LTF0201 T3N0	3	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1	150
LTF0201 T3N1	3.1	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1	150
LTF0201 T3N2	3.2	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1	150
LTF0201 T3N3	3.3	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1	150
LTF0201 T3N4	3.4	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.2	150
LTF0201 T3N5	3.5	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.2	150
LTF0201 T3N6	3.6	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.2	150
LTF0201 T3N7	3.7	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.2	150
LTF0201 T3N8	3.8	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.2	150
LTF0201 T3N9	3.9	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.2	150
LTF0201 T4N0	4	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.2	150
LTF0201 T4N4	4.4	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.3	140
LTF0201 T4N7	4.7	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.4	130
LTF0201 T4N9	4.9	$\pm 0.1, 0.2, 0.3$ nH	8 / 500	6	1.6	130

Electrical Specifications – LTF0201 (cont.)

Part Number	Inductance (nH)	Inductance Tolerance (nH or %)	Quality Factor (MHz) min.	SRF (GHz) min.	DCR (Ω) max.	IDC (mA) max.
LTF0201 T5N6	5.6	±2, ±5%	8 / 500	4	1.8	130
LTF0201 T6N1	6.1	±2, ±5%	8 / 500	4	2	120
LTF0201 T6N8	6.8	±2, ±5%	8 / 500	4	2.3	110
LTF0201 T7N4	7.4	±2, ±5%	8 / 500	4	2.8	110
LTF0201 T8N2	8.2	±2, ±5%	8 / 500	3	3	110
LTF0201 T9N1	9.1	±2, ±5%	8 / 500	3	3.25	100
LTF0201 T9N2	9.2	±2, ±5%	8 / 500	3	3.25	100
LTF0201 T10N	10	±2, ±5%	8 / 500	2	3.5	80

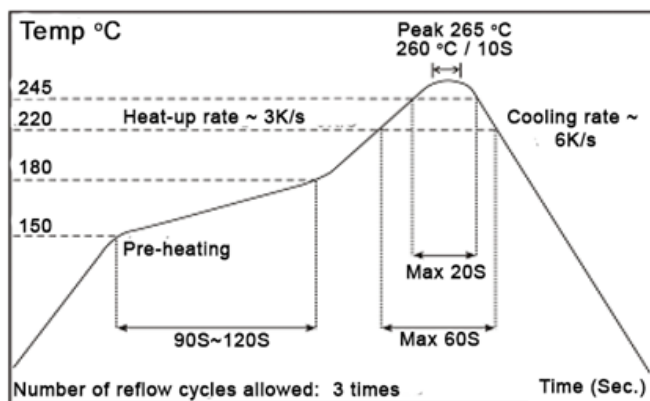
Electrical Specifications - LTF0402

Part Number	Inductance (nH)	Inductance Tolerance (nH or %)	Quality Factor (MHz) min.	SRF (GHz) min.	DCR (Ω) max.	IDC (mA) max.
LTF0402 T0N2	0.2	±0.1, 0.2, 0.3 nH	13 / 500	14	0.10	800
LTF0402 T0N3	0.3	±0.1, 0.2, 0.3 nH	13 / 500	14	0.10	800
LTF0402 T0N4	0.4	±0.1, 0.2, 0.3 nH	13 / 500	14	0.10	800
LTF0402 T0N5	0.5	±0.1, 0.2, 0.3 nH	13 / 500	14	0.15	700
LTF0402 T0N6	0.6	±0.1, 0.2, 0.3 nH	13 / 500	14	0.15	700
LTF0402 T0N8	0.8	±0.1, 0.2, 0.3 nH	13 / 500	14	0.15	700
LTF0402 T0N9	0.9	±0.1, 0.2, 0.3 nH	13 / 500	14	0.15	700
LTF0402 T1N0	1.0	±0.1, 0.2, 0.3 nH	13 / 500	12	0.15	700
LTF0402 T1N1	1.1	±0.1, 0.2, 0.3 nH	13 / 500	12	0.15	700
LTF0402 T1N2	1.2	±0.1, 0.2, 0.3 nH	13 / 500	12	0.15	700
LTF0402 T1N3	1.3	±0.1, 0.2, 0.3 nH	13 / 500	10	0.25	700
LTF0402 T1N4	1.4	±0.1, 0.2, 0.3 nH	13 / 500	10	0.25	700
LTF0402 T1N5	1.5	±0.1, 0.2, 0.3 nH	13 / 500	10	0.25	700
LTF0402 T1N6	1.6	±0.1, 0.2, 0.3 nH	13 / 500	10	0.25	560
LTF0402 T1N7	1.7	±0.1, 0.2, 0.3 nH	13 / 500	10	0.25	560
LTF0402 T1N8	1.8	±0.1, 0.2, 0.3 nH	13 / 500	10	0.25	560
LTF0402 T1N9	1.9	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	560
LTF0402 T2N0	2.0	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	560
LTF0402 T2N1	2.1	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	440
LTF0402 T2N2	2.2	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	440
LTF0402 T2N3	2.3	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	440
LTF0402 T2N4	2.4	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	440
LTF0402 T2N5	2.5	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	440
LTF0402 T2N6	2.6	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	440
LTF0402 T2N7	2.7	±0.1, 0.2, 0.3 nH	13 / 500	8	0.35	440
LTF0402 T2N8	2.8	±0.1, 0.2, 0.3 nH	13 / 500	6	0.45	380
LTF0402 T2N9	2.9	±0.1, 0.2, 0.3 nH	13 / 500	6	0.45	380
LTF0402 T3N0	3.0	±0.1, 0.2, 0.3 nH	13 / 500	6	0.45	380
LTF0402 T3N1	3.1	±0.1, 0.2, 0.3 nH	13 / 500	6	0.45	380
LTF0402 T3N2	3.2	±0.1, 0.2, 0.3 nH	13 / 500	6	0.45	380
LTF0402 T3N3	3.3	±0.1, 0.2, 0.3 nH	13 / 500	6	0.45	380
LTF0402 T3N4	3.4	±0.1, 0.2, 0.3 nH	13 / 500	6	0.55	380
LTF0402 T3N5	3.5	±0.1, 0.2, 0.3 nH	13 / 500	6	0.55	380
LTF0402 T3N6	3.6	±0.1, 0.2, 0.3 nH	13 / 500	6	0.55	380
LTF0402 T3N7	3.7	±0.1, 0.2, 0.3 nH	13 / 500	6	0.55	340
LTF0402 T3N8	3.8	±0.1, 0.2, 0.3 nH	13 / 500	6	0.55	340
LTF0402 T3N9	3.9	±0.1, 0.2, 0.3 nH	13 / 500	6	0.55	340
LTF0402 T4N3	4.3	±0.1, 0.2, 0.3 nH	13 / 500	6	0.65	320
LTF0402 T4N7	4.7	±0.1, 0.2, 0.3 nH	13 / 500	6	0.65	320
LTF0402 T5N4	5.4	±0.1, 0.2, 0.3 nH	13 / 500	6	0.85	280
LTF0402 T5N6	5.6	±0.1, 0.2, 0.3 nH	13 / 500	6	0.85	280
LTF0402 T5N9	5.9	±0.1, 0.2, 0.3 nH	13 / 500	6	0.85	280
LTF0402 T6N5	6.5	±0.1, 0.2, 0.3 nH	13 / 500	6	1.05	260
LTF0402 T6N8	6.8	±0.1, 0.2, 0.3 nH	13 / 500	6	1.05	260

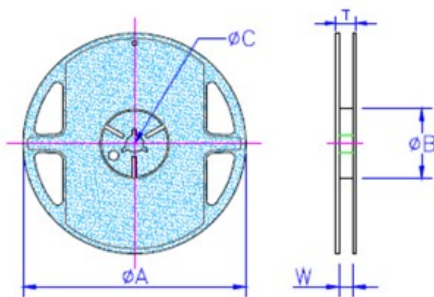
Electrical Specifications - LTF0402 (cont.)

Part Number	Inductance (nH)	Inductance Tolerance (nH or %)	Quality Factor (MHz) min.	SRF (GHz) min.	DCR (Ω) max.	IDC (mA) max.
LTF0402 T7N2	7.2	$\pm 0.1, 0.2, 0.3$ nH	13 / 500	6	1.05	260
LTF0402 T8N0	8.0	$\pm 0.1, 0.2, 0.3$ nH	13 / 500	5.5	1.25	220
LTF0402 T8N1	8.1	$\pm 0.1, 0.2, 0.3$ nH	13 / 500	5.5	1.25	220
LTF0402 T8N2	8.2	$\pm 0.1, 0.2, 0.3$ nH	13 / 500	5.5	1.25	220
LTF0402 T9N1	9.1	$\pm 0.1, 0.2, 0.3$ nH	13 / 500	5.5	1.25	220
LTF0402 T10N	10.0	$\pm 1, 2, 3, 5\%$	13 / 500	4.5	1.35	200
LTF0402 T10N8	10.8	$\pm 1, 2, 3, 5\%$	13 / 500	4.5	1.35	200
LTF0402 T12N	12.0	$\pm 1, 2, 3, 5\%$	13 / 500	3.7	1.55	180
LTF0402 T13N8	13.8	$\pm 1, 2, 3, 5\%$	13 / 500	3.7	1.75	180
LTF0402 T15N	15.0	$\pm 1, 2, 3, 5\%$	13 / 500	3.3	1.75	130
LTF0402 T17N	17.0	$\pm 1, 2, 3, 5\%$	13 / 500	3.1	1.95	100
LTF0402 T18N	18.0	$\pm 1, 2, 3, 5\%$	13 / 500	3.1	2.15	100
LTF0402 T20N8	20.8	$\pm 1, 2, 3, 5\%$	13 / 500	2.8	2.55	90
LTF0402 T22N	22.0	$\pm 1, 2, 3, 5\%$	13 / 500	2.8	2.65	90
LTF0402 T27N	27.0	$\pm 1, 2, 3, 5\%$	13 / 500	2.5	3.25	75
LTF0402 T33N	33.0	$\pm 5\%$	13 / 500	2.5	4.50	75

Reflow Chart:

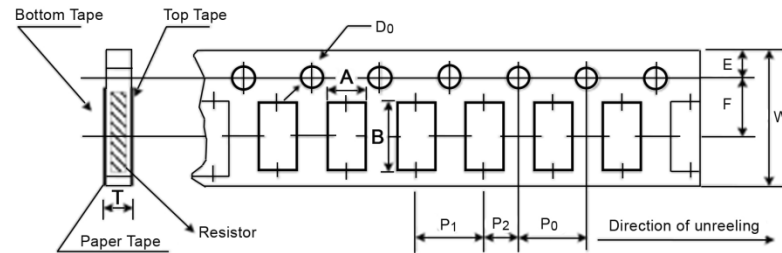


Packaging Specifications



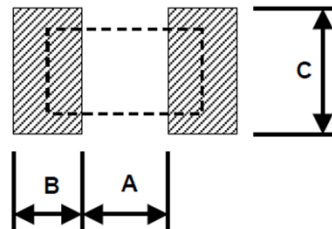
Type / Code	A	B	C	W	T	Unit
All Sizes	7.008 $\pm$ 0.039 178.00 $\pm$ 1.00	2.362 $\pm$ 0.039 60.00 $\pm$ 1.00	0.531 $\pm$ 0.028 13.50 $\pm$ 0.70	0.374 $\pm$ 0.039 9.50 $\pm$ 1.00	0.453 $\pm$ 0.039 11.50 $\pm$ 1.00	inches mm

Paper Tape Specifications



Type / Code	A	B	W	E	F	Unit
LTF0201	0.016 ± 0.002 0.40 ± 0.05	0.028 ± 0.002 0.70 ± 0.05	0.315 ± 0.004 8.00 ± 0.10	0.069 ± 0.002 1.75 ± 0.05	0.138 ± 0.002 3.50 ± 0.05	inches mm
LTF0402	0.028 ± 0.002 0.70 ± 0.05	0.046 ± 0.002 1.16 ± 0.05	0.315 ± 0.004 8.00 ± 0.10	0.069 ± 0.002 1.75 ± 0.05	0.138 ± 0.002 3.50 ± 0.05	inches mm
Type / Code	P0	P1	P2	D0	T	Unit
LTF0201	0.157 ± 0.004 4.00 ± 0.10	0.079 ± 0.002 2.00 ± 0.05	0.079 ± 0.002 2.00 ± 0.05	0.061 ± 0.002 1.55 ± 0.05	0.017 ± 0.001 0.42 ± 0.02	inches mm
LTF0402	0.157 ± 0.004 4.00 ± 0.10	0.079 ± 0.002 2.00 ± 0.05	0.079 ± 0.002 2.00 ± 0.05	0.061 ± 0.002 1.55 ± 0.05	0.016 ± 0.001 0.40 ± 0.03	inches mm

Solder Land Pattern Specifications



Type / Code	A	B	C	Unit
LTF0201	0.012 0.30	0.010 0.25	0.012 ± 0.008 0.30 ± 0.20	inches mm
LTF0402	0.020 0.50	0.018 0.45	0.024 ± 0.008 0.60 ± 0.20	inches mm

RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status

Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
LTF	Thin Film Surface Mount Chip Inductor	SMD	YES	100% Matte Sn over Ni	May-04	04/18

“Conflict Metals” Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the “conflict region” of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to “REACH”

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, “The Registration, Evaluation, Authorization and Restriction of Chemicals”, otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

1	2	3	4	5	6	7	8	9	10	11	12
L	T	F	0	2	0	1	G	T	1	0	N
Product Series		Size		Tolerance		Packaging				Inductance	
LTF	Thin Film Chip Inductor	0201	0402	Code	Tol	Code	Description	Sizes	Quantity	Code	nH
				B	±0.1nH	T	Tape & Reel	All	10,000	1N0	1nH
				C	±0.2nH					10N	10nH
				S	±0.3nH					20N8	20.8nH
				F	±1%						
				G	±2%						
				H	±3%						
				J	±5%						

Legacy Part Number:

1		2		3		4		5		6		7		8		9	
A		L		0		2		G		T		1		0		N	
Product Series		Code	Size	Tolerance		Packaging						Inductance					
AL	Thin Film Chip Inductor	01	0201	Code	Tol	Code	Description	Sizes	Quantity	Code	nH						
		02	0402	B	±0.1nH	T	Tape & Reel	All	10,000	1N0	1nH						
				C	±0.2nH					10N	10nH						
				S	±0.3nH					20N8	20.8nH						
				F	±1%												
				G	±2%												
				H	±3%												
		J	±5%														