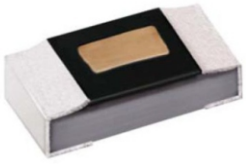
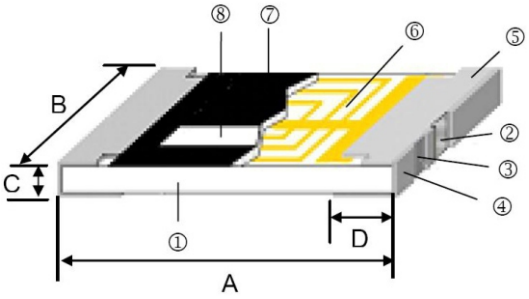
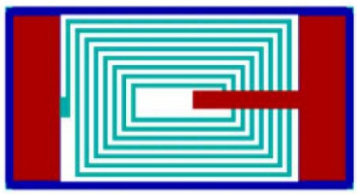
GTF Series



Construction





Features:

photolithographic single layer ceramic chip
High SRF, excellent Q, superior temperature stability
Tight tolerance of ± 1% or ± 0.1nH
Self resonant frequency controlled within 10%
Stable inductance in high frequency circuit
Highly stable design for critical needs

Applications:

Cellular Telephone, Pagers and GPS Products
VCO, TCXO Circuit and RF Transceiver Module
Wireless LAN, Bluetooth Module, Communication Appliances

①	Alumina substrate	⑤	Edge Electrode
②	Inner Electrode (Ni-Cr)	⑥	Cu Circuits
③	Barrier Layer(Ni)	⑦	Overcoat
④	External Electrode (Sn)	⑧	Marking

Operating temperature: –55 ºC to +125 ºC

Dimensions and Land Patterns.（UNIT: mm）

TYPE	Size	A	B	C	D
GTF01	0201	0.60±0.05	0.30±0.05	0.23±0.05	0.15±0.05
GTF02	0402	1.00±0.05	0.50±0.05	0.32±0.05	0.20±0.10

Part Numbering

GTF 02 G T 10N 01

01 :Standard 01:High Current 02:High Q
10N Inductance Value: 1N:1nH 10N：10nH
T Packaging Code: T: Taping Reel
G Inductance Tolerance: B: ±0.1nH C: ±0.2nH S:±0.3nH F: ±1% G: ±2% H: ±3% J: ±5%
02 Dimensions: 01:0201 02:0402
GTF Product Type

Electrical characteristics List

GTF01 Chip Inductors / Standard Type

PART No.	L (nH)	Tolerance (nH or %)	Quality Factor min	SRF (GHz min.)	DCR (Ω)max.	IDC (mA)max.
GTF01☐T0N1	0.1	±0.1,0.2,0.3nH	8/500MHz	9	0.20	400
GTF01☐T0N2	0.2	±0.1,0.2,0.3nH	8/500MHz	9	0.20	400
GTF01☐T0N3	0.3	±0.1,0.2,0.3nH	8/500MHz	9	0.20	400
GTF01☐T0N4	0.4	±0.1,0.2,0.3nH	8/500MHz	9	0.25	350
GTF01☐T0N5	0.5	±0.1,0.2,0.3nH	8/500MHz	9	0.25	350
GTF01☐T0N6	0.6	±0.1,0.2,0.3nH	8/500MHz	9	0.25	350
GTF01☐T0N7	0.7	±0.1,0.2,0.3nH	8/500MHz	9	0.30	300
GTF01☐T0N8	0.8	±0.1,0.2,0.3nH	8/500MHz	9	0.30	300
GTF01☐T0N9	0.9	±0.1,0.2,0.3nH	8/500MHz	9	0.30	300
GTF01☐T1N0	1.0	±0.1,0.2,0.3nH	8/500MHz	9	0.30	300
GTF01☐T1N1	1.1	±0.1,0.2,0.3nH	8/500MHz	9	0.35	300
GTF01☐T1N2	1.2	±0.1,0.2,0.3nH	8/500MHz	9	0.35	300
GTF01☐T1N3	1.3	±0.1,0.2,0.3nH	8/500MHz	9	0.45	250
GTF01☐T1N4	1.4	±0.1,0.2,0.3nH	8/500MHz	9	0.45	250
GTF01☐T1N5	1.5	±0.1,0.2,0.3nH	8/500MHz	9	0.45	250
GTF01☐T1N6	1.6	±0.1,0.2,0.3nH	8/500MHz	9	0.55	200
GTF01☐T1N7	1.7	±0.1,0.2,0.3nH	8/500MHz	9	0.55	200
GTF01☐T1N8	1.8	±0.1,0.2,0.3nH	8/500MHz	9	0.55	200
GTF01☐T1N9	1.9	±0.1,0.2,0.3nH	8/500MHz	9	0.55	200
GTF01☐T2N0	2.0	±0.1,0.2,0.3nH	8/500MHz	8	0.70	200
GTF01☐T2N1	2.1	±0.1,0.2,0.3nH	8/500MHz	8	0.70	200
GTF01☐T2N2	2.2	±0.1,0.2,0.3nH	8/500MHz	8	0.70	200
GTF01☐T2N3	2.3	±0.1,0.2,0.3nH	8/500MHz	8	0.80	150
GTF01☐T2N4	2.4	±0.1,0.2,0.3nH	8/500MHz	8	0.80	150
GTF01☐T2N5	2.5	±0.1,0.2,0.3nH	8/500MHz	8	0.80	150
GTF01☐T2N6	2.6	±0.1,0.2,0.3nH	8/500MHz	8	0.80	150
GTF01☐T2N7	2.7	±0.1,0.2,0.3nH	8/500MHz	8	0.80	150
GTF01☐T2N8	2.8	±0.1,0.2,0.3nH	8/500MHz	6	1.00	150
GTF01☐T2N9	2.9	±0.1,0.2,0.3nH	8/500MHz	6	1.00	150
GTF01☐T3N0	3.0	±0.1,0.2,0.3nH	8/500MHz	6	1.00	150
GTF01☐T3N1	3.1	±0.1,0.2,0.3nH	8/500MHz	6	1.00	150
GTF01☐T3N2	3.2	±0.1,0.2,0.3nH	8/500MHz	6	1.00	150
GTF01☐T3N3	3.3	±0.1,0.2,0.3nH	8/500MHz	6	1.00	150
GTF01☐T3N4	3.4	±0.1,0.2,0.3nH	8/500MHz	6	1.20	150
GTF01☐T3N5	3.5	±0.1,0.2,0.3nH	8/500MHz	6	1.20	150
GTF01☐T3N6	3.6	±0.1,0.2,0.3nH	8/500MHz	6	1.20	150
GTF01☐T3N7	3.7	±0.1,0.2,0.3nH	8/500MHz	6	1.20	150
GTF01☐T3N8	3.8	±0.1,0.2,0.3nH	8/500MHz	6	1.20	150
GTF01☐T3N9	3.9	±0.1,0.2,0.3nH	8/500MHz	6	1.20	150
GTF01☐T4N0	4.0	±0.1,0.2,0.3nH	8/500MHz	6	1.20	150
GTF01☐T4N4	4.4	±0.1,0.2,0.3nH	8/500MHz	6	1.30	140
GTF01☐T4N7	4.7	±0.1,0.2,0.3nH	8/500MHz	6	1.40	130
GTF01☐T4N9	4.9	±0.1,0.2,0.3nH	8/500MHz	6	1.60	130
GTF01☐T5N6	5.6	±2% ±5%	8/500MHz	4	1.80	130
GTF01☐T6N1	6.1	±2% ±5%	8/500MHz	4	2.00	150
GTF01☐T6N8	6.8	±2% ±5%	8/500MHz	4	2.30	110
GTF01☐T7N4	7.4	±2% ±5%	8/500MHz	4	2.80	110
GTF01☐T8N2	8.2	±2% ±5%	8/500MHz	3	3.00	110
GTF01☐T9N1	9.1	±2% ±5%	8/500MHz	3	3.25	100
GTF01☐T9N2	9.2	±2% ±5%	8/500MHz	3	3.25	100
GTF01☐T10N	10	±2% ±5%	8/500MHz	2	3.50	80

Electrical characteristics List

GTF01-01 Chip Inductors / High Current Type

PART No.	L (nH)	Tolerance (nH or %)	Quality Factor min	SRF (GHz min.)	DCR (Ω)max.	IDC (mA)max.
GTF01□T0N101	0.1	±0.1,0.2,0.3nH	10/500MHz	6	0.05	600
GTF01□T0N201	0.2	±0.1,0.2,0.3nH	10/500MHz	6	0.05	600
GTF01□T0N301	0.3	±0.1,0.2,0.3nH	10/500MHz	6	0.05	600
GTF01□T0N401	0.4	±0.1,0.2,0.3nH	10/500MHz	6	0.05	600
GTF01□T0N501	0.5	±0.1,0.2,0.3nH	10/500MHz	6	0.10	600
GTF01□T0N601	0.6	±0.1,0.2,0.3nH	10/500MHz	6	0.10	600
GTF01□T0N701	0.7	±0.1,0.2,0.3nH	10/500MHz	6	0.10	600
GTF01□T0N801	0.8	±0.1,0.2,0.3nH	10/500MHz	6	0.10	600
GTF01□T0N901	0.9	±0.1,0.2,0.3nH	10/500MHz	6	0.10	600
GTF01□T1N001	1.0	±0.1,0.2,0.3nH	10/500MHz	6	0.15	600
GTF01□T1N101	1.1	±0.1,0.2,0.3nH	10/500MHz	6	0.15	600
GTF01□T1N201	1.2	±0.1,0.2,0.3nH	10/500MHz	6	0.15	600
GTF01□T1N301	1.3	±0.1,0.2,0.3nH	10/500MHz	6	0.20	600
GTF01□T1N401	1.4	±0.1,0.2,0.3nH	10/500MHz	6	0.20	600
GTF01□T1N501	1.5	±0.1,0.2,0.3nH	10/500MHz	6	0.20	600
GTF01□T1N601	1.6	±0.1,0.2,0.3nH	10/500MHz	6	0.25	600
GTF01□T1N701	1.7	±0.1,0.2,0.3nH	10/500MHz	6	0.30	500
GTF01□T1N801	1.8	±0.1,0.2,0.3nH	10/500MHz	6	0.30	500
GTF01□T1N901	1.9	±0.1,0.2,0.3nH	10/500MHz	6	0.30	500
GTF01□T2N001	2.0	±0.1,0.2,0.3nH	10/500MHz	6	0.30	500
GTF01□T2N101	2.1	±0.1,0.2,0.3nH	10/500MHz	6	0.30	500
GTF01□T2N201	2.2	±0.1,0.2,0.3nH	10/500MHz	6	0.35	500
GTF01□T2N301	2.3	±0.1,0.2,0.3nH	10/500MHz	6	0.35	500
GTF01□T2N401	2.4	±0.1,0.2,0.3nH	10/500MHz	6	0.35	450
GTF01□T2N501	2.5	±0.1,0.2,0.3nH	10/500MHz	6	0.35	450
GTF01□T2N601	2.6	±0.1,0.2,0.3nH	10/500MHz	6	0.35	450
GTF01□T2N701	2.7	±0.1,0.2,0.3nH	10/500MHz	6	0.35	450
GTF01□T2N801	2.8	±0.1,0.2,0.3nH	10/500MHz	6	0.50	450
GTF01□T2N901	2.9	±0.1,0.2,0.3nH	10/500MHz	6	0.50	450
GTF01□T3N001	3.0	±0.1,0.2,0.3nH	10/500MHz	6	0.50	400
GTF01□T3N101	3.1	±0.1,0.2,0.3nH	10/500MHz	6	0.50	400
GTF01□T3N201	3.2	±0.1,0.2,0.3nH	10/500MHz	6	0.50	400
GTF01□T3N301	3.3	±0.1,0.2,0.3nH	10/500MHz	6	0.50	400
GTF01□T3N401	3.4	±0.1,0.2,0.3nH	10/500MHz	6	0.80	350
GTF01□T3N501	3.5	±0.1,0.2,0.3nH	10/500MHz	6	0.80	350
GTF01□T3N601	3.6	±0.1,0.2,0.3nH	10/500MHz	6	0.80	350
GTF01□T3N701	3.7	±0.1,0.2,0.3nH	10/500MHz	6	0.80	350
GTF01□T3N801	3.8	±0.1,0.2,0.3nH	10/500MHz	6	0.80	350
GTF01□T3N901	3.9	±0.1,0.2,0.3nH	10/500MHz	6	0.80	350
GTF01□T4N001	4.0	±0.1,0.2,0.3nH	10/500MHz	6	0.80	350

Electrical characteristics List

GTF01-02 Chip Inductors / High Q Type

PART No.	L (nH)	Tolerance (nH or %)	Quality Factor min	SRF (GHz min.)	DCR (Ω)max.	IDC (mA)max.
GTF01□T0N102	0.1	±0.1,0.2,0.3nH	14/500MHz	6	0.05	850
GTF01□T0N202	0.2	±0.1,0.2,0.3nH	14/500MHz	6	0.05	800
GTF01□T0N302	0.3	±0.1,0.2,0.3nH	14/500MHz	6	0.05	800
GTF01□T0N402	0.4	±0.1,0.2,0.3nH	14/500MHz	6	0.05	750
GTF01□T0N502	0.5	±0.1,0.2,0.3nH	14/500MHz	6	0.10	750
GTF01□T0N602	0.6	±0.1,0.2,0.3nH	14/500MHz	6	0.10	750
GTF01□T0N702	0.7	±0.1,0.2,0.3nH	14/500MHz	6	0.10	600
GTF01□T0N802	0.8	±0.1,0.2,0.3nH	14/500MHz	6	0.10	600
GTF01□T0N902	0.9	±0.1,0.2,0.3nH	14/500MHz	6	0.10	600
GTF01□T1N002	1.0	±0.1,0.2,0.3nH	14/500MHz	6	0.15	600
GTF01□T1N102	1.1	±0.1,0.2,0.3nH	14/500MHz	6	0.15	600
GTF01□T1N202	1.2	±0.1,0.2,0.3nH	14/500MHz	6	0.15	600
GTF01□T1N302	1.3	±0.1,0.2,0.3nH	14/500MHz	6	0.15	600
GTF01□T1N402	1.4	±0.1,0.2,0.3nH	14/500MHz	6	0.15	600
GTF01□T1N502	1.5	±0.1,0.2,0.3nH	14/500MHz	6	0.15	600
GTF01□T1N602	1.6	±0.1,0.2,0.3nH	14/500MHz	6	0.15	600
GTF01□T1N702	1.7	±0.1,0.2,0.3nH	14/500MHz	6	0.20	500
GTF01□T1N802	1.8	±0.1,0.2,0.3nH	14/500MHz	6	0.20	500
GTF01□T1N902	1.9	±0.1,0.2,0.3nH	14/500MHz	6	0.20	500
GTF01□T2N002	2.0	±0.1,0.2,0.3nH	14/500MHz	6	0.20	500
GTF01□T2N102	2.1	±0.1,0.2,0.3nH	14/500MHz	6	0.20	500
GTF01□T2N202	2.2	±0.1,0.2,0.3nH	14/500MHz	6	0.20	500
GTF01□T2N302	2.3	±0.1,0.2,0.3nH	14/500MHz	6	0.20	500
GTF01□T2N402	2.4	±0.1,0.2,0.3nH	14/500MHz	6	0.25	450
GTF01□T2N502	2.5	±0.1,0.2,0.3nH	14/500MHz	6	0.25	450
GTF01□T2N602	2.6	±0.1,0.2,0.3nH	14/500MHz	6	0.25	450
GTF01□T2N702	2.7	±0.1,0.2,0.3nH	14/500MHz	6	0.25	450
GTF01□T2N802	2.8	±0.1,0.2,0.3nH	14/500MHz	6	0.25	450
GTF01□T2N902	2.9	±0.1,0.2,0.3nH	14/500MHz	6	0.25	450
GTF01□T3N002	3.0	±0.1,0.2,0.3nH	14/500MHz	6	0.30	400
GTF01□T3N102	3.1	±0.1,0.2,0.3nH	14/500MHz	6	0.30	400
GTF01□T3N202	3.2	±0.1,0.2,0.3nH	14/500MHz	6	0.30	400
GTF01□T3N302	3.3	±0.1,0.2,0.3nH	14/500MHz	6	0.30	400
GTF01□T3N402	3.4	±0.1,0.2,0.3nH	14/500MHz	6	0.40	350
GTF01□T3N502	3.5	±0.1,0.2,0.3nH	14/500MHz	6	0.40	350
GTF01□T3N602	3.6	±0.1,0.2,0.3nH	14/500MHz	6	0.40	350
GTF01□T3N702	3.7	±0.1,0.2,0.3nH	14/500MHz	6	0.40	350
GTF01□T3N802	3.8	±0.1,0.2,0.3nH	14/500MHz	6	0.40	350
GTF01□T3N902	3.9	±0.1,0.2,0.3nH	14/500MHz	6	0.40	350
GTF01□T4N002	4.0	±0.1,0.2,0.3nH	14/500MHz	6	0.40	350

Electrical characteristics List

GTF02 Chip Inductors / Standard Type

PART No.	L (nH)	Tolerance (nH or %)	Quality Factor min	SRF (GHz min.)	DCR (Ω)max.	IDC (mA)max.
GTF02□T0N2	0.2	±0.1,0.2,0.3nH	13/500MHz	14	0.10	800
GTF02□T0N3	0.3	±0.1,0.2,0.3nH	13/500MHz	14	0.10	800
GTF02□T0N4	0.4	±0.1,0.2,0.3nH	13/500MHz	14	0.10	800
GTF02□T0N5	0.5	±0.1,0.2,0.3nH	13/500MHz	14	0.15	700
GTF02□T0N6	0.6	±0.1,0.2,0.3nH	13/500MHz	14	0.15	700
GTF02□T0N8	0.8	±0.1,0.2,0.3nH	13/500MHz	14	0.15	700
GTF02□T0N9	0.9	±0.1,0.2,0.3nH	13/500MHz	14	0.15	700
GTF02□T1N0	1.0	±0.1,0.2,0.3nH	13/500MHz	12	0.15	700
GTF02□T1N1	1.1	±0.1,0.2,0.3nH	13/500MHz	12	0.15	700
GTF02□T1N2	1.2	±0.1,0.2,0.3nH	13/500MHz	12	0.15	700
GTF02□T1N3	1.3	±0.1,0.2,0.3nH	13/500MHz	10	0.25	700
GTF02□T1N4	1.4	±0.1,0.2,0.3nH	13/500MHz	10	0.25	700
GTF02□T1N5	1.5	±0.1,0.2,0.3nH	13/500MHz	10	0.25	700
GTF02□T1N6	1.6	±0.1,0.2,0.3nH	13/500MHz	10	0.25	560
GTF02□T1N7	1.7	±0.1,0.2,0.3nH	13/500MHz	10	0.25	560
GTF02□T1N8	1.8	±0.1,0.2,0.3nH	13/500MHz	10	0.25	560
GTF02□T1N9	1.9	±0.1,0.2,0.3nH	13/500MHz	8	0.35	560
GTF02□T2N0	2.0	±0.1,0.2,0.3nH	13/500MHz	8	0.35	560
GTF02□T2N1	2.1	±0.1,0.2,0.3nH	13/500MHz	8	0.35	440
GTF02□T2N2	2.2	±0.1,0.2,0.3nH	13/500MHz	8	0.35	440
GTF02□T2N3	2.3	±0.1,0.2,0.3nH	13/500MHz	8	0.35	440
GTF02□T2N4	2.4	±0.1,0.2,0.3nH	13/500MHz	8	0.35	440
GTF02□T2N5	2.5	±0.1,0.2,0.3nH	13/500MHz	8	0.35	440
GTF02□T2N6	2.6	±0.1,0.2,0.3nH	13/500MHz	8	0.35	440
GTF02□T2N7	2.7	±0.1,0.2,0.3nH	13/500MHz	8	0.35	440
GTF02□T2N8	2.8	±0.1,0.2,0.3nH	13/500MHz	6	0.45	380
GTF02□T2N9	2.9	±0.1,0.2,0.3nH	13/500MHz	6	0.45	380
GTF02□T3N0	3.0	±0.1,0.2,0.3nH	13/500MHz	6	0.45	380
GTF02□T3N1	3.1	±0.1,0.2,0.3nH	13/500MHz	6	0.45	380
GTF02□T3N2	3.2	±0.1,0.2,0.3nH	13/500MHz	6	0.45	380
GTF02□T3N3	3.3	±0.1,0.2,0.3nH	13/500MHz	6	0.45	380
GTF02□T3N4	3.4	±0.1,0.2,0.3nH	13/500MHz	6	0.55	380
GTF02□T3N5	3.5	±0.1,0.2,0.3nH	13/500MHz	6	0.55	380
GTF02□T3N6	3.6	±0.1,0.2,0.3nH	13/500MHz	6	0.55	380
GTF02□T3N7	3.7	±0.1,0.2,0.3nH	13/500MHz	6	0.55	340
GTF02□T3N8	3.8	±0.1,0.2,0.3nH	13/500MHz	6	0.55	340
GTF02□T3N9	3.9	±0.1,0.2,0.3nH	13/500MHz	6	0.55	340
GTF02□T4N3	4.3	±0.1,0.2,0.3nH	13/500MHz	6	0.65	320
GTF02□T4N7	4.7	±0.1,0.2,0.3nH	13/500MHz	6	0.65	320
GTF02□T5N4	5.4	±0.1,0.2,0.3nH	13/500MHz	6	0.85	280
GTF02□T5N6	5.6	±0.1,0.2,0.3nH	13/500MHz	6	0.85	280
GTF02□T5N9	5.9	±0.1,0.2,0.3nH	13/500MHz	6	0.85	280
GTF02□T6N5	6.5	±0.1,0.2,0.3nH	13/500MHz	6	1.05	260
GTF02□T6N8	6.8	±0.1,0.2,0.3nH	13/500MHz	6	1.05	260
GTF02□T7N2	7.2	±0.1,0.2,0.3nH	13/500MHz	6	1.05	260
GTF02□T8N0	8.0	±0.1,0.2,0.3nH	13/500MHz	5.5	1.25	220
GTF02□T8N1	8.1	±0.1,0.2,0.3nH	13/500MHz	5.5	1.25	220
GTF02□T8N2	8.2	±0.1,0.2,0.3nH	13/500MHz	5.5	1.25	220
GTF02□T9N1	9.1	±0.1,0.2,0.3nH	13/500MHz	5.5	1.25	220

Electrical characteristics List

GTF02 Chip Inductors / Standard Type

PART No.	L (nH)	Tolerance (nH or %)	Quality Factor min	SRF (GHz min.)	DCR (Ω)max.	IDC (mA)max.
GTF02□T10N	10.0	±1% ±2% ±3% ±5%	13/500MHz	4.5	1.35	200
GTF02□T10N8	10.8	±1% ±2% ±3% ±5%	13/500MHz	4.5	1.35	200
GTF02□T12N	12.0	±1% ±2% ±3% ±5%	13/500MHz	3.7	1.55	180
GTF02□T13N8	13.8	±1% ±2% ±3% ±5%	13/500MHz	3.7	1.75	180
GTF02□T15N	15.0	±1% ±2% ±3% ±5%	13/500MHz	3.3	1.75	130
GTF02□T17N	17.0	±1% ±2% ±3% ±5%	13/500MHz	3.1	1.95	100
GTF02□T18N	18.0	±1% ±2% ±3% ±5%	13/500MHz	3.1	2.15	100
GTF02□T20N8	20.8	±1% ±2% ±3% ±5%	13/500MHz	2.8	2.55	90
GTF02□T22N	22.0	±1% ±2% ±3% ±5%	13/500MHz	2.8	2.65	90
GTF02□T27N	27.0	±1% ±2% ±3% ±5%	13/500MHz	2.5	3.25	75
GTF02□T33N	33.0	±5%	13/500MHz	2.5	4.50	75