

Feature

- ◆ A Photo Lithographic Single Layer Ceramic Chip
- ◆ High SRF, Excellent Q, Superior Temperature Stability
- ◆ Highly stable design for critical needs
- ◆ Stable Inductance in high frequency circuit
- ◆ Tight Resonant Frequency Controlled Within 10%

Application

- ◆ Cellular Telephone, Pagers and GPS products
- ◆ TCXO circuit and RF Transceiver Module
- ◆ Voltage-controlled oscillator
- ◆ Wireless Lane, Bluetooth Module, Communication Appliance

ORDERING INFORMATION

Example: TFI-02B1N2T (TFI-0402 B 1.2 nH Taping)

Type	Size	Tolerance		Inductance	Packing	Quantity
TFI-02	0402	G= ±2%	A=0.1nH	1N0=1 nH	T=Taping	10K/Reel
TFI-03	0603	H= ±3%	B=0.2nH	10N= 10 nH	B=Bulk	5K/Reel
		J= ±5%	C=0.3nH	101=100nH		
		K= ±10%		102=1000nH		
		M= ±20%		103=10000nH		

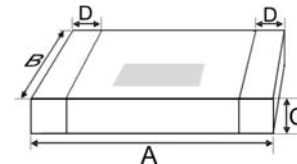
Figure:



DIMENSION

Unit: mm

Type	Size	A	B	C	D
TFI-02	0402	1.0±0.05	0.5±0.05	0.35±0.052	0.2±0.05
TFI-03	0603	1.7±0.15	0.85±0.15	0.45±0.10	0.30±0.15



Characteristics

Item	Specification	Test Method
Bending Test	As Spec.	JIS-C5202-6 1.4 Bending Amplitude 3mm for 10 seconds
Dielectric Withstand Voltage	>100V	MIL-STD -202F Method 301 Apply 100VA (rms) for 1 minute
Insulation Resistance	>1000MΩ	MIL-STD -202F Method 302 Apply 100VDC for 1 minute
Resistance to Soldering Heat	△ L ≤ 10%	MIL-STD-202F Method 210E 260±3℃ 10±1seconds
High Temperature Exposure	△ L ≤ 10%	JIS-C-5202-7.2 85±2℃, 1000+48/- hours
Moisture Resistance	△ L ≤ 10%	MIL-STD-202F Method 103B 40±2℃, 90~95%RH, 1000+48/-0 hours
Low Temperature Storage	△ L ≤ 10%	JIS-C-5202-7.1 -40±3℃, 1000+48/-0 hours
Temperature Cycle	△ L ≤ 10%	JIS-C-5202-7.4 -40/RT/85/RT, 10 cycles
Solderability	△ L ≤ 10%	MIL-STD-202F Method 208H 235℃±5℃, 2±0.5 seconds

* Storage Temperature: 25±3℃; Humidity <80% RH

※美隆公司產品規格及其特性參數的改變或更新恕不另行通知。

※Mayloon characteristic parameters of electronic product specification changes or updates without notice to improve



Standard Electrical Specifications TFI-02 Chip Inductor

Inductance (0402)	Inductance Tolerance (% or nH)	Quality Factor / min	Resistance DC/Max (Ω)	Current DC/Max (mA)	Self Resonant Frequency/min (GHz)	Reel Packaging Quantity
0.2 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.10	800	14	7" Reel / 10K Pcs
0.4 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.10	800	14	7" Reel / 10K Pcs
0.8 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.15	700	14	7" Reel / 10K Pcs
1.0 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.15	700	12	7" Reel / 10K Pcs
1.2 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.15	700	12	7" Reel / 10K Pcs
1.5 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.25	700	10	7" Reel / 10K Pcs
1.6 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.25	560	10	7" Reel / 10K Pcs
1.8 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.25	560	10	7" Reel / 10K Pcs
2.0 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.35	560	8	7" Reel / 10K Pcs
2.2 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.35	440	8	7" Reel / 10K Pcs
2.7 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.35	400	8	7" Reel / 10K Pcs
3.1 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.45	380	6	7" Reel / 10K Pcs
3.3 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.45	380	6	7" Reel / 10K Pcs
3.6 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.55	380	6	7" Reel / 10K Pcs
3.9 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.55	340	6	7" Reel / 10K Pcs
4.7 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.65	320	6	7" Reel / 10K Pcs
5.6 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.85	280	6	7" Reel / 10K Pcs
5.9 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	0.85	280	6	7" Reel / 10K Pcs
6.8 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	1.05	260	6	7" Reel / 10K Pcs
7.2 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	1.05	260	6	7" Reel / 10K Pcs
8.0 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	1.25	220	5.5	7" Reel / 10K Pcs
8.2 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	1.25	220	5.5	7" Reel / 10K Pcs
9.1 nH	* 0.1/0.2/0.3 nH	13 / 500 mHz	1.25	220	5.5	7" Reel / 10K Pcs
10 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	1.35	220	4.5	7" Reel / 10K Pcs
12 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	1.55	180	3.7	7" Reel / 10K Pcs
13.8 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	1.75	180	3.7	7" Reel / 10K Pcs
15.0 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	1.75	130	3.3	7" Reel / 10K Pcs
17.0 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	1.95	100	3.1	7" Reel / 10K Pcs
18.0 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	2.15	100	3.1	7" Reel / 10K Pcs
20.8 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	2.55	90	2.8	7" Reel / 10K Pcs
22.0 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	2.65	90	2.8	7" Reel / 10K Pcs
27.0 nH	±1%, ±2%, ±3%, ±5%	13 / 500 mHz	3.25	75	2.5	7" Reel / 10K Pcs
33.0 nH	±5%	13 / 500 mHz	3.75	75	2.5	7" Reel / 10K Pcs

Remark: Test Equipment : HP4186A+Agilent 16196B

* Tolerance A = 0.1 nH B=0.2 nH C=0.3 nH

F=±1%; G=±2%; H=±3%; J=±5%.

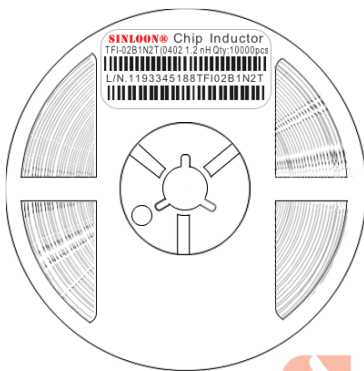


Standard Electrical Specifications TFI-02 Chip Inductor

Inductance (0603)	Inductance Tolerance (% or nH)	Quality Factor / min	Resistance DC/Max (Ω)	Current DC/Max (mA)	Self Resonant Frequency/min (GHz)	Reel Packaging Quantity
1.0 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.35	800	13	7" Reel / 5K Pcs
1.2 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.35	800	13	7" Reel / 5K Pcs
1.5 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.35	800	10	7" Reel / 5K Pcs
1.8 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.35	300	10	7" Reel / 5K Pcs
2.2 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.35	300	8	7" Reel / 5K Pcs
2.7 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.45	300	6	7" Reel / 5K Pcs
3.3 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.45	300	6	7" Reel / 5K Pcs
3.6 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.45	300	6	7" Reel / 5K Pcs
3.9 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.45	300	6	7" Reel / 5K Pcs
4.7 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.55	300	5	7" Reel / 5K Pcs
5.6 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.65	300	5	7" Reel / 5K Pcs
5.9 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.65	300	5	7" Reel / 5K Pcs
6.8 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.75	300	5	7" Reel / 5K Pcs
8.2 nH	* 0.1/0.2/0.3 nH	15 / 300mHz	0.95	300	4	7" Reel / 5K Pcs
10.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	0.95	300	4	7" Reel / 5K Pcs
12.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	1.05	300	3	7" Reel / 5K Pcs
15.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	1.35	300	3	7" Reel / 5K Pcs
18.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	1.65	300	2	7" Reel / 5K Pcs
22.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	1.95	250	2	7" Reel / 5K Pcs
27.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	2.35	250	2	7" Reel / 5K Pcs
33.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	2.75	250	1.5	7" Reel / 5K Pcs
39.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	3.00	200	1.5	7" Reel / 5K Pcs
47.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	3.00	200	1.5	7" Reel / 5K Pcs
56.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	5.00	150	1	7" Reel / 5K Pcs
68.0 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	5.00	150	1	7" Reel / 5K Pcs
100 nH	±1%;±2%;±3%;±5%.	15 / 300mHz	7.50	100	1	7" Reel / 5K Pcs

Remark: Test Equipment : HP4186A+Agilent 16196B
* Tolerance A = 0.1 nH B = 0.2 nH C = 0.3 nH
F = ±1%; G = ±2%; H = ±3%; J = ±5%.

Packing



7" Reel Tape

