

FEATURES

- ULTRA-SMALL LOW PROFILE 0201 & 0402 SIZES
- HIGH CURRENT & HIGH SRF
- COMPATIBLE WITH Pb-FREE SOLDERING
- RoHS COMPLIANT

**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

Case Size	0201	0402
Inductance Range	0.1nH ~ 10nH	0.2nH ~ 33nH
Available Tolerance	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D), $\pm 1\%$ (F), $\pm 2\%$ (G) & $\pm 5\%$ (J)	
Temperature Range	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$	
Resistance to Solder Heat	$260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5 seconds	
Temperature Cycling	$\Delta L < 10\%$ after 10 cycles $-40^{\circ}\text{C}/+20^{\circ}\text{C}/+85^{\circ}\text{C}/+20^{\circ}\text{C}$	

PART NUMBER SYSTEM

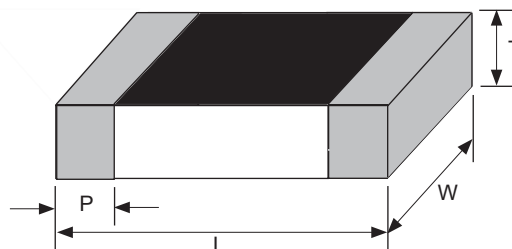
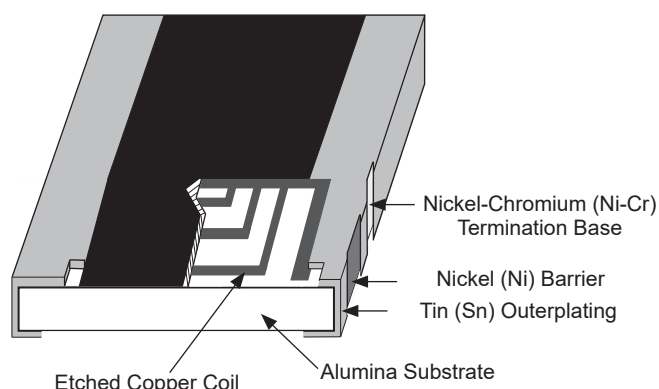
NTI 02 F 10N TR E

RoHS compliant
Tape & Reel Packaging
Inductance Value in nano-henries,
"N" indicates decimal point
Inductance Tolerance (see values tables)
Case Code
Series

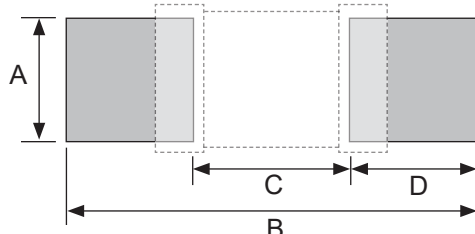
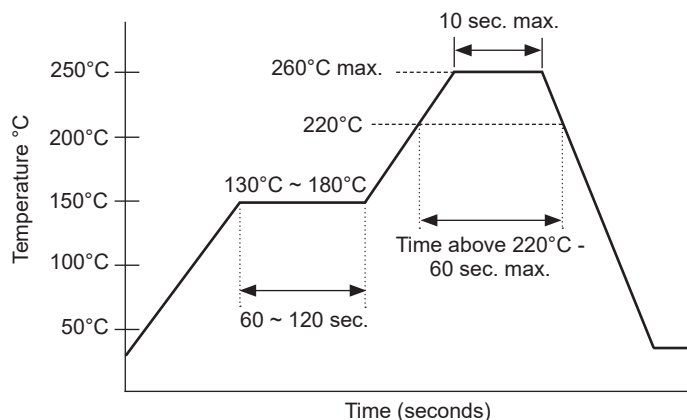
CASE DIMENSIONS (mm)				
Case Size	L	W	T	P
0201	0.60 ± 0.05	0.30 ± 0.05	0.23 ± 0.05	0.15 ± 0.05
0402	1.00 ± 0.05	0.50 ± 0.05	0.32 ± 0.05	0.20 ± 0.10

LAND PATTERN DIMENSIONS (mm)				
Case Size	A	B	C	D
0201	$0.2 \sim 0.3$	$0.8 \sim 0.9$	$0.2 \sim 0.3$	$0.3 \sim 0.4$
0402	$0.5 \sim 0.6$	$1.5 \sim 1.8$	$0.5 \sim 0.6$	$0.5 \sim 0.6$

CONSTRUCTION



REFLOW SOLDERING PROFILE



Available Values - 0201 Case Size						
Inductance Value (nH)	Part Number	DC Resistance Max. (Ω)	DC Current Max. (mA)	Available Tolerances & Tolerance Codes	Q Factor Min. & Test Frequency	SRF Min. (GHz)
0.1	NTI02_0N1TRF	0.20	400	±0.1nH (B), ±0.2nH (C), ±0.3nH (D)	8 min. @ 500MHz	9
0.2	NTI02_0N2TRF					
0.3	NTI02_0N3TRF					
0.4	NTI02_0N4TRF	0.25	350			
0.5	NTI02_0N5TRF					
0.6	NTI02_0N6TRF					
0.7	NTI02_0N7TRF	0.30	300			
0.8	NTI02_0N8TRF					
0.9	NTI02_0N9TRF					
1.0	NTI02_1N0TRF	0.35	250			
1.1	NTI02_1N1TRF					
1.2	NTI02_1N2TRF					
1.3	NTI02_1N3TRF	0.45	200			
1.4	NTI02_1N4TRF					
1.5	NTI02_1N5TRF					
1.6	NTI02_1N6TRF	0.55	200			
1.7	NTI02_1N7TRF					
1.8	NTI02_1N8TRF					
1.9	NTI02_1N9TRF	0.70	150			
2.0	NTI02_2N0TRF					
2.1	NTI02_2N1TRF					
2.2	NTI02_2N2TRF	0.80	140			
2.3	NTI02_2N3TRF					
2.4	NTI02_2N4TRF					
2.5	NTI02_2N5TRF	1.00	130			
2.6	NTI02_2N6TRF					
2.7	NTI02_2N7TRF					
2.8	NTI02_2N8TRF	1.20	120			
2.9	NTI02_2N9TRF					
3.0	NTI02_3N0TRF					
3.1	NTI02_3N1TRF	1.30	110			
3.2	NTI02_3N2TRF					
3.3	NTI02_3N3TRF					
3.4	NTI02_3N4TRF	1.40	100			
3.5	NTI02_3N5TRF					
3.6	NTI02_3N6TRF					
3.7	NTI02_3N7TRF	1.80	100			
3.8	NTI02_3N8TRF					
3.9	NTI02_3N9TRF					
4.0	NTI02_4N0TRF	2.00	110			
4.4	NTI02_4N4TRF					
4.7	NTI02_4N7TRF					
4.9	NTI02_4N9TRF	2.30	100			
5.6	NTI02_5N6TRF					
6.1	NTI02_6N1TRF					
6.8	NTI02_6N8TRF	2.80	100			
7.4	NTI02_7N4TRF					
8.2	NTI02_8N2TRF					
9.1	NTI02_9N1TRF	3.00	80			
9.2	NTI02_9N2TRF					
10	NTI02_10NTRF					

Available Values - 0402 Case Size							
Inductance Value (nH)	Part Number	DC Resistance Max. (Ω)	DC Current Max. (mA)	Available Tolerances & Tolerance Codes	Q Factor Min. & Test Frequency	SRF Min. (GHz)	
0.2	NTI04_0N2TRF	0.10	800	±0.1nH (B), ±0.2nH (C), ±0.3nH (D)	13 min. @ 500MHz	14	
0.3	NTI04_0N3TRF						
0.4	NTI04_0N4TRF						
0.5	NTI04_0N5TRF	0.15	700				
0.6	NTI04_0N6TRF						
0.7	NTI04_0N7TRF						
0.8	NTI04_0N8TRF						
0.9	NTI04_0N9TRF						
1.0	NTI04_1N0TRF						
1.1	NTI04_1N1TRF	0.25	560				
1.2	NTI04_1N2TRF						
1.3	NTI04_1N3TRF						
1.4	NTI04_1N4TRF						
1.5	NTI04_1N5TRF						
1.6	NTI04_1N6TRF						
1.7	NTI04_1N7TRF	0.35	440				
1.8	NTI04_1N8TRF						
1.9	NTI04_1N9TRF						
2.0	NTI04_2N0TRF						
2.1	NTI04_2N1TRF						
2.2	NTI04_2N2TRF						
2.3	NTI04_2N3TRF	0.45	380				
2.4	NTI04_2N4TRF						
2.5	NTI04_2N5TRF						
2.6	NTI04_2N6TRF						
2.7	NTI04_2N7TRF						
2.8	NTI04_2N8TRF						
2.9	NTI04_2N9TRF	0.55	340				
3.0	NTI04_3N0TRF						
3.1	NTI04_3N1TRF						
3.2	NTI04_3N2TRF						
3.3	NTI04_3N3TRF						
3.4	NTI04_3N4TRF						
3.5	NTI04_3N5TRF	0.65	320				
3.6	NTI04_3N6TRF						
3.7	NTI04_3N7TRF						
3.8	NTI04_3N8TRF	0.85	280				
3.9	NTI04_3N9TRF						
4.3	NTI04_4N3TRF						
4.7	NTI04_4N7TRF	1.05	260				
5.4	NTI04_5N4TRF						
5.6	NTI04_5N6TRF						
5.9	NTI04_5N9TRF	1.25	220				
6.5	NTI04_6N5TRF						
6.8	NTI04_6N8TRF						
7.2	NTI04_7N2TRF	1.35	200				
8.0	NTI04_8N0TRF						
8.1	NTI04_8N1TRF						
8.2	NTI04_8N2TRF	1.55	180				
9.1	NTI04_9N1TRF						
10	NTI04_10NTRF						
10.8	NTI04_10N8TRF	1.75	130				
12	NTI04_12NTRF						
13.8	NTI04_13N8TRF						
15	NTI04_15NTRF	1.95	100				
17	NTI04_17NTRF						
18	NTI04_18NTRF						
20.8	NTI04_20N8TRF	2.15	90				
22	NTI04_22NTRF						
27	NTI04_27NTRF						
33	NTI04_33NTRF	4.50	75			±5% (J)	

TAPE AND REEL DIMENSIONS (mm)

Type	A	B	E	F	W	P ₀	P ₁	P ₂	t	Qty/Reel
NTI02	0.40 ± 0.05	0.70 ± 0.05	1.75 ± 0.05	3.5 ± 0.05	8.0 ± 0.10	4.0 ± 0.10	2.0 ± 0.05	2.0 ± 0.5	0.42 ± 0.02	10,000
NTI04	0.70 ± 0.05	1.16 ± 0.05							0.40 ± 0.03	

