

NTI Series

Surface Mount Thin Film Chip Inductors



FEATURES

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

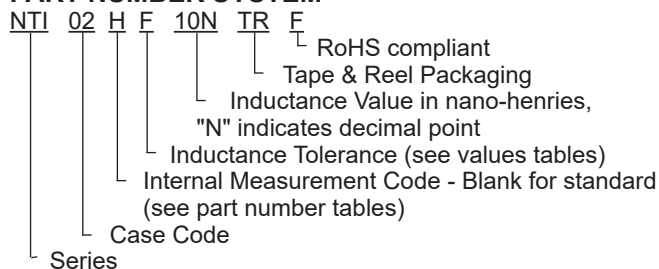


CHARACTERISTICS

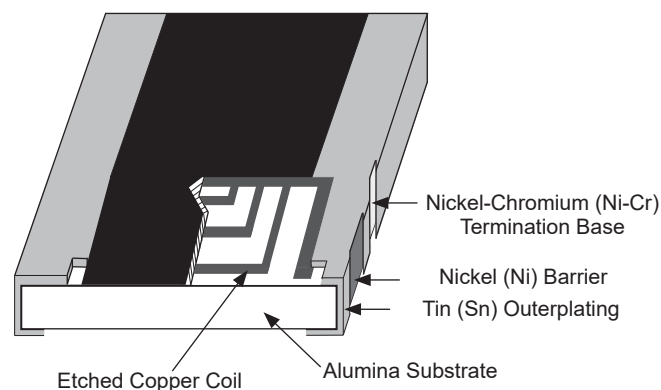
Case Size	0201			
Type Code	Standard (Blank)	High Current (H)	High Q (Q)	
Inductance Range	0.1nH ~ 10nH	0.1nH ~ 10nH	0.1nH ~ 10nH	
Available Tolerances	See Specifications Tables			
Temperature Range	-55°C ~ +125°C			
Resistance to Solder Heat	260°C ±5°C for 10 seconds			
Temperature Cycling	ΔL <10% after 10 cycles -55°C/+20°C/+125°C/+20°C			

Case Size	0402			
Type Code	Standard (Blank)	High Current (H)	High Q (Q)	
Inductance Range	0.2nH ~ 33nH	0.2nH ~ 10nH	0.1nH ~ 10nH	
Available Tolerances	See Specifications Tables			
Temperature Range	-55°C ~ +125°C			
Resistance to Solder Heat	260°C ±5°C for 10 seconds			
Temperature Cycling	ΔL <10% after 10 cycles -55°C/+20°C/+125°C/+20°C			

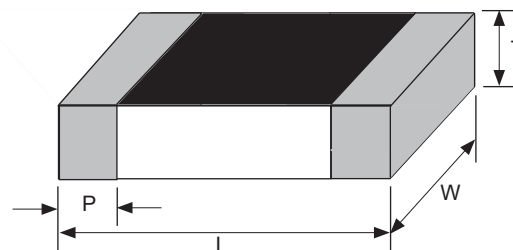
PART NUMBER SYSTEM



CONSTRUCTION



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



NTI Series

Surface Mount Thin Film Chip

Chip Inductors



Available Values - 0201 Case Size - Standard

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	$\pm 0.1\text{nH (B)}$	8 min. @ 500MHz	9
0.2	NTI02_0N2TRF			$\pm 0.1\text{nH (B), } \pm 0.2\text{nH (C)}$		
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	200			
2.0	NTI02_2N0TRF					
2.1	NTI02_2N1TRF					
2.2	NTI02_2N2TRF	0.80	150	$\pm 0.1\text{nH (B), } \pm 0.2\text{nH (C), } \pm 0.3\text{nH (D)}$		
2.3	NTI02_2N3TRF					
2.4	NTI02_2N4TRF					
2.5	NTI02_2N5TRF	1.00	110			
2.6	NTI02_2N6TRF					
2.7	NTI02_2N7TRF					
2.8	NTI02_2N8TRF	1.20	130			
2.9	NTI02_2N9TRF					
3.0	NTI02_3N0TRF					
3.1	NTI02_3N1TRF	1.30	120			
3.2	NTI02_3N2TRF					
3.3	NTI02_3N3TRF					
3.4	NTI02_3N4TRF	1.40	110			
3.5	NTI02_3N5TRF					
3.6	NTI02_3N6TRF					
3.7	NTI02_3N7TRF	1.60	110			
3.8	NTI02_3N8TRF					
3.9	NTI02_3N9TRF					
4.0	NTI02_4N0TRF	1.80	120			
4.4	NTI02_4N4TRF					
4.7	NTI02_4N7TRF					
4.9	NTI02_4N9TRF	2.00	110	$\pm 2\% (G), \pm 3\% (H) \pm 5\% (J)$		
5.6	NTI02_5N6TRF					
6.1	NTI02_6N1TRF					
6.8	NTI02_6N8TRF	2.30	100			
7.4	NTI02_7N4TRF					
8.2	NTI02_8N2TRF					
9.1	NTI02_9N1TRF	2.80	80			
9.2	NTI02_9N2TRF					
10	NTI02_10NTRF					

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Available Values - 0201 Case Size - Type M						
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)
0.7	NTI02M_0N7TRF	0.20	400	±0.1nH (B)	8 @ 500MHz	9
0.8	NTI02M_0N8TRF					
0.9	NTI02M_0N9TRF					
1.0	NTI02M_1N0TRF					
1.1	NTI02M_1N1TRF	0.25	350			
1.2	NTI02M_1N2TRF					
1.3	NTI02M_1N3TRF					
1.4	NTI02M_1N4TRF	0.30	300			
1.5	NTI02M_1N5TRF					
1.6	NTI02M_1N6TRF					
1.7	NTI02M_1N7TRF					
1.8	NTI02M_1N8TRF	0.35				
1.9	NTI02M_1N9TRF					
2.0	NTI02M_2N0TRF	0.45	250			
2.1	NTI02M_2N1TRF					
2.2	NTI02M_2N2TRF					
2.3	NTI02M_2N3TRF	0.55	200	±0.1nH (B), ±0.2nH (C)		
2.4	NTI02M_2N4TRF					
2.5	NTI02M_2N5TRF					
2.6	NTI02M_2N6TRF					
2.7	NTI02M_2N7TRF	0.70				
2.8	NTI02M_2N8TRF					
2.9	NTI02M_2N9TRF					
3.0	NTI02M_3N0TRF	0.80				
3.1	NTI02M_3N1TRF					
3.2	NTI02M_3N2TRF					
3.3	NTI02M_3N3TRF					
3.4	NTI02M_3N4TRF	1.0	150			
3.5	NTI02M_3N5TRF					
3.6	NTI02M_3N6TRF					
3.7	NTI02M_3N7TRF					
3.8	NTI02M_3N8TRF					
3.9	NTI02M_3N9TRF					
4.0	NTI02M_4N0TRF	1.2				
4.1	NTI02M_4N1TRF					
4.2	NTI02M_4N2TRF					
4.3	NTI02M_4N3TRF					
4.7	NTI02M_4N7TRF					
5.1	NTI02M_5N1TRF			1.3	140	
5.6	NTI02M_5N6TRF			1.6	130	
6.2	NTI02M_6N2TRF	1.8				
6.8	NTI02M_6N8TRF	2.0	120			
7.5	NTI02M_7N5TRF	2.3	110			
8.2	NTI02M_8N2TRF	2.8				
9.1	NTI02M_9N1TRF	3.0				
10	NTI02M_10NTRF	3.25	100	±3% (H), ±5% (J)	4	
						3

"M product are performance matched for specific product design-in. For more details contact NIC TPMG"

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Available Values - 0201 Case Size - Type H (High Current)

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	NTI02H_0N1TRF	0.05	600	$\pm 0.1\text{nH}$ (B)	10 @ 500MHz	6.0
0.2	NTI02H_0N2TRF			$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C)		
0.3	NTI02H_0N3TRF					
0.4	NTI02H_0N4TRF					
0.5	NTI02H_0N5TRF	0.10				
0.6	NTI02H_0N6TRF					
0.7	NTI02H_0N7TRF					
0.8	NTI02H_0N8TRF					
0.9	NTI02H_0N9TRF	0.15				
1.0	NTI02H_1N0TRF					
1.1	NTI02H_1N1TRF					
1.2	NTI02H_1N2TRF					
1.3	NTI02H_1N3TRF	0.20				
1.4	NTI02H_1N4TRF					
1.5	NTI02H_1N5TRF					
1.6	NTI02H_1N6TRF					
1.7	NTI02H_1N7TRF	0.30	500	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)		
1.8	NTI02H_1N8TRF					
1.9	NTI02H_1N9TRF					
2.0	NTI02H_2N0TRF					
2.1	NTI02H_2N1TRF	0.35				
2.2	NTI02H_2N2TRF					
2.3	NTI02H_2N3TRF					
2.4	NTI02H_2N4TRF					
2.5	NTI02H_2N5TRF	0.50			450	
2.6	NTI02H_2N6TRF					
2.7	NTI02H_2N7TRF					
2.8	NTI02H_2N8TRF					
2.9	NTI02H_2N9TRF	0.80	400			
3.0	NTI02H_3N0TRF					
3.1	NTI02H_3N1TRF					
3.2	NTI02H_3N2TRF					
3.3	NTI02H_3N3TRF	0.50	350	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D), $\pm 3\%$ (H), $\pm 5\%$ (J)		
3.4	NTI02H_3N4TRF					
3.5	NTI02H_3N5TRF					
3.6	NTI02H_3N6TRF					
3.7	NTI02H_3N7TRF	0.80				
3.8	NTI02H_3N8TRF					
3.9	NTI02H_3N9TRF					
4.0	NTI02H_4N0TRF					
4.4	NTI02H_4N4TRF	0.50			300	
4.7	NTI02H_4N7TRF					
4.9	NTI02H_4N9TRF					
5.6	NTI02H_5N6TRF					
6.1	NTI02H_6N1TRF	0.70	250			
6.8	NTI02H_6N8TRF					
7.4	NTI02H_7N4TRF	0.80	200			
8.2	NTI02H_8N2TRF					
9.1	NTI02H_9N1TRF	1.05	175	$\pm 2\%$ (G), $\pm 3\%$ (H), $\pm 5\%$ (J)		
9.2	NTI02H_9N2TRF					
10	NTI02H_10NTRF	1.30	150		3.5	

NTI Series

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Available Values - 0201 Case Size - Type Q (High Q)							
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	NTI02Q_0N1TRF	0.05	850	$\pm 0.1\text{nH}$ (B)	14 @ 500MHz	10	
0.2	NTI02Q_0N2TRF		800	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C)			
0.3	NTI02Q_0N3TRF						
0.4	NTI02Q_0N4TRF	0.10	750	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)		9.0	
0.5	NTI02Q_0N5TRF						
0.6	NTI02Q_0N6TRF						
0.7	NTI02Q_0N7TRF						
0.8	NTI02Q_0N8TRF						
0.9	NTI02Q_0N9TRF	0.15	600			$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)	8.0
1.0	NTI02Q_1N0TRF						
1.1	NTI02Q_1N1TRF						
1.2	NTI02Q_1N2TRF						
1.3	NTI02Q_1N3TRF						
1.4	NTI02Q_1N4TRF						
1.5	NTI02Q_1N5TRF						
1.6	NTI02Q_1N6TRF	0.20	500	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)	7.5		
1.7	NTI02Q_1N7TRF						
1.8	NTI02Q_1N8TRF						
1.9	NTI02Q_1N9TRF						
2.0	NTI02Q_2N0TRF						
2.1	NTI02Q_2N1TRF						
2.2	NTI02Q_2N2TRF						
2.3	NTI02Q_2N3TRF	0.25	450		$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)	7.0	
2.4	NTI02Q_2N4TRF						
2.5	NTI02Q_2N5TRF						
2.6	NTI02Q_2N6TRF						
2.7	NTI02Q_2N7TRF						
2.8	NTI02Q_2N8TRF						
2.9	NTI02Q_2N9TRF						
3.0	NTI02Q_3N0TRF	0.30	400	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)		6.5	
3.1	NTI02Q_3N1TRF						
3.2	NTI02Q_3N2TRF						
3.3	NTI02Q_3N3TRF						
3.4	NTI02Q_3N4TRF						
3.5	NTI02Q_3N5TRF						
3.6	NTI02Q_3N6TRF						
3.7	NTI02Q_3N7TRF	0.40	350		$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)	6.0	
3.8	NTI02Q_3N8TRF						
3.9	NTI02Q_3N9TRF						
4.0	NTI02Q_4N0TRF						
4.4	NTI02Q_4N4TRF						
4.7	NTI02Q_4N7TRF						
4.9	NTI02Q_4N9TRF						
5.6	NTI02Q_5N6TRF	0.50	300	$\pm 0.1\text{nH}$ (B), $\pm 0.2\text{nH}$ (C), $\pm 0.3\text{nH}$ (D)		5.5	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	0.60	250		$\pm 2\%$ (G) & $\pm 5\%$ (J)	5.0	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	0.70	200	$\pm 2\%$ (G) & $\pm 5\%$ (J)		4.5	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	0.75	175		$\pm 2\%$ (G) & $\pm 5\%$ (J)	4.0	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	0.80	150	$\pm 2\%$ (G) & $\pm 5\%$ (J)		3.5	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	0.90	150		$\pm 2\%$ (G) & $\pm 5\%$ (J)	3.5	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	1.05	150	$\pm 2\%$ (G) & $\pm 5\%$ (J)		3.5	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	1.15	150		$\pm 2\%$ (G) & $\pm 5\%$ (J)	3.5	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						
10	NTI02Q_10NTRF	1.30	150	$\pm 2\%$ (G) & $\pm 5\%$ (J)		3.5	
6.1	NTI02Q_6N1TRF						
6.8	NTI02Q_6N8TRF						
7.4	NTI02Q_7N4TRF						
8.2	NTI02Q_8N2TRF						
9.1	NTI02Q_9N1TRF						
9.2	NTI02Q_9N2TRF						

NTI Series

Surface Mount Thin Film Chip Chip Inductors



Available Values - 0201 Case Size - Type QM (High Q)						
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)
0.7	NTI02QM_0N7TRF	0.05	850	$\pm 0.1\text{nH (B)}$	14 @ 500MHz	6.0
0.8	NTI02QM_0N8TRF		800			
0.9	NTI02QM_0N9TRF		750			
1.0	NTI02QM_1N0TRF					
1.1	NTI02QM_1N1TRF	0.10	600	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}$		
1.2	NTI02QM_1N2TRF					
1.3	NTI02QM_1N3TRF					
1.4	NTI02QM_1N4TRF					
1.5	NTI02QM_1N5TRF	0.15	500	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}$		
1.6	NTI02QM_1N6TRF					
1.7	NTI02QM_1N7TRF					
1.8	NTI02QM_1N8TRF					
1.9	NTI02QM_1N9TRF	0.20	450	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
2.0	NTI02QM_2N0TRF					
2.1	NTI02QM_2N1TRF					
2.2	NTI02QM_2N2TRF					
2.3	NTI02QM_2N3TRF	0.25	400	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
2.4	NTI02QM_2N4TRF					
2.5	NTI02QM_2N5TRF					
2.6	NTI02QM_2N6TRF					
2.7	NTI02QM_2N7TRF	0.30	350	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
2.8	NTI02QM_2N8TRF					
2.9	NTI02QM_2N9TRF					
3.0	NTI02QM_3N0TRF					
3.1	NTI02QM_3N1TRF	0.40	300	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
3.2	NTI02QM_3N2TRF					
3.3	NTI02QM_3N3TRF					
3.4	NTI02QM_3N4TRF					
3.5	NTI02QM_3N5TRF	0.50	250	$\pm 3\% (H), \pm 5\% (J)$		
3.6	NTI02QM_3N6TRF					
3.7	NTI02QM_3N7TRF					
3.8	NTI02QM_3N8TRF					
3.9	NTI02QM_3N9TRF	0.60	200	$\pm 3\% (H), \pm 5\% (J)$		
4.0	NTI02QM_4N0TRF					
4.1	NTI02QM_4N1TRF					
4.2	NTI02QM_4N2TRF					
4.3	NTI02QM_4N3TRF	0.70	150	$\pm 3\% (H), \pm 5\% (J)$		
4.7	NTI02QM_4N7TRF					
5.1	NTI02QM_5N1TRF					
5.6	NTI02QM_5N6TRF					
6.2	NTI02QM_6N2TRF	0.75	150	$\pm 3\% (H), \pm 5\% (J)$		
6.8	NTI02QM_6N8TRF					
7.5	NTI02QM_7N5TRF					
8.2	NTI02QM_8N2TRF					
9.1	NTI02QM_9N1TRF	0.80	150	$\pm 3\% (H), \pm 5\% (J)$		
9.2	NTI02QM_9N2TRF					
10	NTI02QM_10NTRF	1.15	150	$\pm 3\% (H), \pm 5\% (J)$	4.5	
		1.30	150	$\pm 3\% (H), \pm 5\% (J)$	4.0	
					3.5	

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NTI Series

Surface Mount Thin Film Chip

Chip Inductors



Available Values - 0402 Case Size - Standard						
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	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}$	13 min. @ 500MHz	14
0.3	NTI04_0N3TRF					
0.4	NTI04_0N4TRF					
0.5	NTI04_0N5TRF					
0.6	NTI04_0N6TRF	0.15	700	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}$		
0.7	NTI04_0N7TRF					
0.8	NTI04_0N8TRF					
0.9	NTI04_0N9TRF					
1.0	NTI04_1N0TRF	0.25	560	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}$		12
1.1	NTI04_1N1TRF					
1.2	NTI04_1N2TRF					
1.3	NTI04_1N3TRF					
1.4	NTI04_1N4TRF	0.35	440	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$	10	
1.5	NTI04_1N5TRF					
1.6	NTI04_1N6TRF					
1.7	NTI04_1N7TRF					
1.8	NTI04_1N8TRF	0.45	380	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$	8	
1.9	NTI04_1N9TRF					
2.0	NTI04_2N0TRF					
2.1	NTI04_2N1TRF					
2.2	NTI04_2N2TRF	0.55	340	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$	6	
2.3	NTI04_2N3TRF					
2.4	NTI04_2N4TRF					
2.5	NTI04_2N5TRF					
2.6	NTI04_2N6TRF	0.65	320	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$	5.5	
2.7	NTI04_2N7TRF					
2.8	NTI04_2N8TRF					
2.9	NTI04_2N9TRF					
3.0	NTI04_3N0TRF	0.85	280	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
3.1	NTI04_3N1TRF					
3.2	NTI04_3N2TRF					
3.3	NTI04_3N3TRF					
3.4	NTI04_3N4TRF	1.05	260	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
3.5	NTI04_3N5TRF					
3.6	NTI04_3N6TRF					
3.7	NTI04_3N7TRF					
3.8	NTI04_3N8TRF	1.25	220	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
3.9	NTI04_3N9TRF					
4.3	NTI04_4N3TRF					
4.7	NTI04_4N7TRF					
5.4	NTI04_5N4TRF	0.85	280	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
5.6	NTI04_5N6TRF					
5.9	NTI04_5N9TRF					
6.5	NTI04_6N5TRF					
6.8	NTI04_6N8TRF	1.05	260	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
7.2	NTI04_7N2TRF					
8.0	NTI04_8N0TRF					
8.1	NTI04_8N1TRF					
8.2	NTI04_8N2TRF	1.25	220	$\pm 0.1\text{nH (B)}, \pm 0.2\text{nH (C)}, \pm 0.3\text{nH (D)}$		
9.1	NTI04_9N1TRF					

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NTI Series

Surface Mount Thin Film Chip Chip Inductors



Available Values - 0402 Case Size - Standard

Available Values - 0402 Case Size - Standard														
10.0	NTI04_10NTRF	1.35	200	±1% (F), ±2% (G) & ±5% (J)		4.5								
10.8	NTI04_10N8TRF													
12.0	NTI04_12NTRF	1.55	180			±1% (F), ±2% (G) & ±5% (J)		3.7						
13.8	NTI04_13N8TRF													
15.0	NTI04_15NTRF	1.75	130					±1% (F), ±2% (G) & ±5% (J)		3.3				
17.0	NTI04_17NTRF													
18.0	NTI04_18NTRF	2.15	100							±1% (F), ±2% (G) & ±5% (J)		3.1		
20.8	NTI04_20N8TRF													
22.0	NTI04_22NTRF	2.55	90									±1% (F), ±2% (G) & ±5% (J)		2.8
27.0	NTI04_27NTRF													
33.0	NTI04_33NTRF	4.50	75	±1% (F), ±2% (G) & ±5% (J)										2.5
						±5% (J)								

NTI Series

Surface Mount Thin Film Chip

Chip Inductors



Available Values - 0402 Case Size - Type M							
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)	
1.0	NTI04M_1N0TRF	0.1	800	$\pm 0.1\text{nH (B), } \pm 0.2\text{nH (C)}$	13 @ 500MHz	14	
1.1	NTI04M_1N1TRF						
1.2	NTI04M_1N2TRF						
1.3	NTI04M_1N3TRF	0.15	700				12
1.5	NTI04M_1N5TRF						
1.6	NTI04M_1N6TRF						
1.7	NTI04M_1N7TRF						
1.8	NTI04M_1N8TRF						
2.0	NTI04M_2N0TRF					0.25	
2.2	NTI04M_2N2TRF						
2.3	NTI04M_2N3TRF						
2.4	NTI04M_2N4TRF						
2.7	NTI04M_2N7TRF						
2.9	NTI04M_2N9TRF	0.35	440				8
3.0	NTI04M_3N0TRF						
3.1	NTI04M_3N1TRF						
3.2	NTI04M_3N2TRF						
3.3	NTI04M_3N3TRF						
3.6	NTI04M_3N6TRF					0.45	
3.7	NTI04M_3N7TRF						
3.9	NTI04M_3N9TRF						
4.1	NTI04M_4N1TRF						
4.3	NTI04M_4N3TRF						
4.5	NTI04M_4N5TRF	0.55	340				5.5
4.7	NTI04M_4N7TRF						
5.1	NTI04M_5N1TRF						
5.6	NTI04M_5N6TRF						
6.2	NTI04M_6N2TRF						
6.5	NTI04M_6N5TRF					0.85	
6.8	NTI04M_6N8TRF						
7.5	NTI04M_7N5TRF						
7.7	NTI04M_7N7TRF	1.05	260	3.7			
8.2	NTI04M_8N2TRF						
9.0	NTI04M_9N0TRF						
9.1	NTI04M_9N1TRF				1.25	220	3.1
9.2	NTI04M_9N2TRF						
10	NTI04M_10NTRF						
12	NTI04M_12NTRF						
15	NTI04M_15NTRF						
18	NTI04M_18NTRF	1.95	100	5.5			
22	NTI04M_22NTRF						
10	NTI04M_10NTRF				1.25	220	4.5
12	NTI04M_12NTRF						
15	NTI04M_15NTRF						
18	NTI04M_18NTRF						
22	NTI04M_22NTRF						
10	NTI04M_10NTRF	2.55	90	3.1			
12	NTI04M_12NTRF						
15	NTI04M_15NTRF						
18	NTI04M_18NTRF				2.55	90	2.8
22	NTI04M_22NTRF						

"M product are performance matched for specific product design-in. For more details contact NIC TPMG"

NTI Series

Surface Mount Thin Film Chip

Chip Inductors



Available Values - 0402 Case Size - Type Q (High Q)

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	NTI04Q_0N2TRF	0.10	1000	$\pm 0.1, 0.2nH$	16 @ 500MHz	14	
0.3	NTI04Q_0N3TRF						
0.4	NTI04Q_0N4TRF						
0.5	NTI04Q_0N5TRF	0.12	850	$\pm 0.1nH (B), \pm 0.2nH (C), \pm 0.3nH (D)$		12	
0.6	NTI04Q_0N6TRF						
0.7	NTI04Q_0N7TRF						
0.8	NTI04Q_0N8TRF						
0.9	NTI04Q_0N9TRF						
1.0	NTI04Q_1N0TRF	0.20	675			10	
1.1	NTI04Q_1N1TRF						
1.2	NTI04Q_1N2TRF						
1.3	NTI04Q_1N3TRF	0.28	530		8.0		
1.4	NTI04Q_1N4TRF						
1.5	NTI04Q_1N5TRF						
1.6	NTI04Q_1N6TRF						
1.7	NTI04Q_1N7TRF						
1.8	NTI04Q_1N8TRF	0.35	460	6.0			
1.9	NTI04Q_1N9TRF						
2.0	NTI04Q_2N0TRF						
2.1	NTI04Q_2N1TRF	0.45	410			6.0	
2.2	NTI04Q_2N2TRF						
2.3	NTI04Q_2N3TRF						
2.4	NTI04Q_2N4TRF						
2.5	NTI04Q_2N5TRF						
2.6	NTI04Q_2N6TRF	0.55	350		6.0		
2.7	NTI04Q_2N7TRF						
2.8	NTI04Q_2N8TRF						
2.9	NTI04Q_2N9TRF	0.7	310	6.0			
3.0	NTI04Q_3N0TRF						
3.1	NTI04Q_3N1TRF						
3.2	NTI04Q_3N2TRF	0.9	290			6.0	
3.3	NTI04Q_3N3TRF						
3.4	NTI04Q_3N4TRF						
3.5	NTI04Q_3N5TRF						
3.6	NTI04Q_3N6TRF						
3.7	NTI04Q_3N7TRF	1.0	245		6.0		
3.8	NTI04Q_3N8TRF						
3.9	NTI04Q_3N9TRF						
4.3	NTI04Q_4N3TRF	1.1	220	6.0			
4.7	NTI04Q_4N7TRF						
5.4	NTI04Q_5N4TRF						
5.6	NTI04Q_5N6TRF	1.0	245			6.0	
5.9	NTI04Q_5N9TRF						
6.5	NTI04Q_6N5TRF						
6.8	NTI04Q_6N8TRF	1.0	245				6.0
7.2	NTI04Q_7N2TRF						
8.0	NTI04Q_8N0TRF						
8.1	NTI04Q_8N2TRF	1.0	245		6.0		
8.2	NTI04Q_8N1TRF						
9.1	NTI04Q_9N1TRF						
10	NTI04Q_10NTRF	1.1	220	$\pm 1\% (F), \pm 2\% (G), \pm 3\% (H) \text{ \& } \pm 5\% (J)$			

NTI Series

Surface Mount Thin Film Chip Chip Inductors

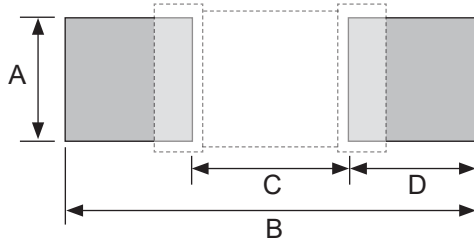


Available Values - 0402 Case Size - Type QM (High Q)						
Inductance Value (nH)	Part Number	DC Resistance Max. (Ω)	DC Current Max. (mA)	Available Tolerances & Tolerance Codes	Q Factor Min. & Test Frequency	SRF Min. (GHz)
1.0	NTI04QM_1N0TRF	0.1	1000	$\pm 0.1, 0.2nH$	16 @ 500MHz	14
1.1	NTI04QM_1N1TRF					
1.2	NTI04QM_1N2TRF					
1.3	NTI04QM_1N3TRF					
1.5	NTI04QM_1N5TRF	0.12	850			
1.6	NTI04QM_1N6TRF					
1.8	NTI04QM_1N8TRF					
2.0	NTI04QM_2N0TRF					
2.2	NTI04QM_2N2TRF	0.2	675			
2.4	NTI04QM_2N4TRF					
2.7	NTI04QM_2N7TRF					
3.0	NTI04QM_3N0TRF	0.28	530			
3.3	NTI04QM_3N3TRF					
3.6	NTI04QM_3N6TRF	0.35	460			
3.9	NTI04QM_3N9TRF					
4.3	NTI04QM_4N3TRF	0.45	410			
4.7	NTI04QM_4N7TRF					
5.1	NTI04QM_5N1TRF	0.55	350			
5.6	NTI04QM_5N6TRF					
6.2	NTI04QM_6N2TRF	0.7	310			
6.8	NTI04QM_6N8TRF					
7.5	NTI04QM_7N5TRF	0.9	290			
8.2	NTI04QM_8N2TRF					
9.1	NTI04QM_9N1TRF	1.0	245			
10	NTI04QM_10NTRF					

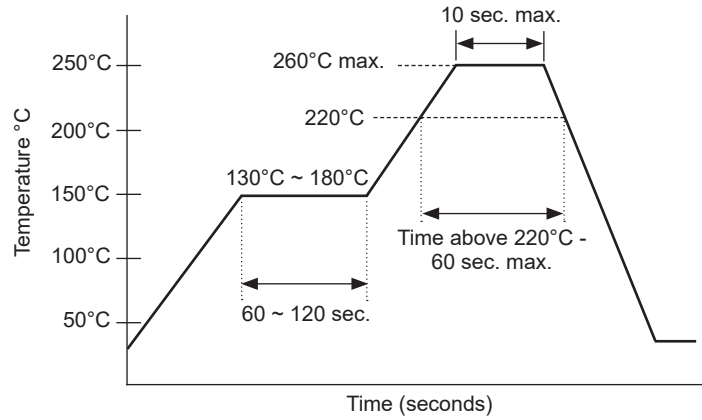
“M product are performance matched for specific product design-in. For more details contact NIC TPMG”

LAND PATTERN DIMENSIONS (mm)

Case Size	A	B	C	D
0201	0.2 ~ 0.3	0.8 ~ 0.9	0.2 ~ 0.3	0.3 ~ 0.4
0402	0.5 ~ 0.6	1.5 ~ 1.8	0.5 ~ 0.6	0.5 ~ 0.6



REFLOW SOLDERING PROFILE



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	

