

High Current Ferrite Chip Beads

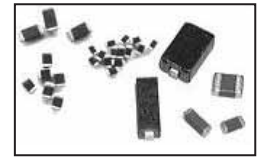
NCB-H Series

FEATURES

- STANDARD EIA 0603 ~ 1812 CASE SIZES
- EFFECTIVE EM/RFI SUPPRESSION UP TO 1 Ghz
- CURRENT RATINGS UP TO 6 AMPS
- HIGH IMPEDANCE OVER A WIDE FREQUENCY RANGE
- COMPATIBLE WITH AUTOMATIC PICK AND PLACE EQUIPMENT
- BOTH FLOW AND REFLOW SOLDERING APPLICABLE

RoHS
Compliant
includes all homogeneous materials

*See Part Number System for Details



OPERATING TEMPERATURE RANGE: -40°C TO +125°C*

EIA Size	NIC P/N	Impedance at 100MHz $\Omega(\pm 25\% \text{ Tol.})$	DC Resistance Max. (Ω)	DC Current Max. (mA)	Style Code	A (mm)	B (mm)	C (mm)	D (mm)
0402	NCB-H0402P100TR200F	10	0.10	2000	1	1.0 ±0.1	0.5 ±0.1	0.5 ±0.1	0.25 ±0.1
	NCB-H0402P300TR200F	30	0.10	2000					
	NCB-H0402P600TR200F	60	0.10	2000					
	NCB-H0402P800TR200F	80	0.10	2000					
	NCB-H0402P900TR200F	90	0.10	2000					
	NCB-H0402P101TR200F	100	0.10	2000					
	NCB-H0402P121TR200F	120	0.10	2000					
	NCB-H0402P221TR150F	220	0.15	1500					
	NCB-H0402P301TR150F	300	0.15	1500					
0603	NCB-H0603R100TR400F	10	0.020	4000	1	1.6 ±0.2	0.8 ±0.15	0.8 ±0.15	0.4 ± 0.2
	NCB-H0603R270TR400F	27	0.030	4000					
	NCB-H0603R300TR300F	30	0.035	3000					
	NCB-H0603R500TR250F	50	0.040	2500					
	NCB-H0603R680TR100F	68	0.100	1000					
	NCB-H0603R800TR300F	80	0.04	3000					
	NCB-H0603R101TR200F	100	0.100	2000					
	NCB-H0603R121TR200F	120	0.100	2000					
	NCB-H0603R151TR200F	150	0.100	2000					
	NCB-H0603R221TR200F	220	0.100	2000					
	NCB-H0603R301TR100F	300	0.200	1000					
	NCB-H0603R471TR100F	470	0.200	1000					
NCB-H0603R601TR100F	600	0.200	1000						
0805	NCB-H0805A300TR500F	30	0.010	5000	1	2.0 ±0.2	1.25 ±0.2	0.9 ±0.2	0.5 ±0.3
	NCB-H0805A390TR400F	39	0.030	4000					
	NCB-H0805A420TR400F	42	0.030	4000					
	NCB-H0805A600TR300F	60	0.025	3000					
	NCB-H0805A800TR300F	80	0.040	3000					
	NCB-H0805A101TR400F	100	0.020	4000					
	NCB-H0805A121TR200F	120	0.100	2000					
	NCB-H0805A151TR200F	150	0.100	2000					
	NCB-H0805A221TR300F	220	0.040	3000					
	NCB-H0805A301TR100F	300	0.200	1000					
	NCB-H0805A331TR250F	330	0.050	2500					
	NCB-H0805A471TR200F	470	0.080	2000					
	NCB-H0805A601TR150F	600	0.100	1500					
1206	NCB-H1206B300TR300F	30	0.040	3000	1	3.2 ±0.2	1.6 ±0.2	1.1 ±0.2	0.5 ±0.3
	NCB-H1206B320TR600F	32	0.020	6000					
	NCB-H1206B500TR400F	50	0.020	4000					
	NCB-H1206B680TR300F	68	0.012	3000					
	NCB-H1206B800TR300F	80	0.040	3000					
	NCB-H1206B121TR200F	120	0.100	2000					

Note: Other values and case sizes available.

*STYLE 2 TYPES, TEMPERATURE RANGE -25°C ~ +85°C

For Impedance (Z) over Frequency curves
see www.RFpassives.com



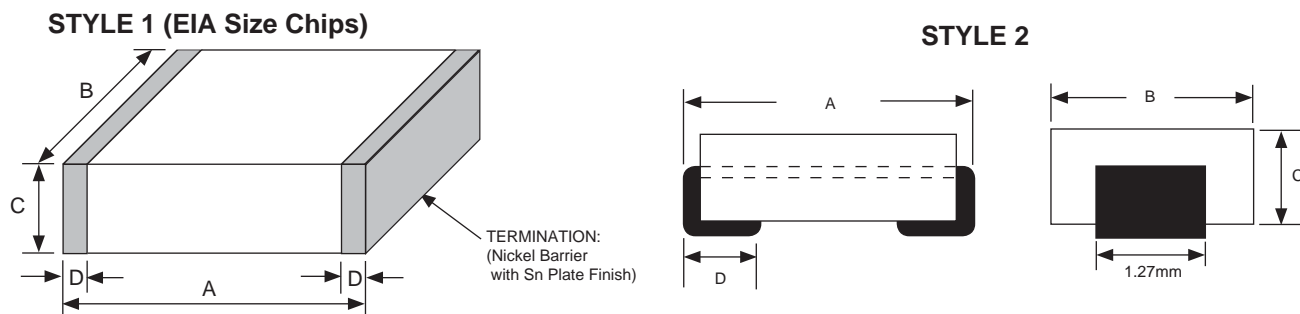
OPERATING TEMPERATURE RANGE: -40°C TO +125°C*

EIA Size	NIC P/N	Impedance at 100MHz Ω ($\pm 25\%$ Tol.)	DC Resistance Max. (Ω)	DC Current Max. (mA)	Style Code	A (mm)	B (mm)	C (mm)	D (mm)
1206	NCB-H1206B151TR200F	150	0.100	2000	1	3.2 \pm 0.2	1.6 \pm 0.2	1.1 \pm 0.2	0.5 \pm 0.3
	NCB-H1206B301TR250F	300	0.050	2500					
	NCB-H1206B471TR100F	470	0.200	1000					
	NCB-H1206B501TR300F	500	0.040	3000					
	NCB-H1206B601TR200F	600	0.100	2000					
1210	NCB-H1210C600TR400F	60	0.03	4000	1	3.2 \pm 0.2	2.5 \pm 0.2	1.3 \pm 0.2	0.5 \pm 0.3
	NCB-H1210C900TR200F	90	0.10	2000					
	NCB-H1210C151TR500F	150	0.02	5000					
	NCB-H1210C201TR400F	200	0.03	4000					
1806	NCB-H1806E600TR600F	60	0.010	6000	1	4.5 \pm 0.25	1.6 \pm 0.2	1.6 \pm 0.2	0.5 \pm 0.3
	NCB-H1806E800TR300F	80	0.040	3000					
	NCB-H1806E102TR150F	1000	0.15	1500					
1812	NCB-H1812D800TR600F	80	0.010	6000	1	4.5 \pm 0.25	3.2 \pm 0.2	1.5 \pm 0.2	0.5 \pm 0.3
	NCB-H1812D125TR150F	125	0.050	1500					
	NCB-H1812D131TR300F	130	0.040	3000					
	NCB-H1812D151TR500F	150	0.020	5000					
	NCB-H1812D681TR400F	680	0.030	4000					
	NCB-H1812D132TR300F	1300	0.060	3000					
1612	NCB1612K480TR500F	48	0.001	5000	2*	4.2 \pm 0.4	3.1 \pm 0.2	2.6 \pm 0.2	1.3 \pm 0.3
3312	NCB3312K900TR500F	90	0.001	5000		8.6 \pm 0.4	3.2 \pm 0.3	2.6 \pm 0.2	1.3 \pm 0.3
3119	NCB3119L950TR500F	95	0.001	5000		7.8 \pm 0.4	4.7 \pm 0.3	2.9 \pm 0.2	1.3 \pm 0.3

Note: Other values and case sizes available.

*STYLE 2 TYPES, TEMPERATURE RANGE -25°C ~ +85°C

For Impedance (Z) over Frequency curves see www.RFpassives.com



PART NUMBER SYSTEM

NCB-H 0805 A 121 TR 200 E

- Series
- Size
- Impedance at 100MHz
- 3 digit code; first two digits are significant third digit is no. of zeros
- Packaging: TR = Tape and Reel
- DC Current Rating (see standard values and case size table)
- RoHS Compliant

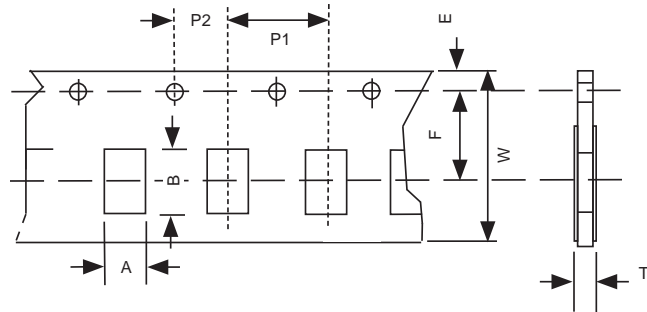
Part Thickness Max; A=1.1mm, B=1.3mm, C=1.5mm, D=1.7mm, E=1.8mm, K=2.8mm, L=3.1mm, N=0.33, P=0.65mm, R=0.95mm



TAPE DIMENSIONS (mm)

Dimensions	NCB0201N	NCB0402P	NCB0603R	NCB0805A
A	0.38 ± 0.03	0.62 ± 0.03	1.05 ± 0.03	1.50 ± 0.05
B	0.68 ± 0.03	1.12 ± 0.03	1.85 ± 0.03	2.30 ± 0.05
T	0.44 ± 0.03	0.60 ± 0.03	0.95 ± 0.05	0.95 ± 0.05
W	8.0 ± 0.1			
E	1.75 ± 0.1			
F	3.5 ± 0.1			
P1	2.0 ± 0.1		4.0 ± 0.1	
P2	2.0 ± 0.1			
Chips/Reel	10,000	10,000	4,000	4,000
Fig.	1	1	1	1

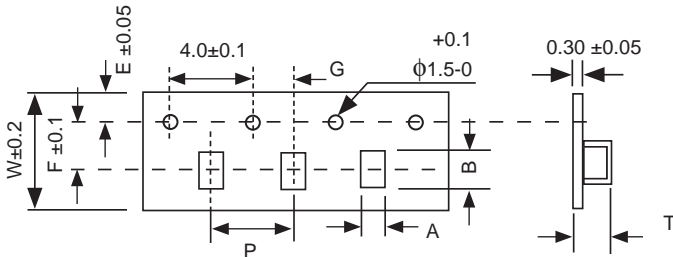
FIGURE 1 (PRESSED PAPER CARRIER)



TAPE DIMENSIONS (mm)

Dimensions	NCB1206B	NCB1206E	NCB1210C	NCB1806E	NCB1812D	NCB1612K	NCB3312K	NCB3119L
A	1.94 ± 0.1	1.94 ± 0.1	2.80 ± 0.1	1.94 ± 0.1	3.64 ± 0.1	3.65 ± 0.1	3.45 ± 0.1	5.25 ± 0.1
B	3.54 ± 0.1	3.64 ± 0.1	3.42 ± 0.1	4.94 ± 0.1	4.94 ± 0.1	5.40 ± 0.1	9.30 ± 0.1	8.75 ± 0.1
T	1.29 ± 0.05	1.90 ± 0.05	1.64 ± 0.05	1.90 ± 0.05	1.80 ± 0.05	3.05 ± 0.05	3.05 ± 0.05	3.70 ± 0.05
W	8.0			12.0		16.0		
E	1.75				2.0			
F	3.5			5.5			7.5	
G	2.0 ± 0.05						4.0 ± 0.05	
P	4.0 ± 0.1				8.0 ± 0.1			
Chips/Reel	3,000	2,000	2,500	2,000	1,000	500	500	500
Fig.	2	2	2	2	2	2	2	2

FIGURE 2 (EMBOSSED PLASTIC CARRIER)



DIMENSIONS (mm)

Size	A	B	C
0201	0.30	0.32	0.25
0402	0.80	0.55	0.50
0603	1.00	0.80	0.60
0805	1.00	1.20	1.20
1206	1.00	1.80	2.00
1210	1.00	2.70	2.00
1806	1.05	1.80	3.30
1812	1.05	3.50	3.30
1612	1.70	2.00	2.20
3312	1.70	2.00	6.60
3119	1.70	2.00	5.80

REEL DIMENSIONS

Dim	Size: 0201, 0402, 0603, 0805, 1206, 1210	Size: 1806, 1812, 1612	Size: 3312, 3319
A	178 ± 2.0		
B	60 ± 1.0		
C	13.0 ± 0.5		
D	21.0 ± 0.8		
E	2.0 ± 0.5		
W	10.0 ± 1.0	14.0 ± 1.0	18.0 ± 1.0
t	2.0 ± 0.5		
R	1.0		

RECOMMENDED LAND PATTERN (mm)

