

FEATURES

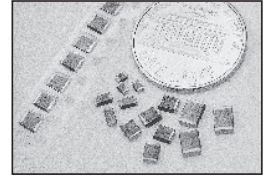
- RUGGED CONSTRUCTION IN STANDARD EIA CASE SIZES
- EFFECTIVE EM/RFI SUPPRESSION UNDER 1GHz
- CURRENT RATINGS UP TO 6 AMPS
- **MEETS THE REQUIREMENTS OF AEC Q-200**
- OPERATING TEMPERATURE RANGE: -40°C TO +125°C

RoHS

Compliant

includes all homogeneous materials

*See Part Number System for Details

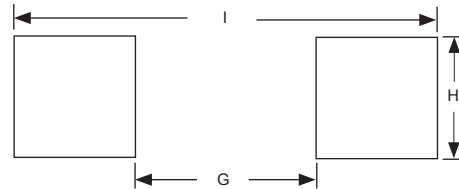
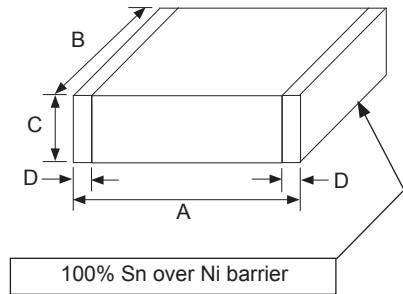


CHARACTERISTICS

Type	High Current Up to 6.0A
Sizes Available	0201, 0402, 0603, 0805, 1206
Impedance Range	10Ω ~ 1,500Ω
Impedance Tolerance	±25% (Impedance <10 ohm ±30%)
Operating Temperature Range	-40°C ~ +125°C

CASE SIZE & LAND PATTERN DIMENSIONS (mm)

EIA Size	A (mm)	B (mm)	C (mm)	D (mm)	G (mm)	H (mm)	I (mm)
0201	0.60 ± 0.03	0.30 ± 0.03	0.30 ± 0.03	0.15 ± 0.05	0.20 ~ 0.30	0.30	0.75 ~ 1.05
0402	1.00 ± 0.10	0.50 ± 0.10	0.50 ± 0.10	0.25 ± 0.10	0.40	0.50	1.20 ~ 1.40
0603	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20	0.70 ~ 0.80	0.60 ~ 0.80	1.80 ~ 2.00
0805	2.00 ± 0.20	1.25 ± 0.20	0.90 ± 0.20	0.50 ± 0.30	1.00 ~ 1.20	1.00 ~ 1.20	2.60 ~ 4.00
1206	3.20 ± 0.20	1.60 ± 0.20	1.10 ± 0.20	0.50 ± 0.30	2.00	1.20	4.20 ~ 5.20



PART NUMBER SYSTEM

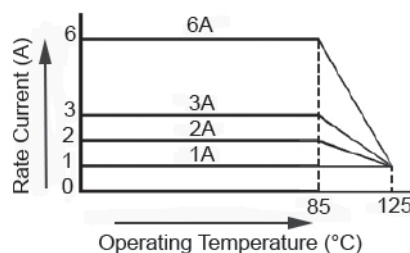
NCB-H 0805 P Y 221 TR 200 Q Y E RoHS Compliant

"Q" denotes AEC Q-200 qualified
 DC Current Rating (see standard values and case size table)
 Packaging: TR = Tape and Reel
 Impedance at 100MHz
 3 digit code; first two digits are significant third digit is no. of zeros
 Material Code
 Performance Code (P = High Current, U = Ultra High Current)
 Case Size
 Series

"Y" denotes suitable for Automotive equipment, sourced to special production and inspection at TS-16949 certified production site.

TEMPERATURE DERATING

Parts with current rating ≥1A



*Suitable for automotive equipment, sourced to special production and inspection at TS-16949 certified production site.

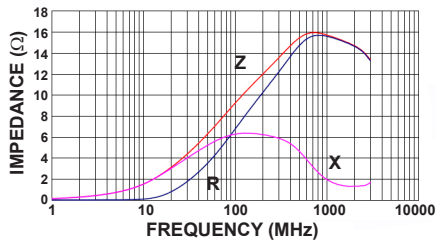
NIC COMPONENTS CORP. www.niccomp.com | www.lowESR.com | www.RFpassives.com | www.SMTmagnetics.com

Specifications are subject to change

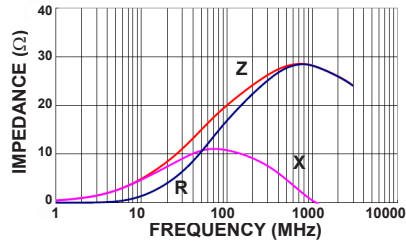
HIGH CURRENT 0201 STANDARD VALUES

EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0201	NCB-H0201PY100TR100QYF	10	0.05	1000	0.60 ± 0.03	0.30 ± 0.03	0.30 ± 0.03	0.15 ± 0.05
	NCB-H0201PY220TR100QYF	22	0.065	1000				
	NCB-H0201PY330TR075QYF	33	0.09	750				
	NCB-H0201PY470TR050QYF	47	0.12	500				
	NCB-H0201PY800TR050QYF	80	0.18	500				
	NCB-H0201PY121TR045QYF	120	0.23	450				
	NCB-H0201PY241TR035QYF	240	0.40	350				

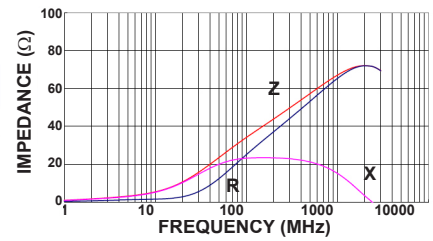
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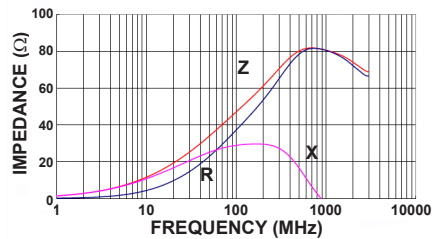
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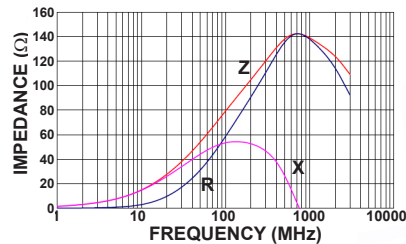
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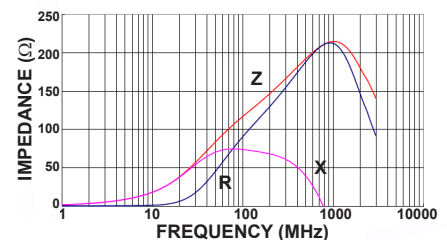
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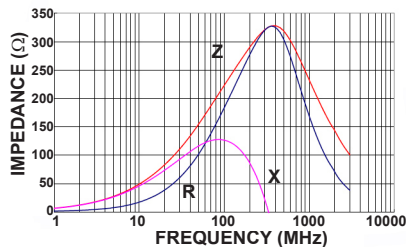
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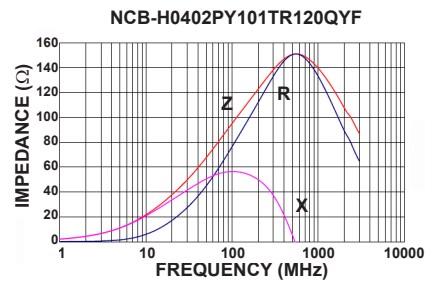
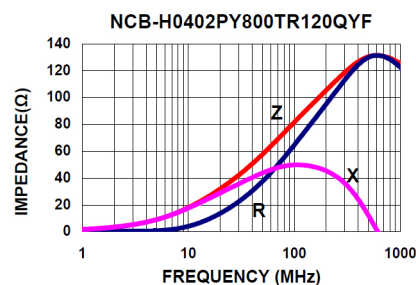
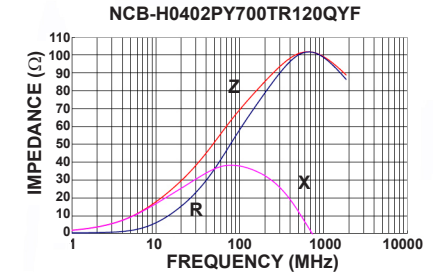
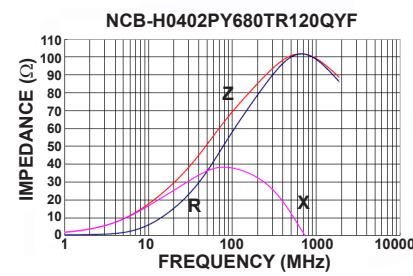
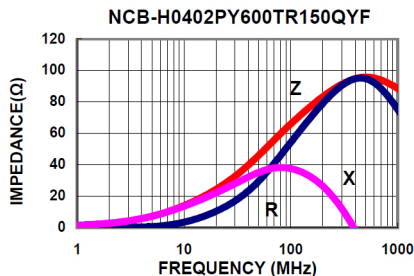
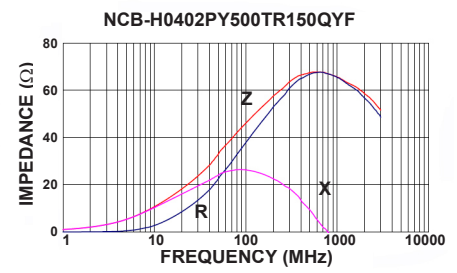
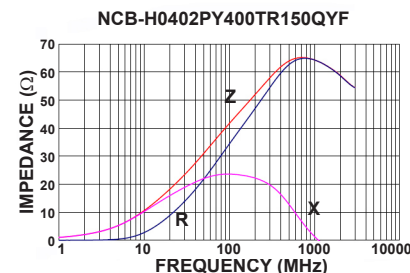
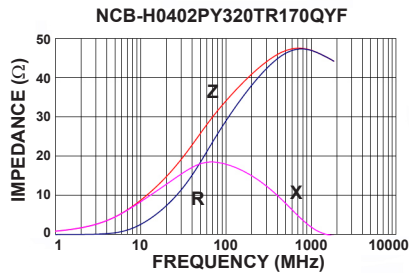
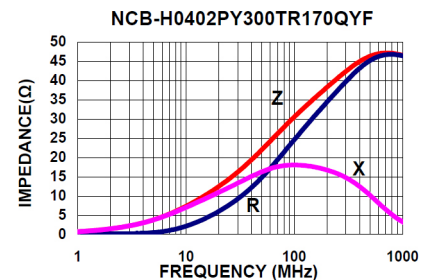
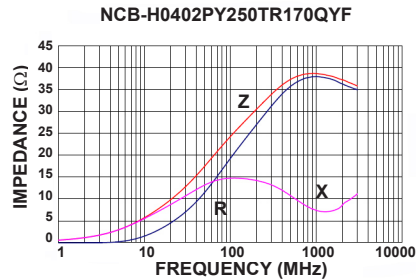
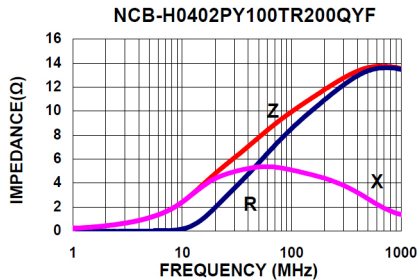


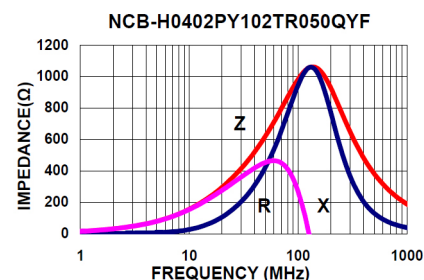
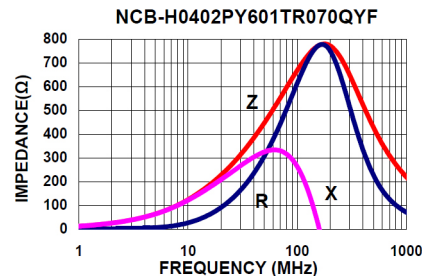
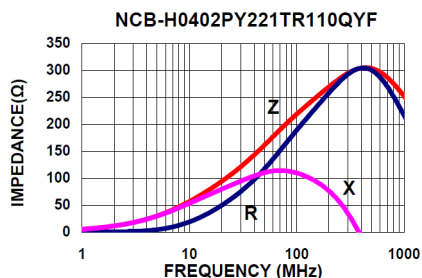
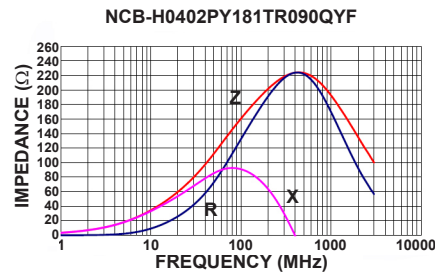
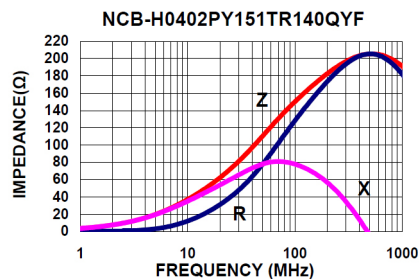
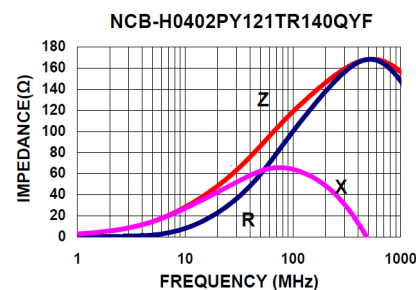
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HIGH CURRENT 0402 STANDARD VALUES (FOR ULTRA HIGH CURRENT 0402 PARTS SEE PAGE 11)

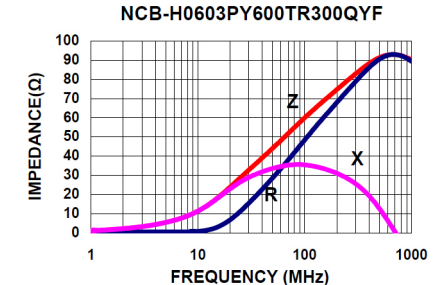
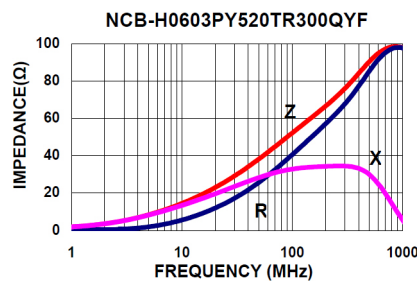
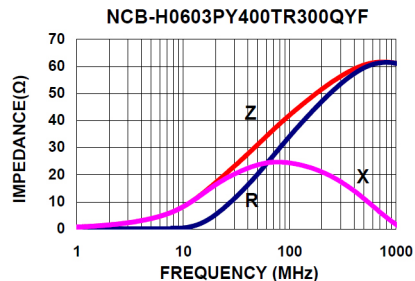
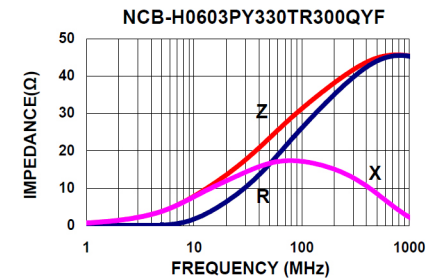
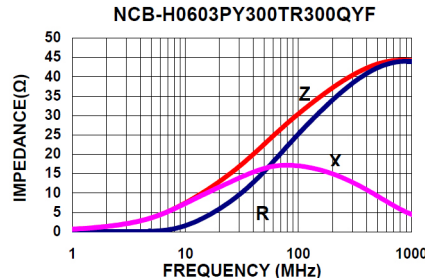
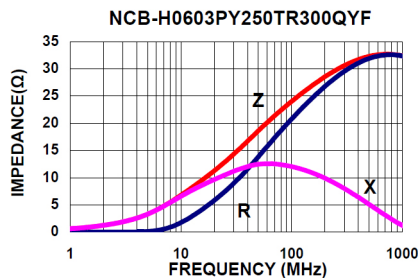
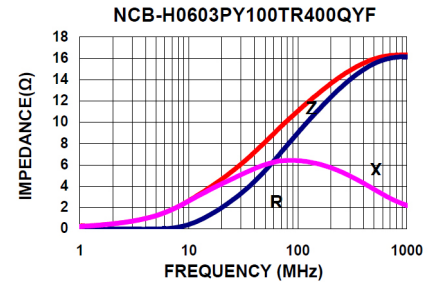
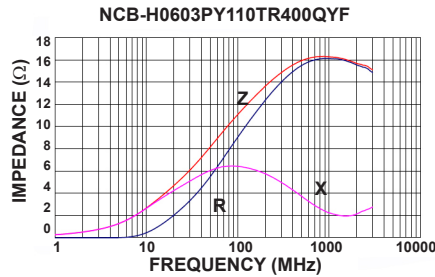
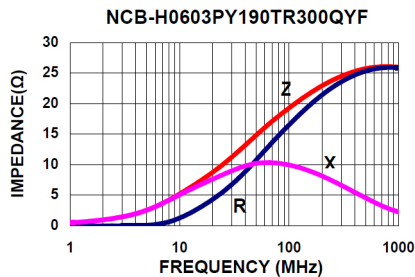
EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0402	NCB-H0402PY100TR200QYF	10	0.03	2000	1.00 ± 0.10	0.50 ± 0.10	0.50 ± 0.10	0.25 ± 0.10
	NCB-H0402PY250TR170QYF	25	0.05	1700				
	NCB-H0402PY300TR170QYF	30	0.05	1700				
	NCB-H0402PY320TR170QYF	32	0.05	1700				
	NCB-H0402PY400TR150QYF	40	0.075	1500				
	NCB-H0402PY500TR150QYF	50	0.075	1500				
	NCB-H0402PY600TR150QYF	60	0.075	1500				
	NCB-H0402PY680TR120QYF	68	0.09	1200				
	NCB-H0402PY700TR120QYF	70	0.09	1200				
	NCB-H0402PY800TR120QYF	80	0.09	1200				
	NCB-H0402PY101TR120QYF	100	0.09	1200				
	NCB-H0402PY121TR140QYF	120	0.09	1400				
	NCB-H0402PY151TR140QYF	150	0.14	1400				
	NCB-H0402PY181TR090QYF	180	0.14	900				
	NCB-H0402PY221TR110QYF	220	0.18	1100				
	NCB-H0402PY601TR070QYF	600	0.34	700				
	NCB-H0402PY102TR050QYF	1000	0.49	500				

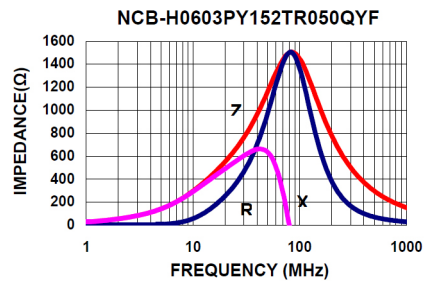
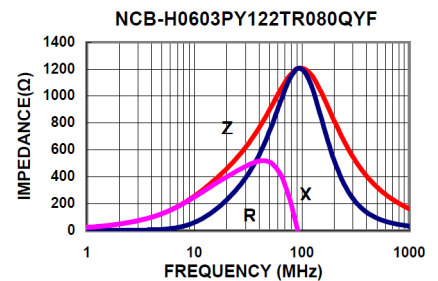
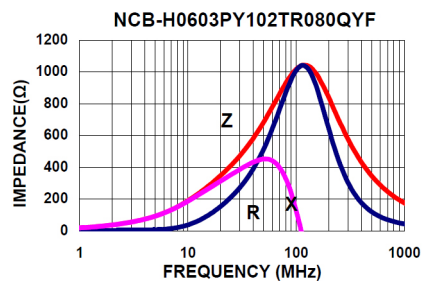
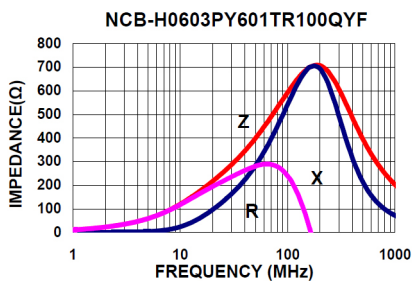
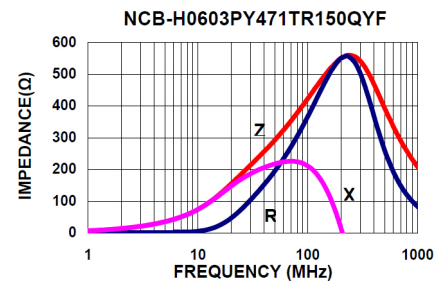
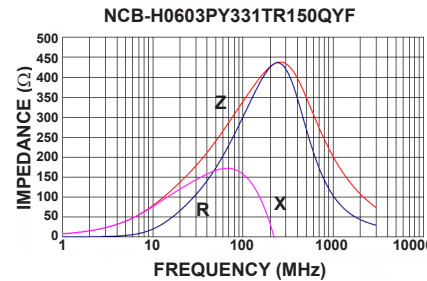
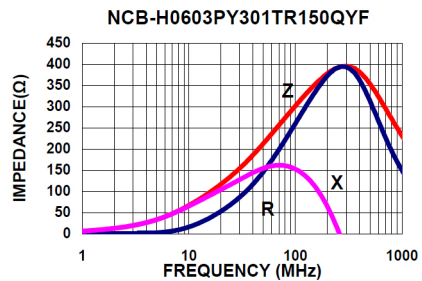
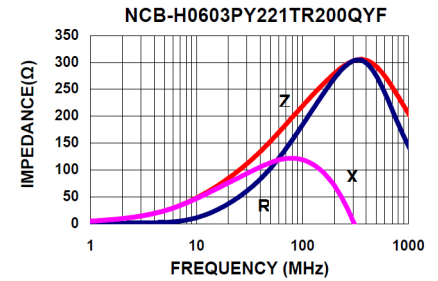
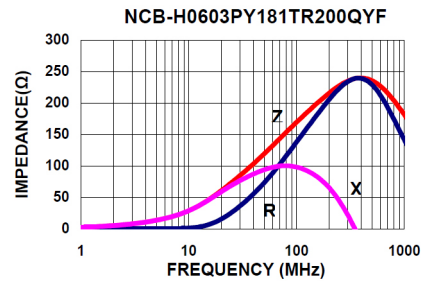
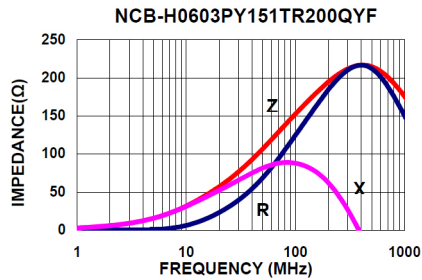
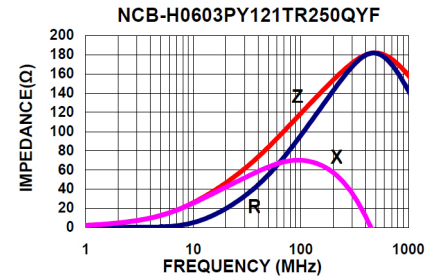
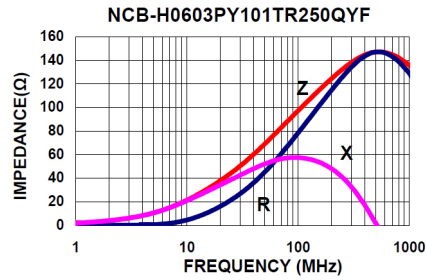
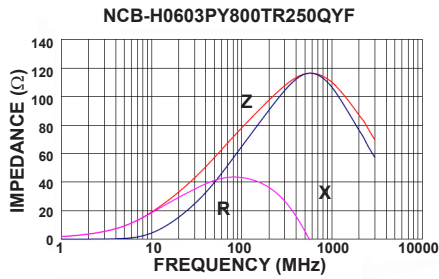




HIGH CURRENT 0603 STANDARD VALUES (FOR ULTRA HIGH CURRENT 0603 PARTS SEE PAGE 12)

EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0603	NCB-H0603PY100TR400QYF	10	0.02	4000	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20
	NCB-H0603PY110TR400QYF	11	0.02	4000				
	NCB-H0603PY190TR300QYF	19	0.03	3000				
	NCB-H0603PY250TR300QYF	25	0.03	3000				
	NCB-H0603PY300TR300QYF	30	0.03	3000				
	NCB-H0603PY330TR300QYF	33	0.035	3000				
	NCB-H0603PY400TR300QYF	40	0.035	3000				
	NCB-H0603PY520TR300QYF	52	0.04	3000				
	NCB-H0603PY600TR300QYF	60	0.04	3000				
	NCB-H0603PY800TR250QYF	80	0.05	2500				
	NCB-H0603PY101TR250QYF	100	0.05	2500				
	NCB-H0603PY121TR250QYF	120	0.08	2500				
	NCB-H0603PY151TR200QYF	150	0.085	2000				
	NCB-H0603PY181TR200QYF	180	0.09	2000				
	NCB-H0603PY221TR200QYF	220	0.10	2000				
	NCB-H0603PY301TR150QYF	300	0.12	1500				
	NCB-H0603PY331TR150QYF	330	0.12	1500				
	NCB-H0603PY471TR150QYF	470	0.15	1500				
	NCB-H0603PY601TR100QYF	600	0.20	1000				
	NCB-H0603PY102TR080QYF	1000	0.25	800				
	NCB-H0603PY122TR080QYF	1200	0.25	800				
	NCB-H0603PY152TR050QYF	1500	0.40	500				

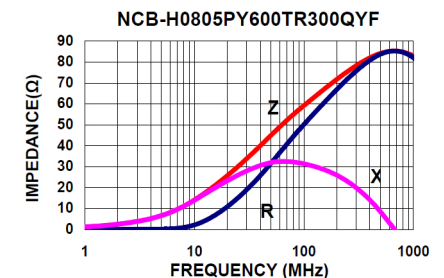
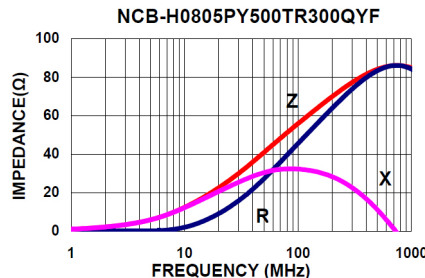
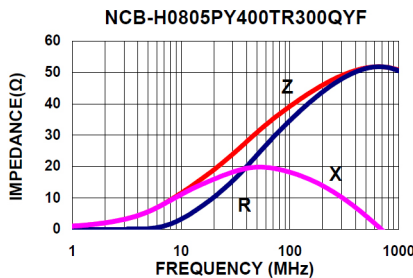
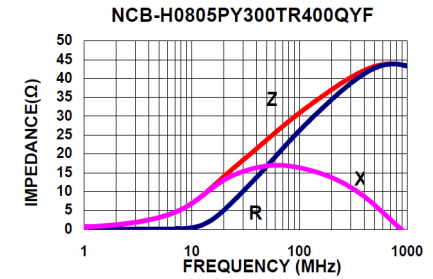
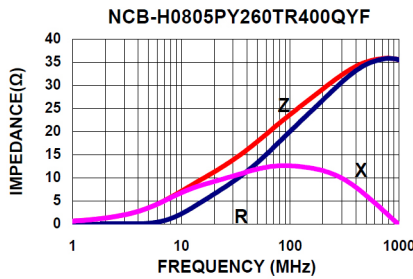
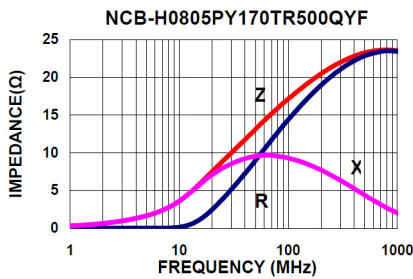
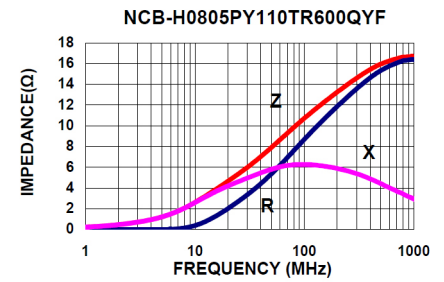
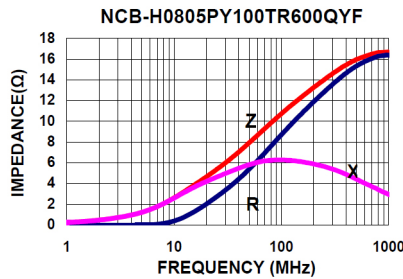
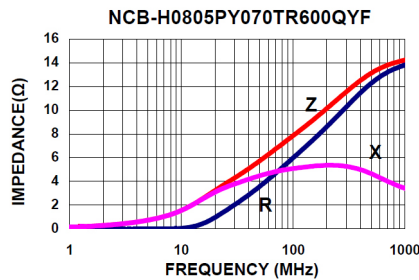


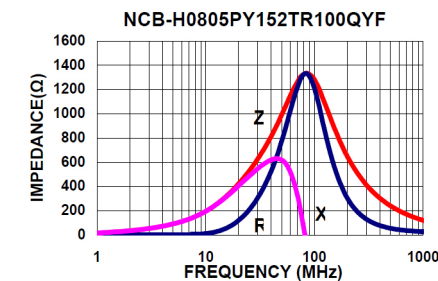
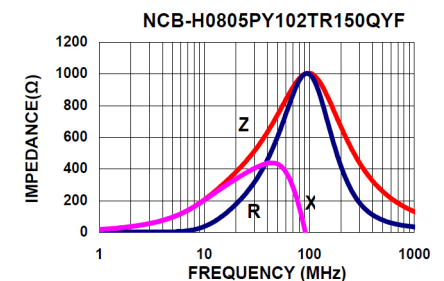
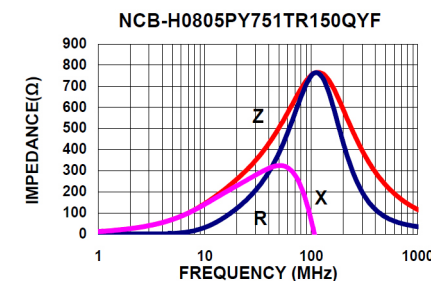
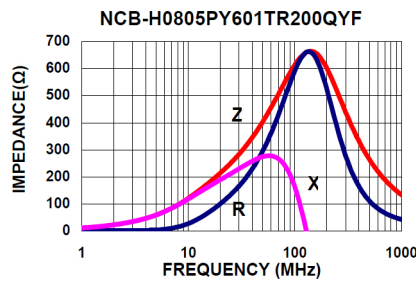
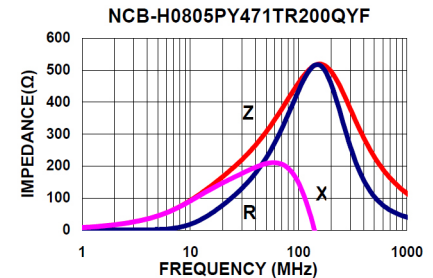
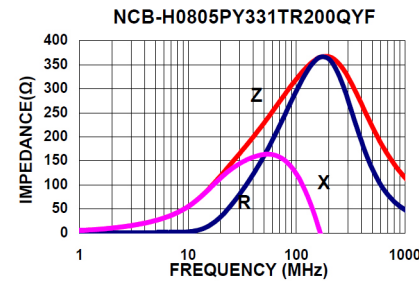
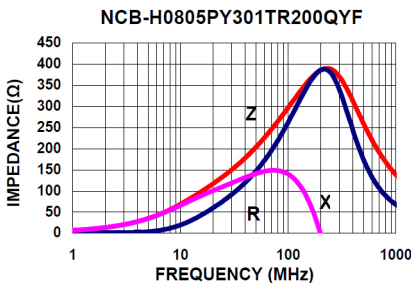
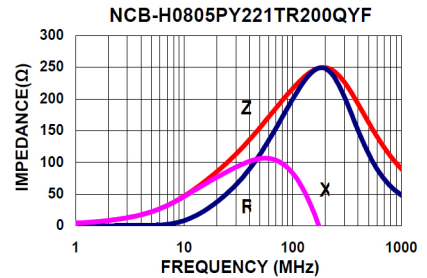
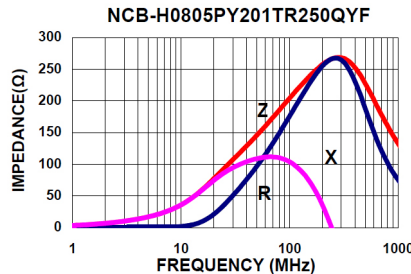
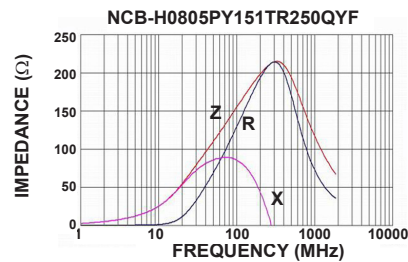
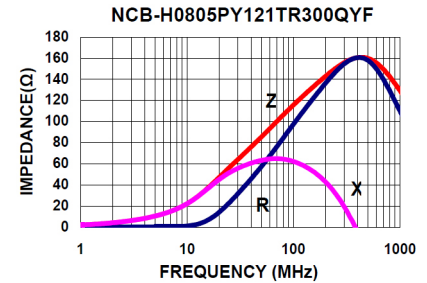
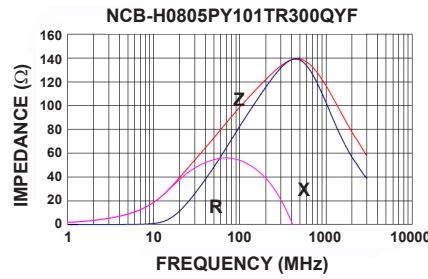
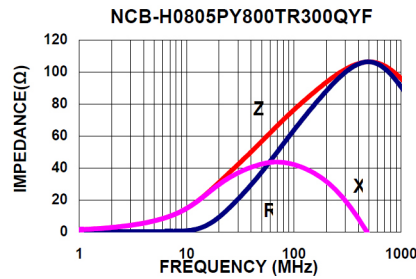


HIGH CURRENT 0805 STANDARD VALUES (FOR ULTRA HIGH CURRENT 0805 PARTS SEE PAGE 13)

EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0805	NCB-H0805PY070TR600QYF	7*	0.01	6000	2.00 ± 0.20	1.25 ± 0.20	0.90 ± 0.20	0.50 ± 0.30
	NCB-H0805PY100TR600QYF	10	0.01	6000				
	NCB-H0805PY110TR600QYF	11	0.01	6000				
	NCB-H0805PY170TR500QYF	17	0.02	5000				
	NCB-H0805PY260TR400QYF	26	0.02	4000				
	NCB-H0805PY300TR400QYF	30	0.015	4000				
	NCB-H0805PY400TR300QYF	40	0.02	3000				
	NCB-H0805PY500TR300QYF	50	0.025	3000				
	NCB-H0805PY600TR300QYF	60	0.03	3000				
	NCB-H0805PY800TR300QYF	80	0.04	3000				
	NCB-H0805PY101TR300QYF	100	0.04	3000				
	NCB-H0805PY121TR300QYF	120	0.04	3000				
	NCB-H0805PY151TR250QYF	150	0.05	2500				
	NCB-H0805PY201TR250QYF	200	0.05	2500				
	NCB-H0805PY221TR200QYF	220	0.08	2000				
	NCB-H0805PY301TR200QYF	300	0.08	2000				
	NCB-H0805PY331TR200QYF	330	0.08	2000				
	NCB-H0805PY471TR200QYF	470	0.10	2000				
	NCB-H0805PY601TR200QYF	600	0.10	2000				
	NCB-H0805PY751TR150QYF	750	0.12	1500				
	NCB-H0805PY102TR150QYF	1000	0.12	1500				
	NCB-H0805PY152TR100QYF	1500	0.30	1000				

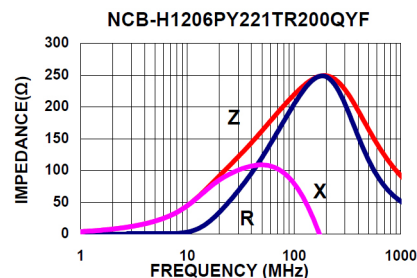
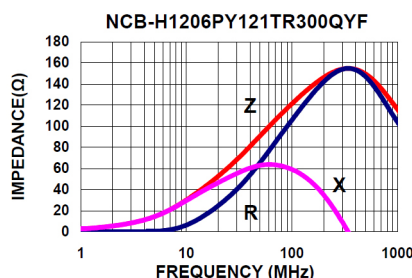
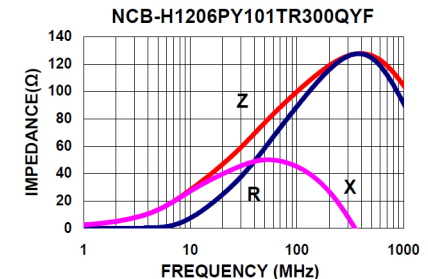
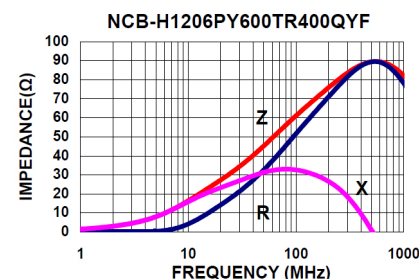
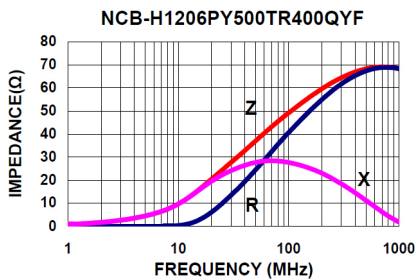
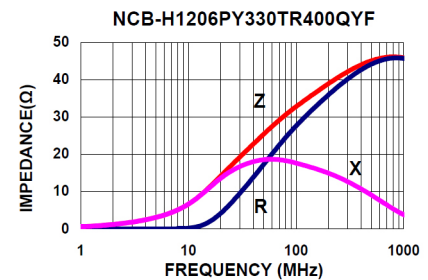
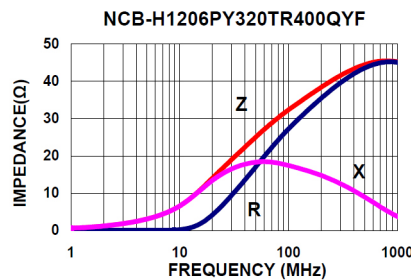
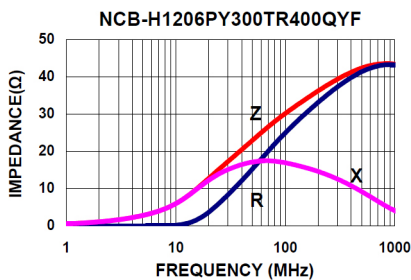
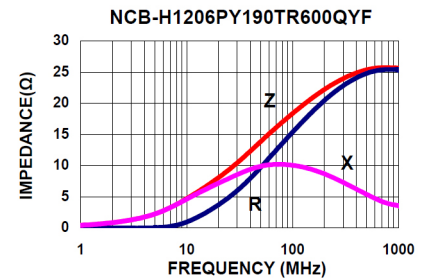
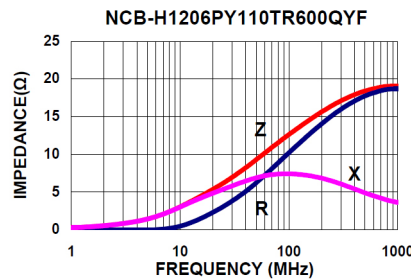
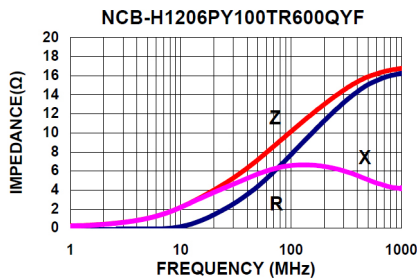
*Impedance tolerance $\pm 30\%$

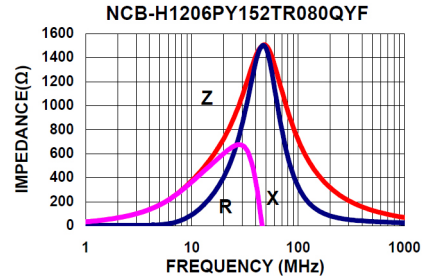
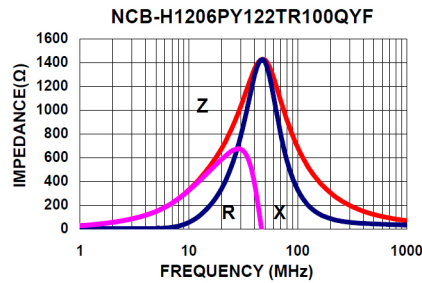
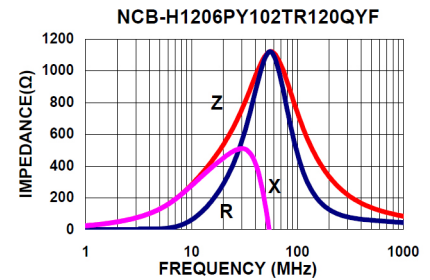
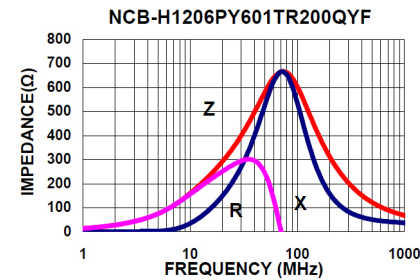
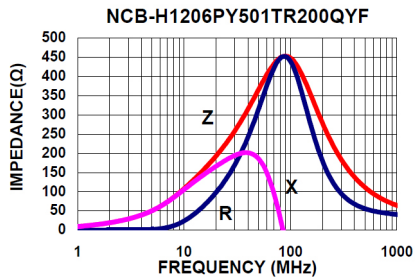
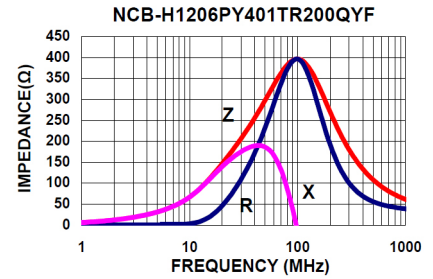
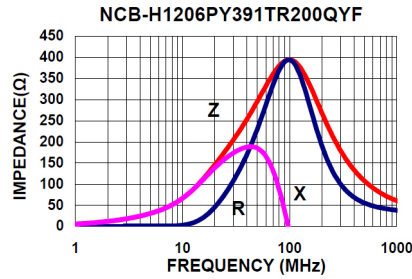
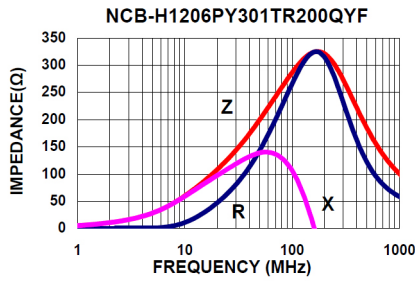




HIGH CURRENT 1206 STANDARD VALUES (FOR ULTRA HIGH CURRENT 1206 PARTS SEE PAGE 14)

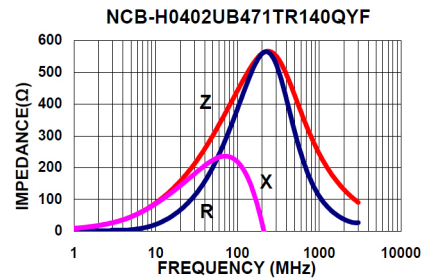
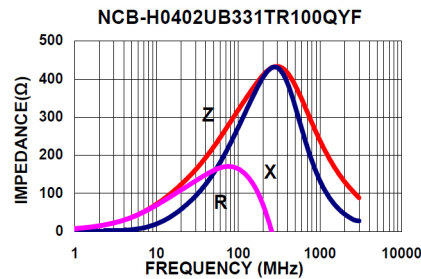
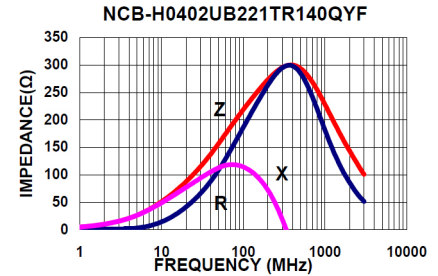
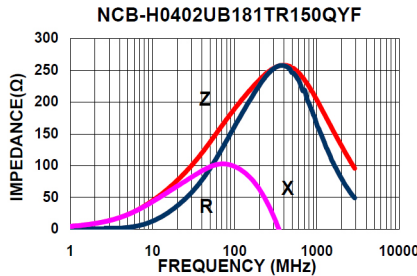
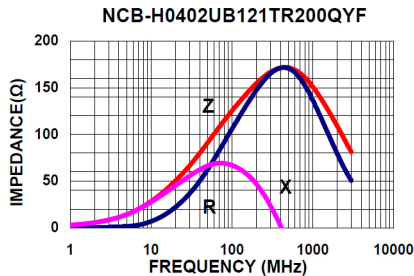
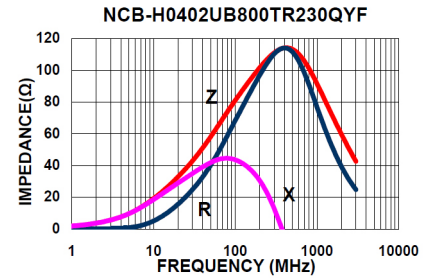
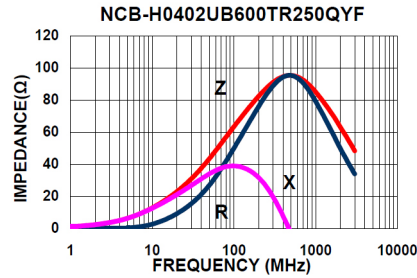
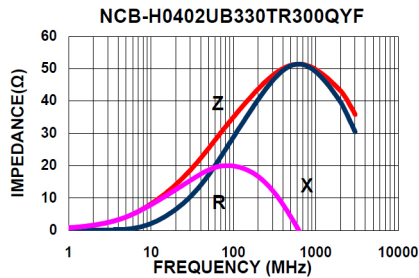
EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
1206	NCB-H1206PY100TR600QYF	10	0.015	6000	3.20 ± 0.20	1.60 ± 0.20	1.10 ± 0.20	0.50 ± 0.30
	NCB-H1206PY110TR600QYF	11	0.015	6000				
	NCB-H1206PY190TR600QYF	19	0.015	6000				
	NCB-H1206PY300TR400QYF	30	0.015	4000				
	NCB-H1206PY320TR400QYF	32	0.015	4000				
	NCB-H1206PY330TR400QYF	33	0.015	4000				
	NCB-H1206PY500TR400QYF	50	0.02	4000				
	NCB-H1206PY600TR400QYF	60	0.02	4000				
	NCB-H1206PY101TR300QYF	100	0.03	3000				
	NCB-H1206PY121TR300QYF	120	0.03	3000				
	NCB-H1206PY221TR200QYF	220	0.05	2000				
	NCB-H1206PY301TR200QYF	300	0.06	2000				
	NCB-H1206PY391TR200QYF	390	0.06	2000				
	NCB-H1206PY401TR200QYF	400	0.10	2000				
	NCB-H1206PY501TR200QYF	500	0.10	2000				
	NCB-H1206PY601TR200QYF	600	0.10	2000				
	NCB-H1206PY102TR120QYF	1000 (50MHz)	0.15	1200				
	NCB-H1206PY122TR100QYF	1200 (50MHz)	0.18	1000				
	NCB-H1206PY152TR080QYF	1500 (50MHz)	0.20	800				





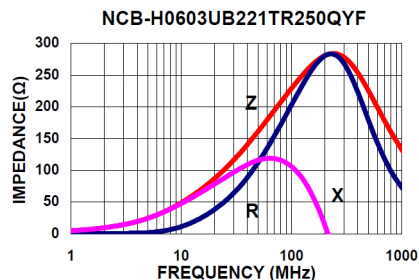
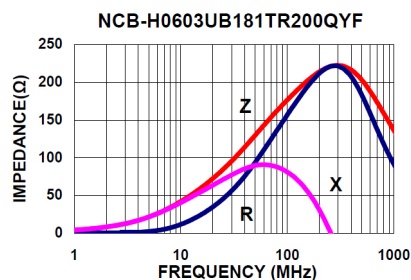
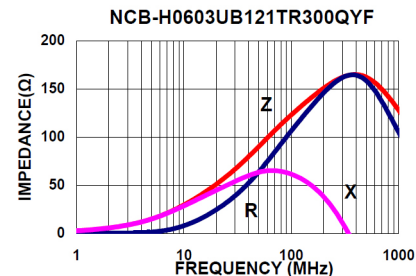
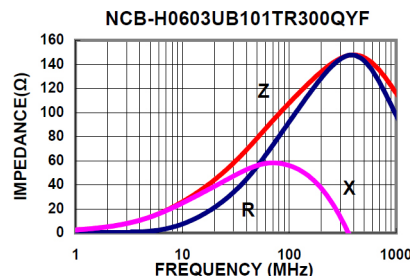
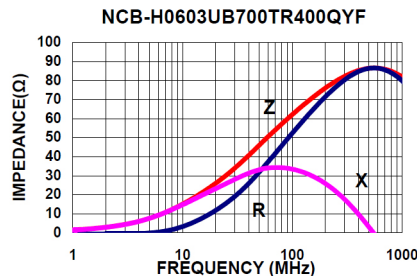
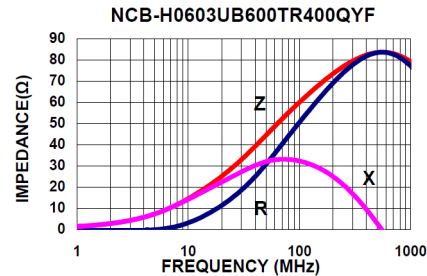
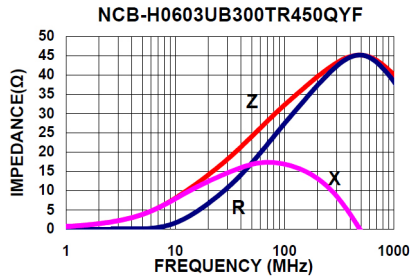
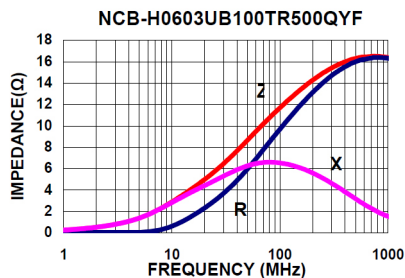
ULTRA HIGH CURRENT 0402 STANDARD VALUES

EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0402	NCB-H0402UB330TR300QYF	33	0.022	3000	1.00 ± 0.10	0.50 ± 0.10	0.50 ± 0.10	0.25 ± 0.10
	NCB-H0402UB600TR250QYF	60	0.032	2500				
	NCB-H0402UB800TR230QYF	80	0.038	2300				
	NCB-H0402UB121TR200QYF	120	0.055	2000				
	NCB-H0402UB181TR150QYF	180	0.09	1500				
	NCB-H0402UB221TR140QYF	220	0.10	1400				
	NCB-H0402UB331TR120QYF	330	0.15	1200				
	NCB-H0402UB471TR100QYF	470	0.20	1000				



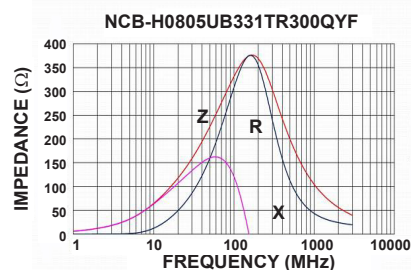
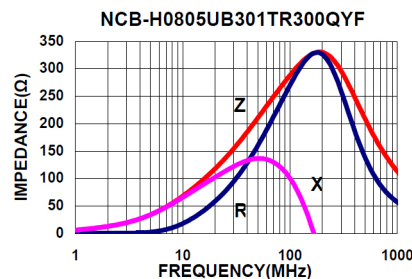
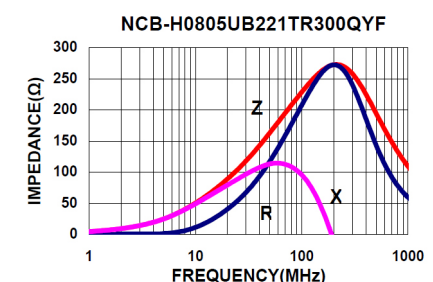
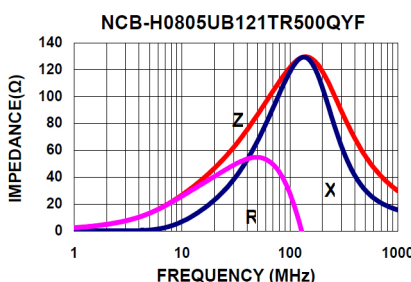
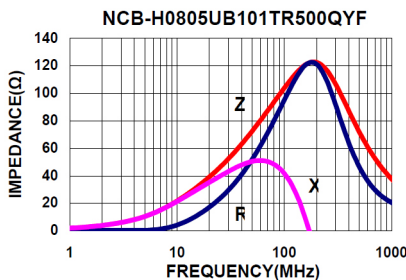
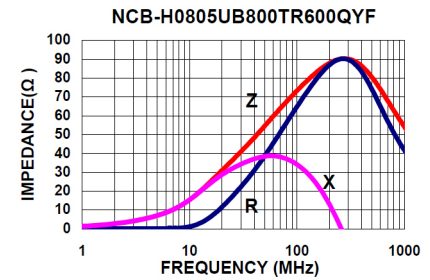
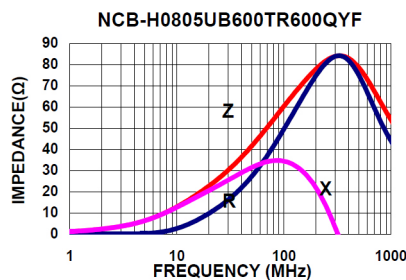
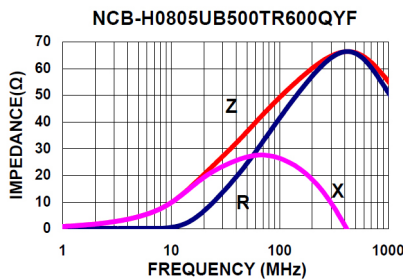
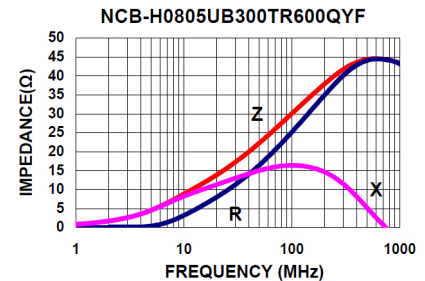
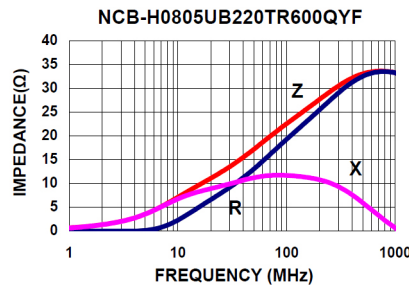
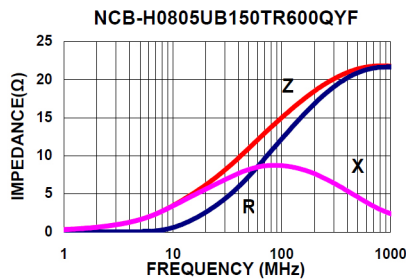
ULTRA HIGH CURRENT 0603 STANDARD VALUES

EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0603	NCB-H0603UB100TR500QYF	10	0.01	5000	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20
	NCB-H0603UB300TR450QYF	30	0.015	4500				
	NCB-H0603UB600TR400QYF	60	0.02	4000				
	NCB-H0603UB700TR400QYF	70	0.02	4000				
	NCB-H0603UB101TR300QYF	100	0.03	3000				
	NCB-H0603UB121TR300QYF	120	0.03	3000				
	NCB-H0603UB181TR200QYF	180	0.05	2000				
	NCB-H0603UB221TR250QYF	220	0.04	2500				



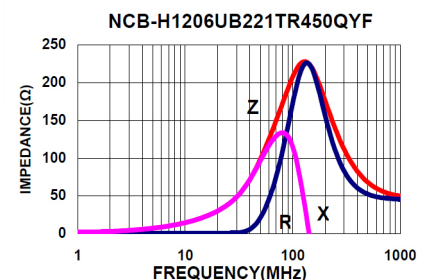
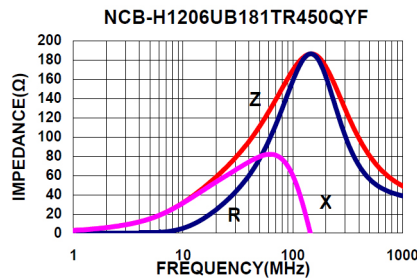
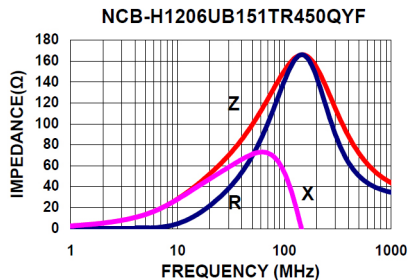
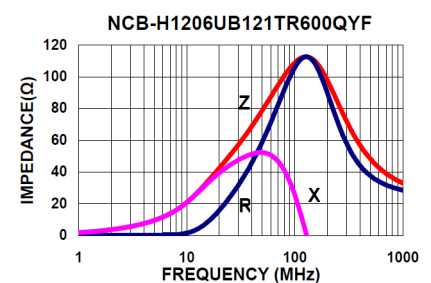
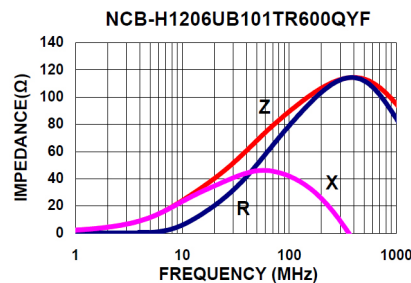
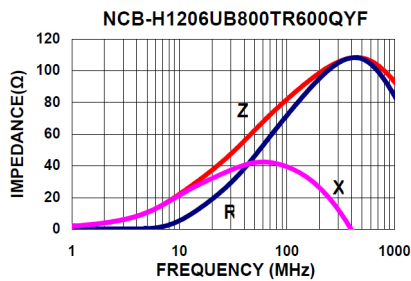
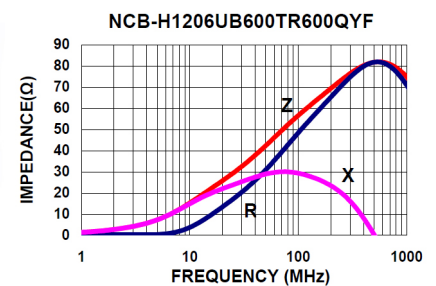
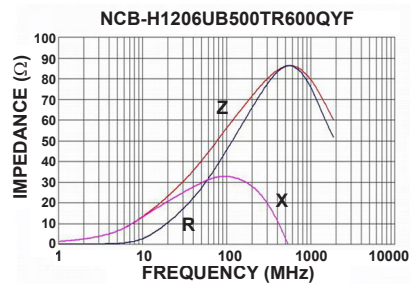
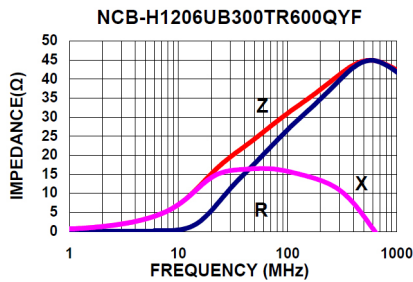
ULTRA HIGH CURRENT 0805 STANDARD VALUES

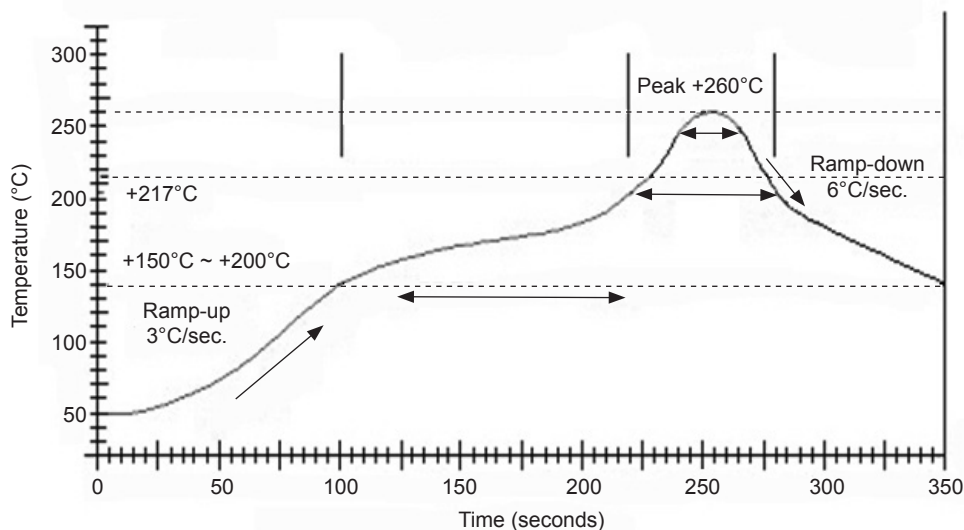
EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0805	NCB-H0805UB150TR600QYF	15	0.012	6000	2.00 ± 0.20	1.25 ± 0.20	0.90 ± 0.20	0.50 ± 0.30
	NCB-H0805UB220TR600QYF	22	0.012	6000				
	NCB-H0805UB300TR600QYF	30	0.012	6000				
	NCB-H0805UB500TR600QYF	50	0.015	6000				
	NCB-H0805UB600TR600QYF	60	0.018	6000				
	NCB-H0805UB800TR600QYF	80	0.02	6000				
	NCB-H0805UB101TR500QYF	100	0.02	5000				
	NCB-H0805UB121TR500QYF	120	0.02	5000				
	NCB-H0805UB221TR300QYF	220	0.04	3000				
	NCB-H0805UB301TR300QYF	300	0.05	3000				
	NCB-H0805UB331TR300QYF	330	0.05	3000				



ULTRA HIGH CURRENT 1206 STANDARD VALUES

EIA Size	NIC Part Number	Impedance at 100MHz Ω	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
1206	NCB-H1206UB300TR600QYF	30	0.012	6000	3.20 ± 0.20	1.60 ± 0.20	1.10 ± 0.20	0.50 ± 0.30
	NCB-H1206UB500TR600QYF	50	0.012	6000				
	NCB-H1206UB600TR600QYF	60	0.012	6000				
	NCB-H1206UB800TR600QYF	80	0.012	6000				
	NCB-H1206UB101TR600QYF	100	0.012	6000				
	NCB-H1206UB121TR600QYF	120	0.012	6000				
	NCB-H1206UB151TR450QYF	150	0.02	4500				
	NCB-H1206UB181TR450QYF	180	0.02	4500				
	NCB-H1206UB221TR450QYF	220	0.02	4500				

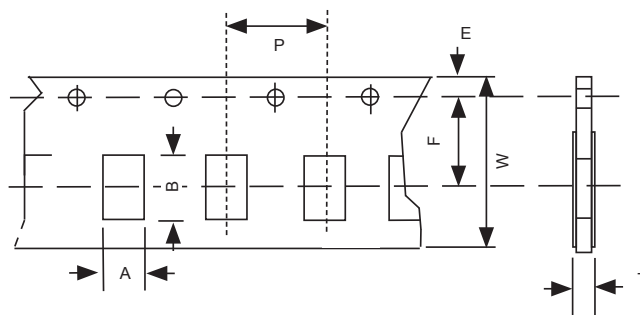




PAPER CARRIER DIMENSIONS (mm)

Dimensions	0201	0402	0603	0805
A	0.37 ± 0.10	0.62 ± 0.10	1.05 ± 0.10	1.50 ± 0.10
B	0.67 ± 0.10	1.12 ± 0.10	1.85 ± 0.10	2.30 ± 0.10
T	0.42 ± 0.05	0.60 ± 0.05	0.95 ± 0.05	0.97 ± 0.05
W	8.0 ± 0.20			
E	1.75 ± 0.10			
F	3.5 ± 0.05			
P	2.0 ± 0.10		4.0 ± 0.10	
Chips/Reel	15,000	10,000	4,000	4,000
Fig.	1			

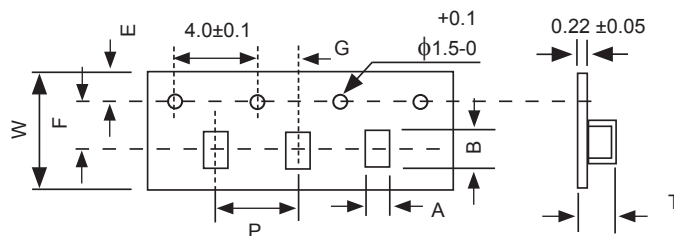
FIGURE 1 (PRESSED PAPER CARRIER)



EMBOSSED CARRIER DIMENSIONS (mm)

Dimensions	1206
A	1.88 ± 0.10
B	3.5 ± 0.10
T	1.27 ± 0.10
W	8.0 ± 0.20
E	1.75 ± 0.10
F	3.5 ± 0.05
P	4.0 ± 0.10
Chips/Reel	3,000
Fig.	2

FIGURE 2 (EMBOSSED PLASTIC CARRIER)



REEL DIMENSIONS

Case Size	REEL DIMENSIONS (mm)			
	A	B	C	D
0201	178	60	12	1.5
0402				
0603				
0805				
1206				

