

FEATURES

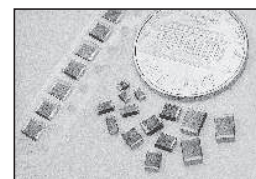
- RUGGED CONSTRUCTION IN STANDARD EIA SIZES
- EFFECTIVE EM/RFI SUPPRESSION UP TO 1 GHz
- CURRENT RATINGS UP TO 2.2 AMPS
- SHARP AND HIGH IMPEDANCES AVAILABLE
- OPERATING TEMPERATURE RANGE: -55°C TO +125°C
- SUITABLE FOR AUTOMOTIVE EQUIPMENT*

RoHS

Compliant

includes all homogeneous materials

*See Part Number System for Details

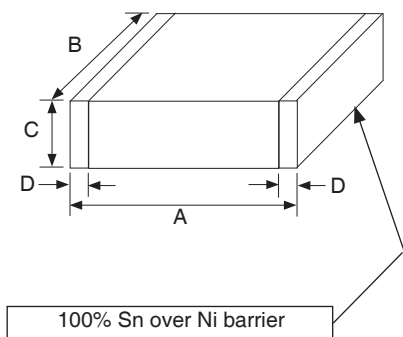


Characteristics

Type	General Range	Sharp High Impedances
Sizes Available	0603, 0805, 1206	0603, 0805
Impedance Range	15Ω ~ 2,000Ω	10Ω ~ 2,700Ω
Impedance Tolerance	±25% Tol.	
Operating Temperature Range	-55°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)
0603	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20	0.60 ~ 0.80	0.60 ~ 0.80	0.60 ~ 0.80
0805	2.0 +0.3/-0.1	1.25 ± 0.2	0.85 ± 0.2	0.5 ± 0.3	0.80 ~ 1.20	0.90 ~ 1.60	0.80 ~ 1.20
1206	3.2 ± 0.20	1.6 ± 0.20	0.85 ± 0.2	0.85 ± 0.2	1.00 ~ 1.50	1.20 ~ 2.00	1.80 ~ 2.50



PART NUMBER SYSTEM

NCB 0805 G U 301 TR 050 Y F

- NCB: Series
- 0805: Case Size
- G: Type (G = General Range, S = Sharp, High Impedance)
- U: Frequency Characteristic (see frequency response curves)
- 301: Impedance at 100Mhz, 3 digit code; first two digits are significant third digit is no. of zeros
- TR: Packaging: TR = Tape and Reel
- 050: DC Current Rating (see standard values and case size table)
- Y: "Y" denotes suitable for Automotive equipment*
- F: RoHS Compliant



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

GENERAL RANGE - STANDARD VALUES AND CASE SIZES (mm)

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	NCB0603GD110TR200YF	0 ~ 15	0.05	2,000	1.60 $\pm$ 0.15	0.80 $\pm$ 0.15	0.80 $\pm$ 0.15	0.30 $\pm$ 0.20
	NCB0603GD300TR200YF	30 $\pm$ 25%	0.05	2,000				
	NCB0603GD600TR050YF	60 $\pm$ 25%	0.10	500				
	NCB0603GD800TR040YF	80 $\pm$ 25%	0.15	400				
	NCB0603GD101TR030YF	100 $\pm$ 25%	0.20	300				
	NCB0603GD121TR030YF	120 $\pm$ 25%	0.20	300				
	NCB0603GD221TR030YF	220 $\pm$ 25%	0.30	300				
	NCB0603GD301TR020YF	300 $\pm$ 25%	0.35	200				
	NCB0603GD471TR020YF	470 $\pm$ 25%	0.45	200				
	NCB0603GD601TR020YF	600 $\pm$ 25%	0.45	200				
	NCB0603GD751TR020YF	750 $\pm$ 25%	0.50	200				
	NCB0603GD102TR020YF	1000 $\pm$ 25%	0.60	200				
	NCB0603GD152TR015YF	1500 $\pm$ 25%	0.70	150				
	NCB0603GD182TR010YF	1800 $\pm$ 25%	0.90	100				
	NCB0603GD202TR010YF	2000 $\pm$ 25%	1.20	100				
	NCB0603GD222TR010YF	2200 $\pm$ 25%	1.20	100				
	NCB0603GE800TR030YF	80 $\pm$ 25%	0.15	300				
	NCB0603GE121TR030YF	120 $\pm$ 25%	0.20	300				
	NCB0603GE181TR030YF	180 $\pm$ 25%	0.30	300				
	NCB0603GE301TR020YF	300 $\pm$ 25%	0.35	200				
	NCB0603GE601TR020YF	600 $\pm$ 25%	0.45	200				
	NCB0603GE102TR020YF	1000 $\pm$ 25%	0.60	200				
	NCB0603GE202TR010YF	2000 $\pm$ 25%	1.00	100				
	NCB0603GU100TR200YF	0 ~ 15	0.05	2000				
	NCB0603GU300TR200YF	30 $\pm$ 25%	0.05	2000				
	NCB0603GU600TR050YF	60 $\pm$ 25%	0.10	500				
	NCB0603GU121TR030YF	120 $\pm$ 25%	0.20	300				
	NCB0603GU221TR030YF	220 $\pm$ 25%	0.30	300				
	NCB0603GU301TR020YF	300 $\pm$ 25%	0.35	200				
	NCB0603GU471TR020YF	470 $\pm$ 25%	0.40	200				
	NCB0603GU601TR020YF	600 $\pm$ 25%	0.50	200				
	NCB0603GU102TR020YF	1000 $\pm$ 25%	0.60	200				
0805	NCB0805GD070TR200YF	0 ~ 15	0.04	2000	2.0 +0.3/-0.1	1.25 $\pm$ 0.2	0.85 $\pm$ 0.2	0.5 $\pm$ 0.3
	NCB0805GD190TR200YF	19 $\pm$ 25%	0.04	2000				
	NCB0805GD300TR150YF	30 $\pm$ 25%	0.05	1500				
	NCB0805GD800TR100YF	80 $\pm$ 25%	0.10	1000				
	NCB0805GD121TR080YF	120 $\pm$ 25%	0.15	800				
	NCB0805GD181TR070YF	180 $\pm$ 25%	0.18	700				
	NCB0805GD221TR060YF	220 $\pm$ 25%	0.20	600				
	NCB0805GD301TR050YF	300 $\pm$ 25%	0.20	500				
	NCB0805GD421TR050YF	420 $\pm$ 25%	0.30	500				
	NCB0805GD501TR050YF	500 $\pm$ 25%	0.30	500				
	NCB0805GD601TR050YF	600 $\pm$ 25%	0.30	500				
	NCB0805GD751TR050YF	750 $\pm$ 25%	0.35	500				
	NCB0805GD102TR050YF	1000 $\pm$ 25%	0.35	500				
	NCB0805GD152TR050YF	1500 $\pm$ 25%	0.40	500				
	NCB0805GD202TR050YF	2000 $\pm$ 25%	0.50	500				
	NCB0805GE800TR100YF	80 $\pm$ 25%	0.10	1000				
	NCB0805GE121TR080YF	120 $\pm$ 25%	0.15	800				

GENERAL RANGE - STANDARD VALUES AND CASE SIZES (mm)

EIA Size	NIC Part Number	Impedance at 100MHz Ω ($\pm 25\%$ Tol.)	DC Resistance Max. (Ω)	DC Current Max. (mA)	A (mm)	B (mm)	C (mm)	D (mm)
0805	NCB0805GE181TR060YF	180 $\pm$ 25%	0.20	600	2.0 +0.3/-0.1	1.25 $\pm$ 0.2	0.85 $\pm$ 0.2	0.5 $\pm$ 0.3
	NCB0805GE301TR050YF	300 $\pm$ 25%	0.20	500				
	NCB0805GE501TR050YF	500 $\pm$ 25%	0.30	500				
	NCB0805GE601TR050YF	600 $\pm$ 25%	0.30	500				
	NCB0805GE102TR050YF	1000 $\pm$ 25%	0.35	500				
	NCB0805GU100TR220YF	0 ~ 15	0.04	2200				
	NCB0805GU170TR200YF	17 $\pm$ 25%	0.04	2000				
	NCB0805GU300TR150YF	30 $\pm$ 25%	0.05	1500				
	NCB0805GU470TR150YF	47 $\pm$ 25%	0.05	1500				
	NCB0805GU700TR100YF	70 $\pm$ 25%	0.10	1000				
	NCB0805GU121TR080YF	120 $\pm$ 25%	0.15	800				
	NCB0805GU221TR060YF	220 $\pm$ 25%	0.20	600				
	NCB0805GU301TR050YF	300 $\pm$ 25%	0.20	500				
	NCB0805GU421TR050YF	420 $\pm$ 25%	0.25	500				
	NCB0805GU601TR050YF	600 $\pm$ 25%	0.30	500				
1206	NCB0805GU102TR050YF	1000 $\pm$ 25%	0.40	500	3.2 $\pm$ 0.20	1.6 $\pm$ 0.20	0.85 $\pm$ 0.2	0.85 $\pm$ 0.2
	NCB1206GD000TR220YF	0 ~ 15	0.03	2200				
	NCB1206GD310TR200YF	31 $\pm$ 25%	0.05	2000				
	NCB1206GD600TR100YF	60 $\pm$ 25%	0.10	1000				
	NCB1206GD800TR100YF	80 $\pm$ 25%	0.10	1000				
	NCB1206GD121TR100YF	120 $\pm$ 25%	0.10	1000				
	NCB1206GD221TR060YF	220 $\pm$ 25%	0.20	600				
	NCB1206GD301TR060YF	300 $\pm$ 25%	0.20	600				
	NCB1206GD501TR060YF	500 $\pm$ 25%	0.30	600				
	NCB1206GD601TR060YF	600 $\pm$ 25%	0.30	600				
	NCB1206GD102TR050YF	1000 $\pm$ 25%	0.60	500				
	NCB1206GD122TR030YF	1200 $\pm$ 25%	0.60	300				
	NCB1206GU310TR200YF	31 $\pm$ 25%	0.05	2000				
	NCB1206GU700TR100YF	70 $\pm$ 25%	0.10	1000				
	NCB1206GU301TR060YF	300 $\pm$ 25%	0.20	600				
	NCB1206GU601TR060YF	600 $\pm$ 25%	0.30	600				

SHARP IMPEDANCE - STANDARD VALUES AND CASE SIZES (mm)

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	NCB0603SF050TR050F	0 ~ 10	0.20	500	1.60 $\pm$ 0.15	0.80 $\pm$ 0.15	0.80 $\pm$ 0.15	0.30 $\pm$ 0.20
	NCB0603SF100TR050F	5 ~ 15	0.25	500				
	NCB0603SF220TR050F	22 $\pm$ 25%	0.35	500				
	NCB0603SF470TR030F	47 $\pm$ 25%	0.55	300				
	NCB0603SF750TR030F	75 $\pm$ 25%	0.70	300				
	NCB0603SF121TR020F	120 $\pm$ 25%	0.90	200				
	NCB0603SG050TR080F	0 ~ 15	0.10	800				
	NCB0603SG220TR080F	22 $\pm$ 25%	0.20	800				
	NCB0603SG600TR060F	60 $\pm$ 25%	0.30	600				
	NCB0603SG121TR060F	120 $\pm$ 25%	0.45	600				
	NCB0603SG221TR050F	220 $\pm$ 25%	0.55	500				
	NCB0603SG331TR050F	330 $\pm$ 25%	0.70	500				
	NCB0603SG471TR040F	470 $\pm$ 25%	0.80	400				
	NCB0603SG601TR020F	600 $\pm$ 25%	1.10	200				
	NCB0603SG102TR015F	1000 $\pm$ 25%	1.20	150				
	NCB0603SK221TR050F	220 $\pm$ 25%	0.45	500				
	NCB0603SK331TR050F	330 $\pm$ 25%	0.50	500				
	NCB0603SK421TR040F	420 $\pm$ 25%	0.55	400				
	NCB0603SK471TR040F	470 $\pm$ 25%	0.55	400				
	NCB0603SK601TR020F	600 $\pm$ 25%	0.60	200				
	NCB0603SK102TR020F	1000 $\pm$ 25%	0.80	200				
	NCB0603SK152TR020F	1500 $\pm$ 25%	0.80	200				
	NCB0603SK202TR020F	2000 $\pm$ 25%	1.00	200				
	NCB0603SK222TR020F	2200 $\pm$ 25%	1.00	200				
	NCB0603SK252TR020F	2500 $\pm$ 25%	1.20	200				
	NCB0603SK272TR020F	2700 $\pm$ 25%	1.40	200				
0805	NCB0805SG050TR100F	0 ~ 15	0.07	1000	2.0 +0.3/-0.1	1.25 $\pm$ 0.2	0.85 $\pm$ 0.2	0.5 $\pm$ 0.3
	NCB0805SG300TR100F	30 $\pm$ 25%	0.10	1000				
	NCB0805SG600TR080F	60 $\pm$ 25%	0.20	800				
	NCB0805SG121TR060F	120 $\pm$ 25%	0.25	600				
	NCB0805SG221TR060F	220 $\pm$ 25%	0.30	600				
	NCB0805SG301TR060F	300 $\pm$ 25%	0.40	600				
	NCB0805SG421TR060F	420 $\pm$ 25%	0.40	600				
	NCB0805SG601TR060F	600 $\pm$ 25%	0.45	600				
	NCB0805SG102TR0500F	1000 $\pm$ 25%	0.50	500				
	NCB0805SK121TR060F	120 $\pm$ 25%	0.20	600				
	NCB0805SK221TR060F	220 $\pm$ 25%	0.25	600				
	NCB0805SK301TR060F	300 $\pm$ 25%	0.30	600				
	NCB0805SK421TR060F	420 $\pm$ 25%	0.30	600				
	NCB0805SK601TR060F	600 $\pm$ 25%	0.35	600				
	NCB0805SK102TR050F	1000 $\pm$ 25%	0.40	500				
	NCB0805SK152TR020F	1500 $\pm$ 25%	0.45	200				
	NCB0805SK222TR020F	2200 $\pm$ 25%	0.60	200				
	NCB0805SK252TR020F	2500 $\pm$ 25%	0.70	200				
	NCB0805SK272TR020F	2700 $\pm$ 25%	0.80	200				

