

FEATURES

- LOW INSERTION LOSS
- HIGH ATTENUATION
- LOW COST LTCC CONSTRUCTION
- SURFACE MOUNTABLE CONSTRUCTION
- TAPED AND REELED FOR AUTOMATIC INSERTION

**RoHS
Compliant**
includes all homogeneous materials
*See Part Number System for Details



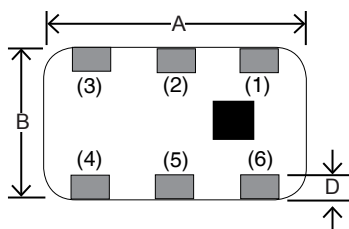
CHARACTERISTICS

Case Code	0603	0805	1210
Low Frequency Range (Min.)	2400 ~ 2500 MHz	Refer to Part Number Table	900 ~ 1450 MHz
High Frequency Range (Max.)	9800 ~ 11800 MHz		1650 ~ 2200 MHz
Operating Temperature Range	-40°C ~ +85°C		
Impedance	50Ω		
Resistance to Solder Heat	+260°C for 10 seconds		

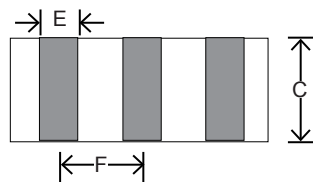
DIMENSIONS (mm)

Case Code	DIMENSIONS						LAND PATTERNS				
	A	B	C	D	E	F	G	H	I	J	K
NGD0603C	1.6 ± 0.1	0.8 ± 0.1	0.6 ± 0.1	0.15 ± 0.1	0.2 ± 0.1	0.5 ± 0.1	0.3	0.55	0.25	0.5	-
NGD0805C	2.0 ± 0.15	1.2 ± 0.15	0.95 ± 0.1	0.2 ± 0.1	0.3 ± 0.15	0.65 ± 0.1	0.75	0.5	0.35	0.65	-
			0.8 ± 0.1								
NGD1210C	3.2 ± 0.2	2.5 ± 0.2	1.5 ± 0.1	0.3 ± 0.2	0.55 ± 0.2	1.0 ± 0.1	1.6	0.95	0.6	-	0.35

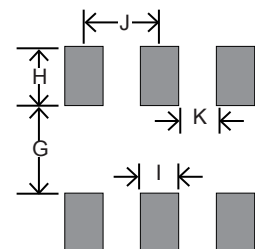
COMPONENT LAYOUT



Refer to Part Number Table for PIN Layout



LAND PATTERNS



PART NUMBER SYSTEM

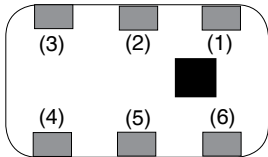
NGD 0805C 2R450 G1 TR F

- Series
- Size Code (see dimensions table for details)
- Frequency Code (Ghz): "R" indicates decimal
- Layout Code
- Packaging: TR = Tape & Reel
- RoHS Compliant

NGD0603C Size

Part Number	Standard Values - Case Size 0603 (1.6 x 0.8 x 0.6mm)						
	Frequency Range	Impedance (Ω)	Frequency (MHz)	Max. IL in BW @ 25°C (dB)	Ripple in BW @ 25°C (dB)	Max. VSWR in BW @ 25°C (dB)	Min. Attenuation @ 25°C (dB)
NGD0603C2R450G1TRF	Low	50	2400 ~ 2500	1.0	0.5	2.0	-
			4800 ~ 6000	-	-	-	18
			7200 ~ 7500	-	-	-	18
	High		2400 ~ 2500	-	-	-	18
			4900 ~ 5900	1.6	1.0	2.0	-
			9800 ~ 11800	-	-	-	15
NGD0603C2R450G2TRF	Low	50	2400 ~ 2500	1.0	0.5	2.0	-
			4800 ~ 6000	-	-	-	18
			7200 ~ 7500	-	-	-	18
	High		2400 ~ 2500	-	-	-	18
			4900 ~ 5900	1.6	1.0	2.0	-
			9800 ~ 11800	-	-	-	15

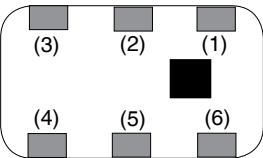
PIN	(1)	(2)	(3)	(4)	(5)	(6)
NGD0603C2R450G1TRF	High	Ground	Low	Ground	Common	Ground
NGD0603C2R450G2TRF	Low		High			



NGD0805C Size

Part Number	Standard Values - Case Size 0805 (2.0 x 1.2 mm)						
	Frequency Range	Impedance (Ω)	Frequency (MHz)	Max. IL in BW @ 25°C (dB)	Ripple in BW @ 25°C (dB)	Max. VSWR in BW @ 25°C (dB)	Min. Attenuation @ 25°C (dB)
NGD0805C2R450G1TRF (C: 0.95 ± 0.1 mm)	Low	50	824 ~ 960	0.6	0.3	2.0	-
			1710 ~ 1880	1.0	0.5	2.0	-
			1880 ~ 1990	1.5	0.7	2.0	-
	High		2400 ~ 2500	-	-	-	15
			824 ~ 1990	-	-	-	20
			2400 ~ 2500	2.0	1.0	2.0	-
NGD0805C2R450G2TRF (C: 0.95 ± 0.1 mm)	Low	50	2400 ~ 2500	0.7	0.3	2.0	-
			4800 ~ 6000	-	-	-	18
			7200 ~ 7500	-	-	-	18
	High		4900 ~ 5900	1.0	0.5	2.0	-
			1800 ~ 2500	-	-	-	19
			10300 ~ 10700	-	-	-	25
NGD0805C2R450G3TRF (C: 0.8 ± 0.1 mm)	Low	50	824 ~ 915	-	-	-	28
			1545 ~ 1610	-	-	-	28
			1710 ~ 1990	-	-	-	24
			2110 ~ 2170	-	-	-	18
			2400 ~ 2500	2.4	-	2.0	-
			4800 ~ 5000	-	-	-	27
	High		7200 ~ 7500	-	-	-	20
			1545 ~ 1610	-	-	-	25
			2400 ~ 2500	-	-	-	25
			5150 ~ 5850	1.2	-	2.0	-
			10300 ~ 11700	-	-	-	20
			NGD0805C2R450G4TRF (C: 0.8 ± 0.1 mm)	Low	50	824 ~ 915	-
1545 ~ 1610	-	-				-	28
1710 ~ 1990	-	-				-	24
2110 ~ 2170	-	-				-	18
2400 ~ 2500	2.4	-				2.0	-
4800 ~ 5000	-	-				-	27
High	7200 ~ 7500	-		-		-	20
	1545 ~ 1610	-		-		-	25
	2400 ~ 2500	-		-		-	25
	5150 ~ 5850	1.2		-		2.0	-
	10300 ~ 11700	-		-		-	20

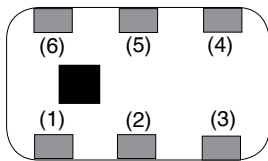
PIN	(1)	(2)	(3)	(4)	(5)	(6)
NGD0805C2R450G1TRF	High	Ground	Low	Ground	Common	Ground
NGD0805C2R450G2TRF	High		Low			
NGD0805C2R450G3TRF	Low	Ground	High	Ground	Common	Ground
NGD0805C2R450G4TRF	High		Low			



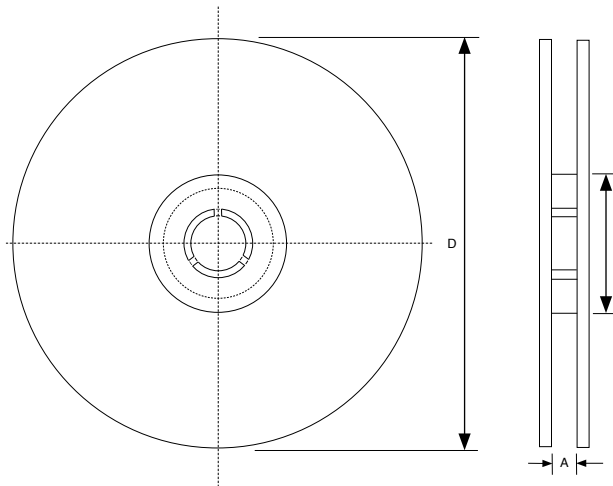
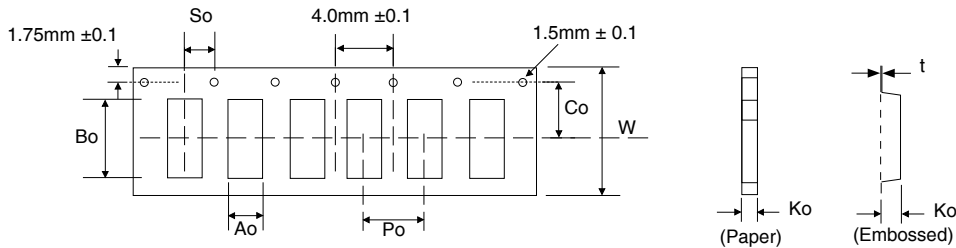
NGD1210C Size

Part Number	Standard Values - Case Size 1210 (3.2 x 2.5 x 1.8mm)						
	Frequency Range	Impedance (Ω)	Frequency (MHz)	Max. IL in BW @ 25°C (dB)	Ripple in BW @ 25°C (dB)	Max. VSWR in BW @ 25°C (dB)	Min. Attenuation @ 25°C (dB)
NGD1210C2R200G1TRF	Low	50	900 ~ 1450	2.2	1.6	2.0	-
			1425 ~ 1450	-	0.3	-	-
			1450 ~ 1475	-	1.0	-	-
			1650 ~ 2200	-	-	-	27
			1800	-	-	-	30
	High		900 ~ 1450	-	-	-	27
			1300	-	-	-	30
			1625 ~ 1650	-	1.0	-	-
			1650 ~ 1675	-	0.3	-	-
			1650 ~ 2200	2.2	1.6	2.0	-

PIN	(1)	(2)	(3)	(4)	(5)	(6)
NGD1210C2R200G1TRF	Ground	Common	Ground	High	Ground	Low



Case Size	CARRIER TAPING DIMENSIONS (mm) AND REEL QUANTITY									
	Tape	Ao	Bo	Po	So	Co	Ko	t	W	Qty
NGD0603C	Paper	1.00	1.80	4.0	2.0 ±0.05	3.5 ± 0.1	0.75 max.	-	8.0 ± 0.3	4,000
NGD0805C	Embossed	1.42	2.25				1.14 max.	0.27 max.		4,000
NGD1210C		2.75	3.45				1.80 max.			2,000



Tape Width	REEL DIMENSIONS (mm)		
	A(mm)	B(mm)	D(mm)
NGD0603C	9.0 ± 1.5	58 ± 2.0	178 ± 2.0
NGD0805C			
NGD1210C			

