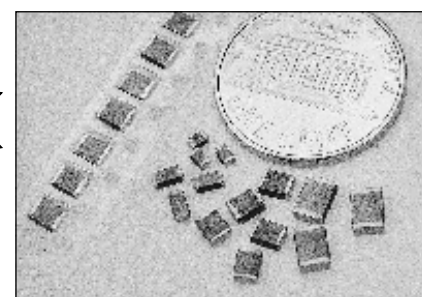


FEATURES

- RUGGED CONSTRUCTION IN STANDARD EIA SIZES
- EFFECTIVE EM/RFI SUPPRESSION UP TO 1 Ghz
- CURRENT RATINGS UP TO 5 AMPS (STYLE 2)
- HIGH IMPEDANCE OVER A WIDE FREQUENCY RANGE
- COMPATIBLE WITH AUTOMATIC PICK AND PLACE EQUIPMENT
- BOTH FLOW AND REFLOW SOLDERING APPLICABLE
- OPERATING TEMPERATURE RANGE: -40°C TO +125°C



STANDARD VALUES AND CASE SIZES (mm)

EIA Size	NIC P/N	Impedance* At 100Mhz	DC Resistance Max. (Ohms)	DC Current Max. (mA)	Style Code	A (mm)	B (mm)	C (mm)	D (mm)
0402	NCB0402P060TR	6 ohms +/-25%	0.05	500	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
	NCB0402P100TR	10 ohms +/-25%	0.05	500	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
	NCB0402P400TR	40 ohms +/-25%	0.3	300	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
	NCB0402P800TR	80 ohms +/-25%	0.4	200	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
	NCB0402P121TR	120 ohms +/-25%	0.5	200	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
	NCB0402P151TR	150 ohms +/-25%	0.5	200	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
	NCB0402P241TR	240 ohms +/-25%	0.5	200	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
	NCB0402P481TR	480 ohms +/-25%	0.8	100	1	1.0+/-0.5	0.50+/-0.15	0.5+/-0.15	0.25+/-0.15
0603	NCB0603R300TR	30 ohms +/-25%	0.2	200	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R600TR	60 ohms +/-25%	0.2	200	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R800TR	80 ohms +/-25%	0.3	200	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R121TR	120 ohms +/-25%	0.3	200	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R141TR	140 ohms +/-25%	0.3	200	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R221TR	220 ohms +/-25%	0.5	100	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R301TR	300 ohms +/-25%	0.6	100	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R451TR	450 ohms +/-25%	0.7	100	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R471TR	470 ohms +/-25%	0.5	200	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R601TR	600 ohms +/-25%	0.8	100	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB0603R751TR	750 ohms +/-25%	0.7	200	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
0805	NCB0805A110TR	11 ohms +/-25%	0.1	600	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A170TR	17 ohms +/-25%	0.1	500	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A320TR	32 ohms +/-25%	0.3	500	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A600TR	60 ohms +/-25%	0.15	500	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A800TR	80 ohms +/-25%	0.4	400	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A900TR	90 ohms +/-25%	0.1	600	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A121TR	120 ohms +/-25%	0.4	200	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A151TR	150 ohms +/-25%	0.5	200	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A221TR	220 ohms +/-25%	0.6	200	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A301TR	300 ohms +/-25%	0.9	200	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A401TR	400 ohms +/-25%	0.9	200	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A601TR	600 ohms +/-25%	1	200	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB0805A102TR	1000 ohms +/-25%	1	100	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
NCB0805A222TR	2200 ohms +/-25%	0.75	100	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3	

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

STANDARD VALUES AND CASE SIZES (mm)

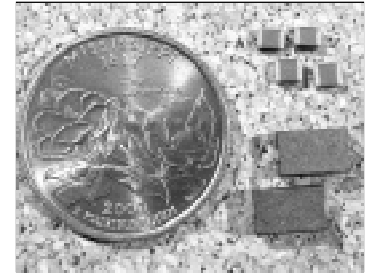
EIA Size	NIC P/N	Impedance* At 100Mhz	DC Resistance Max. (Ohms)	DC Current Max. (mA)	Style Code	A (mm)	B (mm)	C (mm)	D (mm)
1206	NCB1206B190TR	19 ohms +/-25%	0.15	500	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B260TR	26 ohms +/-25%	0.15	500	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B320TR	32 ohms +/-25%	0.15	500	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B500TR	50 ohms +/-25%	0.2	400	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B600TR	60 ohms +/-25%	0.2	400	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B700TR	70 ohms +/-25%	0.3	400	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B900TR	90 ohms +/-25%	0.3	400	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B121TR	120 ohms +/-25%	0.4	400	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B151TR	150 ohms +/-25%	0.5	200	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B201TR	200 ohms +/-25%	0.5	200	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B401TR	400 ohms +/-25%	0.5	200	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B501TR	500 ohms +/-25%	0.5	200	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B601TR	600 ohms +/-25%	0.5	200	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B122TR	1200 ohms +/-25%	1	100	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB1206B202TR	2000 ohms +/-25%	1.5	100	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
NCB1206E600TR	60 ohms +/-25%	0.5	200	1	3.2+/-0.2	1.6+/-0.2	1.6+/-0.2	0.5+/-0.3	
NCB1206E700TR	70 ohms +/-25%	0.5	200	1	3.2+/-0.2	1.6+/-0.2	1.6+/-0.2	0.5+/-0.3	
1210	NCB1210C320TR	32 ohms +/-25%	0.3	400	1	3.2+/-0.2	2.5+/-0.2	1.3+/-0.2	0.5+/-0.3
	NCB1210C600TR	60 ohms +/-25%	0.3	400	1	3.2+/-0.2	2.5+/-0.2	1.3+/-0.2	0.5+/-0.3
	NCB1210C800TR	80 ohms +/-25%	0.3	400	1	3.2+/-0.2	2.5+/-0.2	1.3+/-0.2	0.5+/-0.3
	NCB1210C900TR	90 ohms +/-25%	0.3	400	1	3.2+/-0.2	2.5+/-0.2	1.3+/-0.2	0.5+/-0.3
	NCB1210C202TR	2000 ohms +/-25%	1.5	100	1	3.2+/-0.2	2.5+/-0.2	1.3+/-0.2	0.5+/-0.3
1806	NCB1806E600TR	60 ohms +/-25%	0.3	400	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB1806E800TR	80 ohms +/-25%	0.3	400	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB1806E101TR	100 ohms +/-25%	0.4	300	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB1806E151TR	150 ohms +/-25%	0.5	200	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
1812	NCB1812D700TR	70 ohms +/-25%	0.4	300	1	4.5+/-0.25	3.2+/-0.2	1.5/-0.2	0.5+/-0.3
	NCB1812D800TR	80 ohms +/-25%	0.4	300	1	4.5+/-0.25	3.2+/-0.2	1.5/-0.2	0.5+/-0.3
	NCB1812D121TR	120 ohms +/-25%	0.3	500	1	4.5+/-0.25	3.2+/-0.2	1.5/-0.2	0.5+/-0.3

SURFACE MOUNT

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

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



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

SURFACE MOUNT

EIA Size	NIC P/N	Impedance At 100Mhz	DC Resistance Max. (Ohms)	DC Current Max. (mA)	Style Code	A (mm)	B (mm)	C (mm)	D (mm)
0603	NCB-H0603R100TR	10 ohms +/-25%	0.020	4000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R270TR	27 ohms +/-25%	0.006	4000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R300TR	30 ohms +/-25%	0.035	3000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R500TR	50 ohms +/-25%	0.040	2500	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R680TR	68 ohms +/-25%	0.100	1000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R101TR	100 ohms +/-25%	0.100	2000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R121TR	120 ohms +/-25%	0.100	2000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R151TR	150 ohms +/-25%	0.100	2000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R221TR	220 ohms +/-25%	0.100	2000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R301TR	300 ohms +/-25%	0.200	1000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0603R471TR	470 ohms +/-25%	0.200	1000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
0805	NCB-H0603R601TR	600 ohms +/-25%	0.200	1000	1	1.6+/-0.2	0.8+/-0.15	0.8+/-0.15	0.4+/-0.2
	NCB-H0805A300TR	30 ohms +/-25%	0.020	4000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H0805A600TR	60 ohms +/-25%	0.025	3000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H0805A800TR	80 ohms +/-25%	0.040	3000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H0805A121TR	120 ohms +/-25%	0.100	2000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H0805A151TR	150 ohms +/-25%	0.100	2000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H0805A221TR	220 ohms +/-25%	0.100	2000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H0805A301TR	300 ohms +/-25%	0.200	1000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H0805A471TR	470 ohms +/-25%	0.200	1000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
1206	NCB-H0805A601TR	600 ohms +/-25%	0.200	1000	1	2.0+/-0.2	1.25+/-0.2	0.9+/-0.2	0.5+/-0.3
	NCB-H1206B320TR	32 ohms +/-25%	0.020	5000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B500TR	50 ohms +/-25%	0.020	4000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B680TR	68 ohms +/-25%	0.012	3000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B800TR	80 ohms +/-25%	0.040	3000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B121TR	120 ohms +/-25%	0.100	2000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B151TR	150 ohms +/-25%	0.100	2000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B301TR	300 ohms +/-25%	0.200	1000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B471TR	470 ohms +/-25%	0.200	1000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
1806	NCB-H1206B501TR	500 ohms +/-25%	0.040	3000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1206B6071TR	600 ohms +/-25%	0.100	2000	1	3.2+/-0.2	1.6+/-0.2	1.1+/-0.2	0.5+/-0.3
	NCB-H1806E600TR	60 ohms +/-25%	0.010	6000	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB-H1806E800TR	80 ohms +/-25%	0.040	3000	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
1812	NCB-H1812D800TR	80 ohms +/-25%	0.010	6000	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB-H1812D125TR	125 ohms +/-25%	0.050	1500	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB-H1812D151TR	150 ohms +/-25%	0.020	5000	1	4.5+/-0.25	1.6+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB-H1812D681TR	680 ohms +/-25%	0.030	4000	1	4.5+/-0.25	3.2+/-0.2	1.6/-0.2	0.5+/-0.3
	NCB-H1812D132TR	1300 ohms +/-25%	0.060	3000	1	4.5+/-0.25	3.2+/-0.2	1.6/-0.2	0.5+/-0.3
1612	NCB1612K480TR**	48 ohms +/-25%	0.001	5000	2	4.2+/-0.4	3.1+/-0.2	2.6/-0.2	1.3+/-0.3
3312	NCB3312K900TR**	90 ohms +/-25%	0.001	5000	2	8.6+/-0.4	3.2+/-0.3	2.6/-0.2	1.3+/-0.3
3119	NCB3119L950TR**	95 ohms +/-25%	0.001	5000	2	7.8+/-0.4	4.7+/-0.3	2.9/-0.2	1.3+/-0.3

Note: Other values and case sizes available.

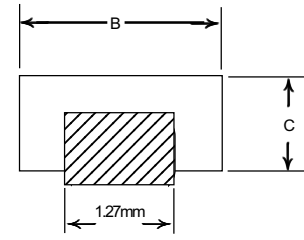
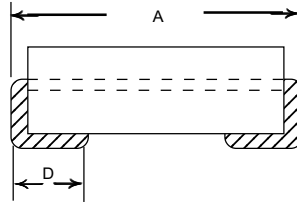
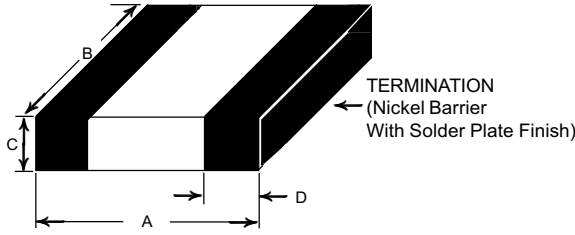
**STYLE 2 TYPES, TEMPERATURE RANGE -25°C ~ +85°C

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

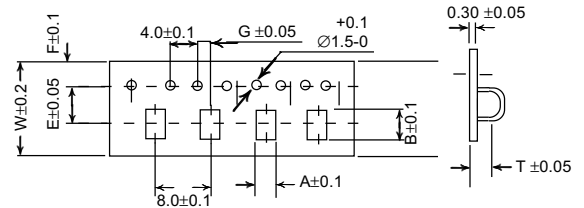
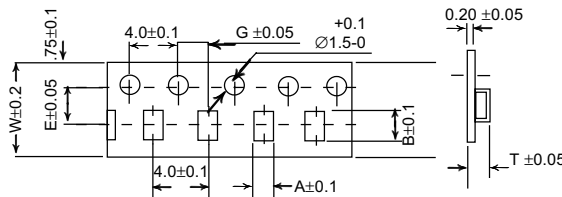
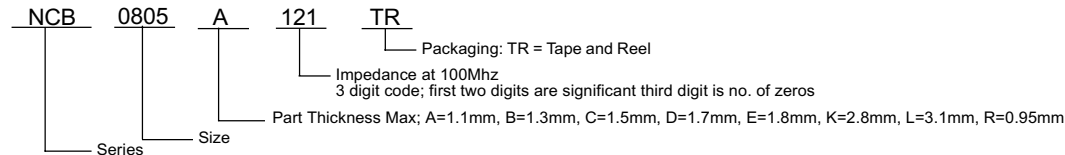


STYLE 1 (EIA Size Chips)

STYLE 2



PART NUMBERING SYSTEM



TAPE DIMENSIONS (mm)

Fig. 1

Fig. 2

Dimensions	NCB0603R	NCB0805A	NCB1206B	NCB1206E	NCB1210C	NCB1806E	NCB1812D	NCB1612K	NCB3312K	NCB3119L
A	1.14	1.54	1.94	1.94	2.80	1.94	3.64	3.65	3.45	5.25
B	1.75	2.32	3.54	3.64	3.42	4.94	4.94	5.40	9.30	8.75
T	1.15	1.15	1.29	1.90	1.64	1.90	1.80	3.05	3.05	3.70
W	8.0	8.0	8.0	8.0	8.0	12.0	12.0	12.0	16.0	16.0
E	3.5	3.5	3.5	3.5	3.5	5.5	5.5	5.5	7.5	8.0
F	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.0	2.0
G	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0
Chips/Reel	4000	4000	3000	2000	2500	2000	1000	500	500	500
Fig.	1	1	1	1	1	1	2	2	2	2

DIMENSIONS (mm)

Size	A	B	C
0603	1.0	0.6	0.8
0805	1.0	1.2	1.2
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: 0603, 0805, 1206, 1210	Size: 1806, 1812, 1612	Size: 3312, 3319
A	178 ± 2	178 ± 2	178 ± 2
B	60 ± 1	60 ± 1	60 ± 1
C	13.0 ± 0.5	13.0 ± 0.5	13.0 ± 0.5
D	21.0 ± 0.8	21.0 ± 0.8	21.0 ± 0.8
E	2.0 ± 0.5	2.0 ± 0.5	2.0 ± 0.5
W	10.0 ± 1.0	14.0 ± 1.0	18.0 ± 1.0
t	2.0 ± 0.5	2.0 ± 0.5	2.0 ± 0.5
R	1.0	1.0	1.0

RECOMMENDED LAND PATTERN (mm)

