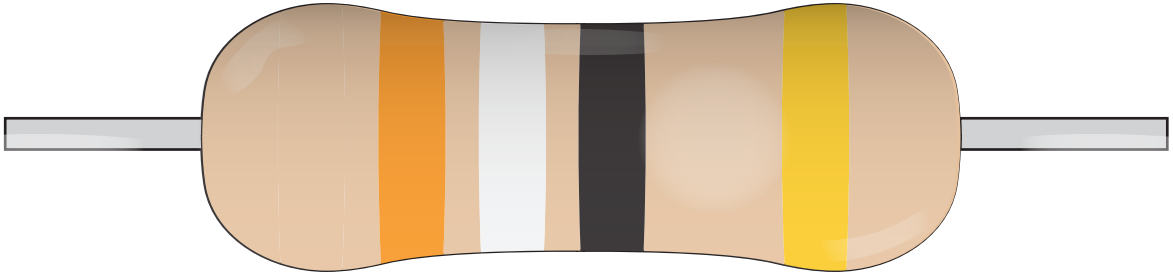
THE UNOFFICIAL

ARDUINO

basic connections

TOLERANCE

GOLD	±5%
SILVER	±10%



BLACK	0	0	x1Ω
BROWN	1	1	x10Ω
RED	2	2	x100Ω
ORANGE	3	3	x1,000Ω
YELLOW	4	4	x10,000Ω
GREEN	5	5	x100,000Ω
BLUE	6	6	x1,000,000Ω
VIOLET	7	7	
GRAY	8	8	
WHITE	9	9	

MULTIPLIER

KΩ =x1,000Ω

MΩ =x1,000,000Ω

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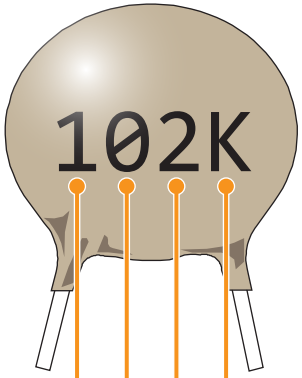
Ceramic Capacitor Code



= 1,000pF - ±10%

Significant Digit	Multiplier
0	*none*
1	10
2	100
3	1,000
4	10,000
5	100,000
6	1,000,000
7	
8	
9	

1st
2nd

C	±0.25pF
J	±5%
K	±10%
M	±20%
D	±0.5pF
Z	+80% -20%

1,000 pF	1 nF	0.001 µF

1	1p0	1pF	10	10pF	101	n10	100pF
1.2	1p2	1.2pF	12	12pF	121	n12	120pF
1.5	1p5	1.5pF	15	15pF	151	n15	150pF
1.8	1p8	1.8pF	18	18pF	181	n18	180pF
2.2	2p2	2.2pF	22	22pF	221	n21	220pF
2.7	2p7	2.7pF	27	27pF	271	n27	270pF
3.3	3p3	3.3pF	33	33pF	331	n33	330pF
3.9	3p9	3.9pF	39	39pF	391	n39	390pF
4.7	4p7	4.7pF	47	47pF	471	n47	470pF
5.6	5p6	5.6pF	56	56pF	561	n56	560pF
6.8	6p8	6.8pF	68	68pF	681	n68	680pF
8.2	8p2	8.2pF	82	82pF	821	n82	820pF

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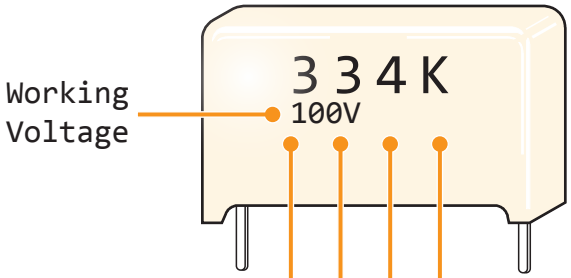
III

Polyester Film-Mylar Capacitor Code



= 0.33µF ±20% 100V

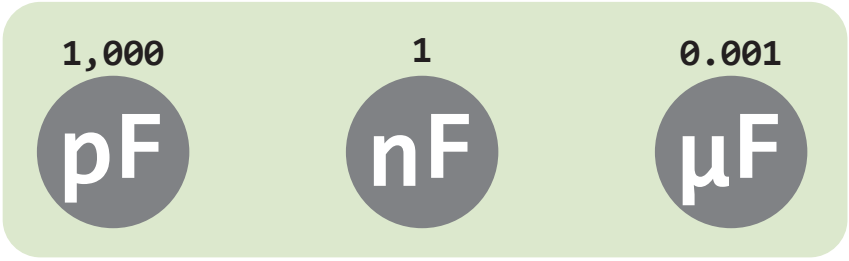
Significant Digit

1st
2nd
Multiplier

0	*none*
1	10
2	100
3	1,000
4	10,000
5	100,000
6	
7	
8	
9	

F	1~2%
G	2%
J	5%
K	10%
M	20%

102	1n	.001	1,000pF	103	10n	.01	10,000pF	104	100n	.1	100,000pF
122	1n2	.0012	1,200pF	123	12n	.012	12,000pF	124	120n	.12	120,000pF
152	1n5	.0015	1,500pF	153	15n	.015	15,000pF	154	150n	.15	150,000pF
182	1n8	.0018	1,800pF	183	18n	.018	18,000pF	184	180n	.18	180,000pF
222	2n2	.0022	2,200pF	223	22n	.022	22,000pF	224	220n	.22	220,000pF
272	2n7	.0027	2,700pF	273	27n	.027	27,000pF	274	270n	.27	270,000pF
332	3n3	.0033	3,300pF	333	33n	.033	33,000pF	334	330n	.33	330,000pF
392	3n9	.0039	3,900pF	393	39n	.039	39,000pF	394	390n	.39	390,000pF
472	4n7	.0047	4,700pF	473	47n	.047	47,000pF	474	470n	.47	470,000pF
562	5n6	.0056	5,600pF	563	56n	.056	56,000pF	564	560n	.56	560,000pF
682	6n8	.0068	6,800pF	683	68n	.068	68,000pF	684	680n	.68	680,000pF
822	8n2	.0082	8,200pF	823	82n	.082	82,000pF	824	820n	.82	820,000pF



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