



STANDARD CAPACITOR CODE CHART / REFERENCE

EIA Code	pF	nF	uF	EIA Code	pF	nF	uF	EIA Code	pF	nF	uF	EIA Code	pF	nF	uF	EIA Code	pF	nF	uF
1R0 (109)*	1.0			330	33			102	1,000	1.0	0.001	333	33,000	33	0.033	105		1000	1.0
1R2 (129)*	1.2			390	39			122	1,200	1.2	0.0012	393	39,000	39	0.039	155		1500	1.5
1R5 (159)*	1.5			470	47			152	1,500	1.5	0.0015	473	47,000	47	0.047	225		2200	2.2
1R8 (189)*	1.8			560	56			182	1,800	1.8	0.0018	563	56,000	56	0.056	475		4700	4.7
2R2 (229)*	2.2			680	68			222	2,200	2.2	0.0022	683	68,000	68	0.068	685		6800	6.8
2R7 (279)*	2.7			820	82			272	2,700	2.7	0.0027	823	82,000	82	0.082	106		10000	10
3R3 (339)*	3.3			101	100		0.0001	332	3,300	3.3	0.0033	104	100,000	100	0.1	156			15
3R9 (399)*	3.9			121	120		0.00012	392	3,900	3.9	0.0039	124	120,000	120	0.12	226			22
4R7 (479)*	4.7			151	150		0.00015	472	4,700	4.7	0.0047	154	150,000	150	0.15	336			33
5R6 (569)*	5.6			181	180		0.00018	562	5,600	5.6	0.0056	184	180,000	180	0.18	476			47
6R8 (689)*	6.8			221	220		0.00022	682	6,800	6.8	0.0068	224	220,000	220	0.22	686			68
8R2 (829)*	8.2			271	270		0.00027	822	8,200	8.2	0.0082	274	270,000	270	0.27	107			100
100	10			331	330		0.00033	103	10,000	10	0.01	334	330,000	330	0.33	157			150
120	12			391	390		0.00039	123	12,000	12	0.012	394	390,000	390	0.39	227			220
150	15			471	470		0.00047	153	15,000	15	0.015	474	470,000	470	0.47	337			330
180	18			561	560		0.00056	183	18,000	18	0.018	564	560,000	560	0.56	477			470
220	22			681	680		0.00068	223	22,000	22	0.022	684	680,000	680	0.68	687			680
270	27			821	820		0.00082	273	27,000	27	0.027	824	820,000	820	0.82	108			1,000

First 2 digits are significant. Third digit is number of zeros. Example: 10pF=100.
 * Some Suppliers do not use the EIA code for values below 10pF. R=Decimal.

CODE	TOL.	CODE	TOL.
A	± 0.05pF	K	± 10%
B	± 0.10pF	M	± 20%
C	± 0.25pF	N	± 30%
D	± 0.50pF	P	- 0 ~ +100%
E	± 0.5%	T	- 10 ~ +50%
F	± 1.0%	U	- 10 ~ +75%
G	± 2.0 %	W	- 10 ~ +100%
H	± 2.5%	Y	- 20 ~ +5%
J	± 5.0%	Z	- 20 ~ +80%

Low Temp Limit	High Temp Limit	Max Allowable Cap Change From +25°C (OVDC)
X = -55°C	5 = +85°C	F = ±7.5%
Y = -30°C	6 = +105°C	P = ±10%
Z = +10°C	7 = +125°C	R = ±15%
	8 = +150°C	S = ±22%
		T = +22%/-33%
		U = +22%/-56%
		V = +22%/-82%

Temperature Coefficient: Each Capacitor will have a temperature coefficient (TC). TC is a measure of how the capacitance value behaves over temperature.

The EIA (Electronics Industries Alliance) established standards for dielectric classifications and are identified by their temperature coefficient (TC) codes

C0G (NPO) is ultrastable with ±30ppm/°C Change

SURFACE MOUNT CAPACITOR CASE SIZE			
(EIA)	Metric	Length	Width
0402	1005	1.0mm (.040")	0.5mm (.020")
0603	1608	1.6mm (.063")	0.8mm (.032")
0805	2012	2.0mm (.079")	1.2mm (.049")
1206	3216	3.2mm (.126")	1.6mm (.063")
1210	3225	3.2mm (.126")	2.5mm (.098")
1812	4564	4.5mm (.177")	3.2mm (.126")
2220	5650	5.7mm (.220")	5.0mm (.197")
2225	5764	5.7mm (.220")	6.4mm (.248")
2512	5764	6.4mm (.248")	3.2mm (.126")

SURFACE MOUNT TANTALUM CASE SIZE				
Case Code	(EIA)	Metric	Length	Width
P,R	2012	0805	2.0mm (.079")	1.2mm (.050")
A	3216-18	1206	3.2mm (.126")	1.6mm (.063")
B	3528-21	1411	3.5mm (.138")	2.8mm (.110")
C	6032-28	2412	6.0mm (.236")	3.2mm (.126")
D	7343-31	2917	7.3mm (.287")	4.3mm (.169")
X	7343-43	2917	7.3mm (.287")	4.3mm (.169")
E	7260-38	2924	7.3mm (.287")	6.0mm (.236")

Voltage Code for Aluminum Caps			
Voltage	Code	Voltage	Code
6.3	0J	100	2A
10	1A	160	2C
16	1C	200	2D
25	1E	250	2E
35	1V	350	2V
50	1H	400	2G
63	1J	450	2W