## Capacitor Chart

Tantalum Capacitor Color Codes								
Charts	Color	Color	1st Figure	2nd Figure	Multiplier	Voltage		
1st Significant Figure		Black		0	1	10		
Multiplier —2nd Significant Figure		Brown	1	1	10			
Voltage (1µF at 16V)		Red	2	2	100			
1 1		Orange	3	3				
Parallel Capacitance Math:		Yellow	4	4		6.3		
$C_T = C_1 + C_2 + C_3$ Series Capacitance Math:		Green	5	5		16		
$1/C_T = 1/C_1 + 1/C_2 + 1/C_3$		Blue	6	6		20		
		Violet	7	7				
		Grey	8	8	0.01	25		
		White	9	9	0.1	3		
		Pink				35		

Mica Capacitor Values						
Charts	Value	Multiplier	Letter	Tolerance		
1st Significant Figure 2nd Significant Figure Multiplier Tolerance	0	1	В	± 0.1pF		
	1	10	C	± 0.25pF		
	2	100	D	± 0.5pF		
	3	1,000	F	± 1%		
	4	10,000	G	± 2%		
(0.1μF ±10%)	5	100,000	Н	± 3%		
Parallel Capacitance Math: $\mathbf{C}_{T} = \mathbf{C}_{1} + \mathbf{C}_{2} + \mathbf{C}_{3}$			J	± 5%		
Series Capacitance Math: $1/C_T = 1/C_1 + 1/C_2 + 1/C_3$	8	0.01	K	± 10%		
	9	0.1	M	± 20%		

## **Capacitor Code Guide**

VALUE 1.5pF 3.3pF 10pF 15pF 20pF 30pF 33pF 47pF 56pF 68pF 75pF 82pF 91pF 100pF 130pF 130pF 130pF 130pF 150pF 150pF 150pF 150pF 680pF	Ceramic	101 121 131 151 181 221 331 471 561 681	VALUE  1,000pF / .001uF  1,500pF / .0015uF  2,000pF / .002uF  2,200pF / .0022uF  4,700pF / .0047uF  5,000pF / .005uF  5,600pF / .0056uF  6,800pF / .0068uF  .01  .015  .02  .022  .033  .047  .05  .056  .068  .1  .2  .22  .33  .47	Ceramic / Mylar	CODE 102 152 202 222 472 502 562 682 103 203 223 333 473 503 563 683 104 204 224 334 474 564
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Usually the first two digits of the code represent part of the value; the third digit corresponds to the number of zeros to be added to the first two digits. This is the value in pf.

## General Capacitance Code breaker Charts

pico-farad (pF)	nano-farad (nF)	micro-farad (mF,uF or mfd)	capacitance code
1000	1 or 1n	0.001	102
1500	1.5 or 1n5	0.0015	152
2200	2.2 or 2n2	0.0022	222
3300	3.3 or 3n3	0.0033	332
4700	4.7 or 4n7	0.0047	472
6800	6.8 or 6n8	0.0068	682
10000	10 or 10n	0.01	103
15000	15 or 15n	0.015	153
22000	22 or 22n	0.022	223
33000	33 or 33n	0.033	333
47000	47 or 47n	0.047	473
68000	68 or 68n	0.068	683
100000	100 or 100n	0.1	104
150000	150 or 150n	0.15	154
220000	220 or 220n	0.22	224
330000	330 or 330n	0.33	334
470000	470 or 470n	0.47	474

## RESISTANCE CHART

1 <sup>ST</sup>	$2^{ m ND}$	3 <sup>RD</sup> COLOUR					
COLOUR	COLOUR	BLK	BRN	RED	ORG	YEL	
BRN	BLK	10	100	1K	10K	100K	
BRN	RED	12	120	1K2	12K	120K	
BRN	GRN	15	150	1K5	15K	150K	
BRN	GRY	18	180	1K8	18K	180K	
RED	RED	22	220	2K2	22K	220K	
RED	VIO	27	270	2K7	27K	270K	
ORG	ORG	33	330	3K3	33K	330K	
ORG	WHT	39	390	3K9	39K	390K	
YEL	VIO	47	470	4K7	47K	470K	
GRN	BLU	56	560	5K6	56K	560K	
BLU	GRY	68	680	6K8	68K	680K	
GRY	RED	82	820	8K2	82K	820K	