## Capacitor Code

Ceramic Capacitor may have 3 or 4 numbers at its body. Last number is *multiplier*. The number tells how much =zeros= contains multiplied number. Numbers before are value in pF.

**Example 1:** At a capacitor's body is number 102. It means 10-pF multiply to 100 (last number tells us about 2 =zeros=). So, 1000-pF.

**Example 2.** At a capacitor's body is number 101. It means 10-pF multiply to 10 (last number tells us about 1 =zero=). So, 100-pF.

**Example 3:** At a capacitor's body is number 103. It means 10-pF multiply to 1000 (last number tells us about 3 =zeros=). So, 10000-pF.

Capacitor that has value in pF may be marked straight away in pF. A letter =p= shows the value.

**Example 4:** At a capacitor's body is number 5p6. It means 5.6-pF.

**Example 5:** At a capacitor's body is number 10p. It means 10-pF.

Sometimes, capacitance is marked in 1000-pF. Letter =n= tells about it.

**Example 6:** At a capacitor's body is number 2n2. It means 2200-pF.

**Example 7:** At a capacitor's body is number 10n. It means 10000-pF.

Capacitance may be marked in µF. At the case only numbers with point can be found at the body.

**Example 7:** At a capacitor's body is number = .1=. It means  $0.1- \mu F$ .

**Example 8:** At a capacitor's body is number = 3.3=. It means 3.3-  $\mu$ F.

As usual, after numbers follows a letter. The letter may be located under numbers. The letter tells us about *tolerance*. **Table 1** shows the tolerance code.

**Example 9:** At a capacitor's body is number 103N. It means 10-pF multiply to 1000 (last number tells us about 3 =zeros=). So, 10000-pF +- 30%.

**Example 10:** At a capacitor's body is number 2p2B. It means 2.2-pF +- 0.1-pF.

Some capacitors may have mark of *Temperature Coefficient* which is marked by different color at cap
of the capacitor. *Table 2* shows the Color Code for a *Temperature Coefficient*.

**Example 11:** At a capacitor's body is number 101. Cap is red. It means 100-pF N080.

Some old capacitors may have Letter Code for dielectric material. *Table 3* shows the code.

## **Table 1 Tolerance Code for Capacitor**

Tolerance	+-0.05pF	+-0.1 pF	+-0.25pF	+-0.5pF	+-0.5%	+-1%	+-2%	+-3%	+-5%	+-10%
Tolerance Code	А	В	С	D	Е	F	G	Н	J	K

Tolerance	+-15%	+-20%	+- 30 %	-0% 100%	-20 +50%	-0 +200%	-20 +40 %	-20 +80%
Tolerance Code	L	М	N	Р	S	W	Х	Z



## **Capacitor Code**

Example 12: At a capacitor's body is number =2.2= Figure 1 shows some others examples of Number, KP. It means 2.2-µF dielectric Polypropylene Film/Foil.

Letters and Color Code.

Table 2 **Color Code (Cap Mark) for Temperature Coefficient** 

Black	Brown	Red	Orange	Yellow	Green	Blue
NP0	N030	N080	N150	N220	N330	N470

Violet	Red+ Orange	Orange+ Orange	Yellow+ Orange	Green+ Orange	Blue+ Orange	Red+ Violet
N750	N1000	N1500	N2200	N3300	N4700	P100

Table 3 **Letter Code for Dielectric Material** 

KT	KC	KP	KS	MP	MKP
Polyester	Polycarbonate	Polypropylene	Polystyrene	Metallized	Metallized
Film/Foil	Film/Foil	Film/Foil	Film/Foil	Paper	Polypropylene

MKC	MKT
Metallized	Metallized
Polycarbonate	Polvester

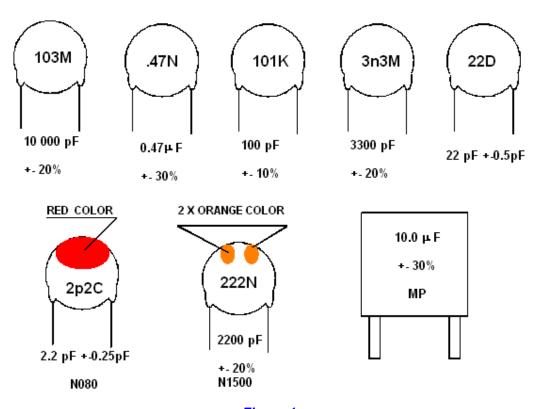


Figure 1