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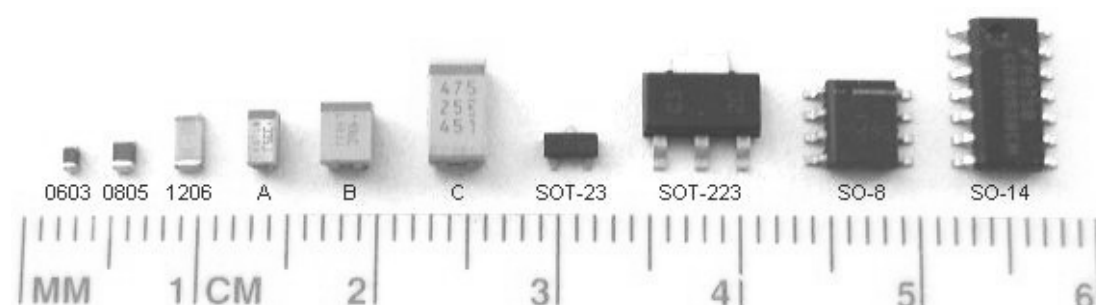
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## SMD (Surface Mount Device) / SMT (Surface Mount Technology)

Here's a view on common SMDs (Surface Mount Devices).



### SMD resistors

SMD resistors come into several possible case sizes. Each size is described as a 4 digits number. The first 2 digits indicate the length; the last 2 indicate the width (in 0.01", or 10 mils units).

For example, the three most popular sizes are:

- 0603: means 0.06"x0.03", or 60x30 mils, or 1.6x0.8mm
- 0805: means 0.08"x0.05"
- 1206: means 0.12"x0.06"

### SMD capacitors

Capacitors from 1pF to 1uF are available in the same sizes, 0603 to 1206. The most popular technology is ceramic.

### SMD Tantalum capacitors

Tantalum capacitors are the technology of choice for 1uF and higher values. Case sizes are indicated by a letter from "A" to "E".

Case	L x W x H (mm)
A	3.2x1.6x1.6
B	3.5x2.8x1.9
C	6.0x3.2x2.5
D	7.3x4.3x2.8
E	7.3x6.0x3.6

Tantalum capacitors are polarized; a bar on the case indicates the positive side.

### SMD transistors

The most popular size for small-signal transistor is called "SOT-23". The second most popular is "SOT-223".

### SMD Integrated Circuits ("ICs")

The two most popular sizes are "SO-8" and "SO-14" (also named "SOIC-8" and