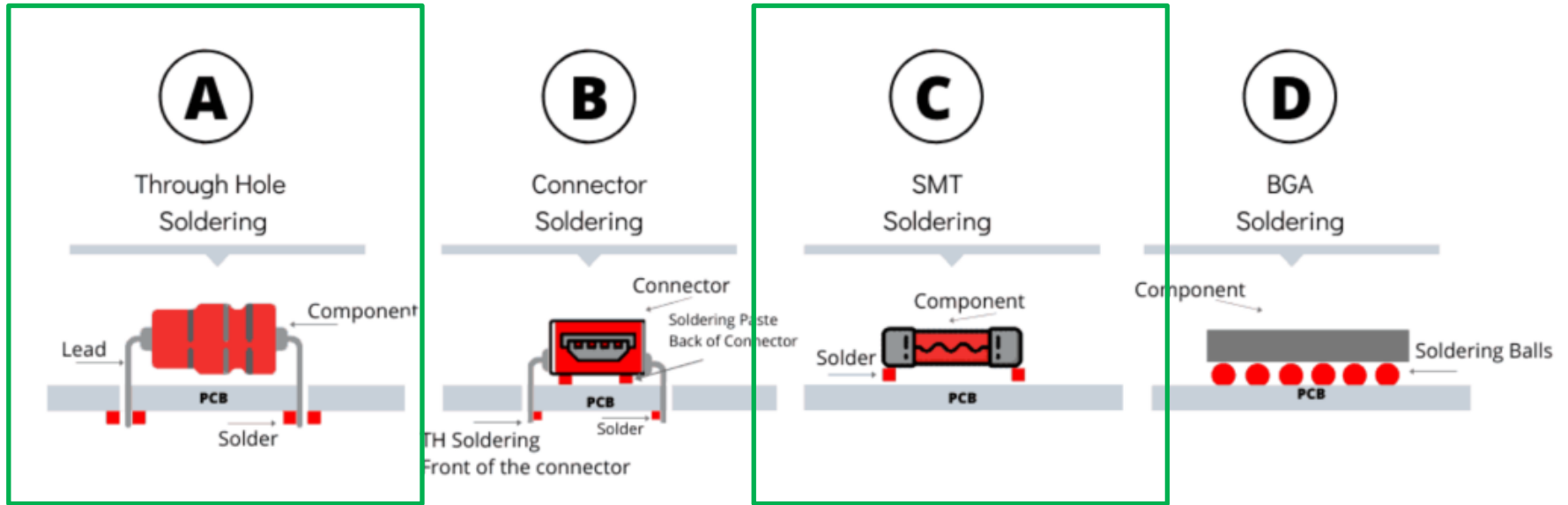


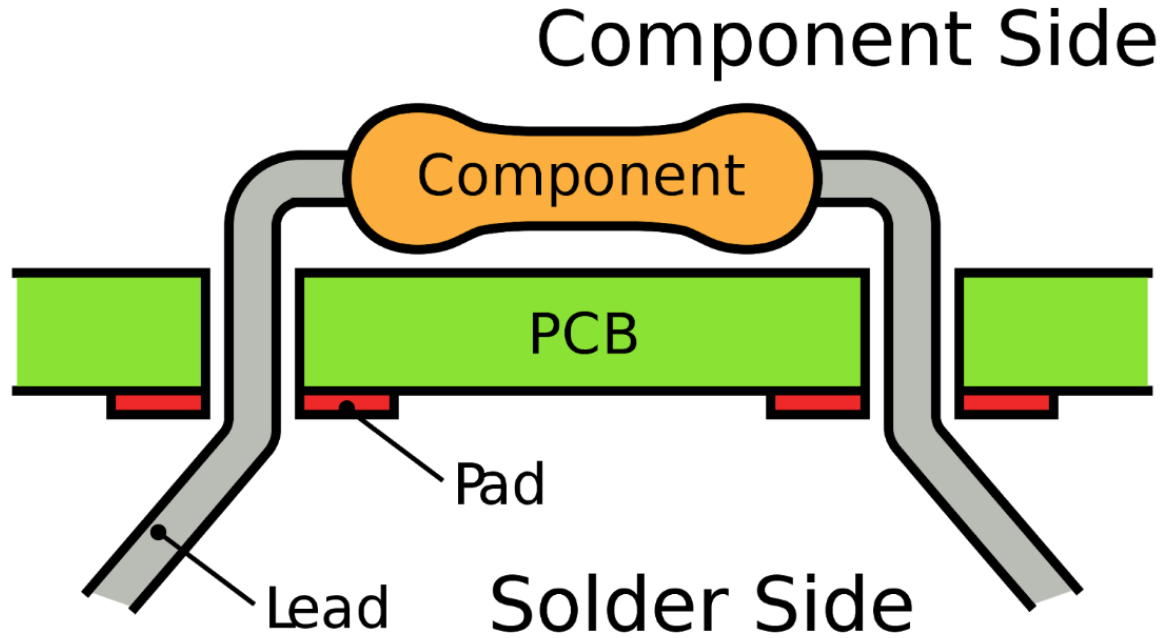
Packaging of Passives

**Accessories***261 Items***Chassis Mount
Resistors***23,453 Items***Chip Resistor -
Surface Mount***9,83,169 Items***Resistor
Networks, Arrays***37,021 Items***Specialized
Resistors***781 Items***Through Hole
Resistors***5,07,221 Items*

TITOMA

Design for Manufacturing Asia





<https://resources.altium.com/p/why-use-through-hole-technology-in-pcb-design>

SMD Resistor Sizes



Code		Length (l)		Width (w)		Height (h)		Power
Imperial	Metric	inch	mm	inch	mm	inch	mm	Watt
0201	0603	0.024	0.6	0.012	0.3	0.01	0.25	1/20 (0.05)
0402	1005	0.04	1.0	0.02	0.5	0.014	0.35	1/16 (0.062)
0603	1608	0.06	1.55	0.03	0.85	0.018	0.45	1/10 (0.10)
0805	2012	0.08	2.0	0.05	1.2	0.018	0.45	1/8 (0.125)
1206	3216	0.12	3.2	0.06	1.6	0.022	0.55	1/4 (0.25)
1210	3225	0.12	3.2	0.10	2.5	0.022	0.55	1/2 (0.50)
1812	3246	0.12	3.2	0.18	4.6	0.022	0.55	1
2010	5025	0.20	5.0	0.10	2.5	0.024	0.6	3/4 (0.75)
2512	6332	0.25	6.3	0.12	3.2	0.024	0.6	1

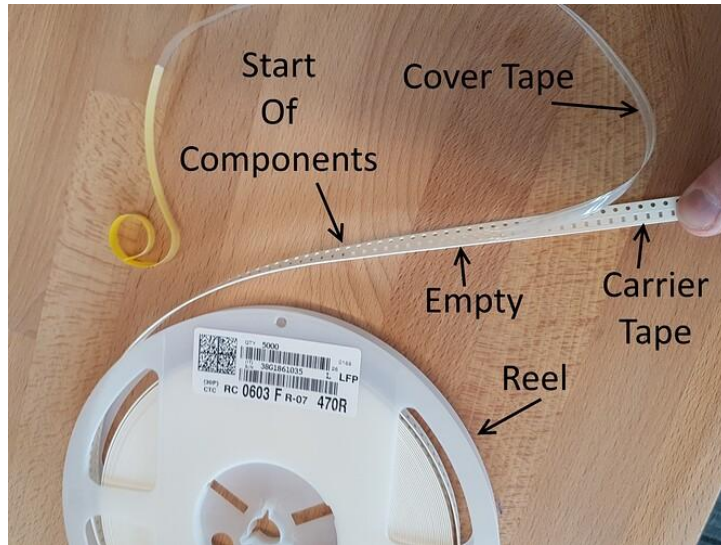
- Similar for Capacitors, LEDs etc.,
- For the course, 0402 (Imperial) package size will be used.

<https://eepower.com/resistor-guide/resistor-standards-and-codes/resistor-sizes-and-packages/>

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Cut Tape vs. Reel

Tape and Reel



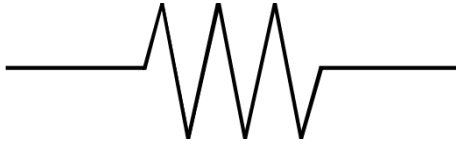
Cut-Tape



<https://forum.digikey.com/t/a-closer-look-at-taped-packaging-including-cut-tape-and-tape-and-reels/17211>

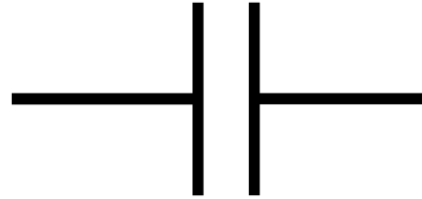
Component Parameters

Resistor



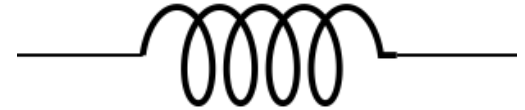
- Resistance
- Power Rating
- Package (e.g., 0402)

Capacitor



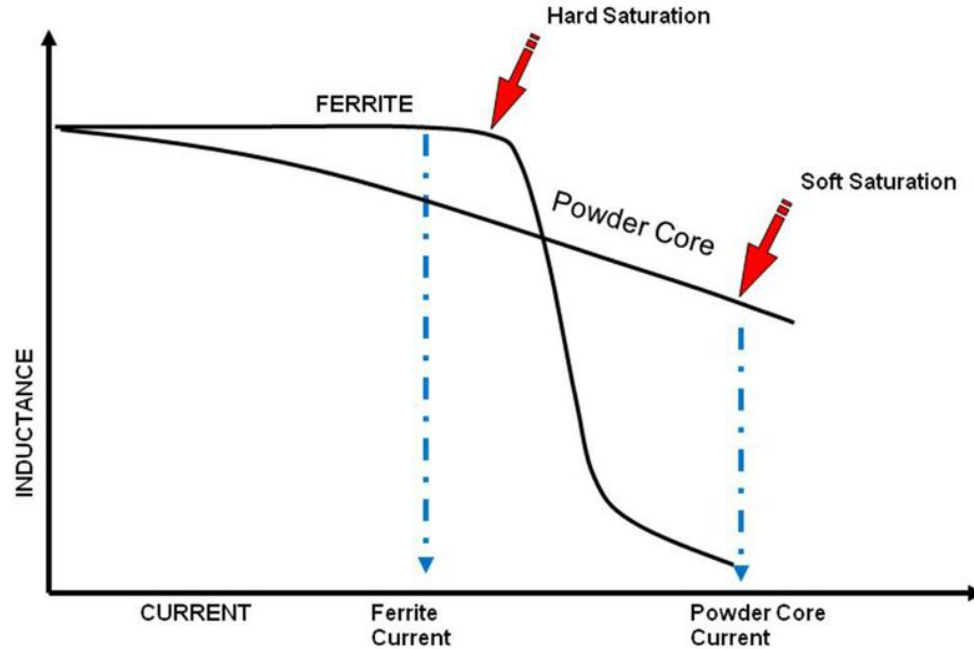
- Capacitance
- Voltage Rating
- Package (e.g., 0402)

Inductor



- Inductance
- Saturation Current
- Package (e.g., 0402)

Inductor Saturation



<https://www.powersystemsdesign.com/power-inductors-and-peak-current-handling-capability/22>

digikey: Part# LQW18ASR11G0ZD

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