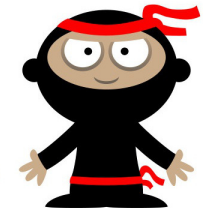
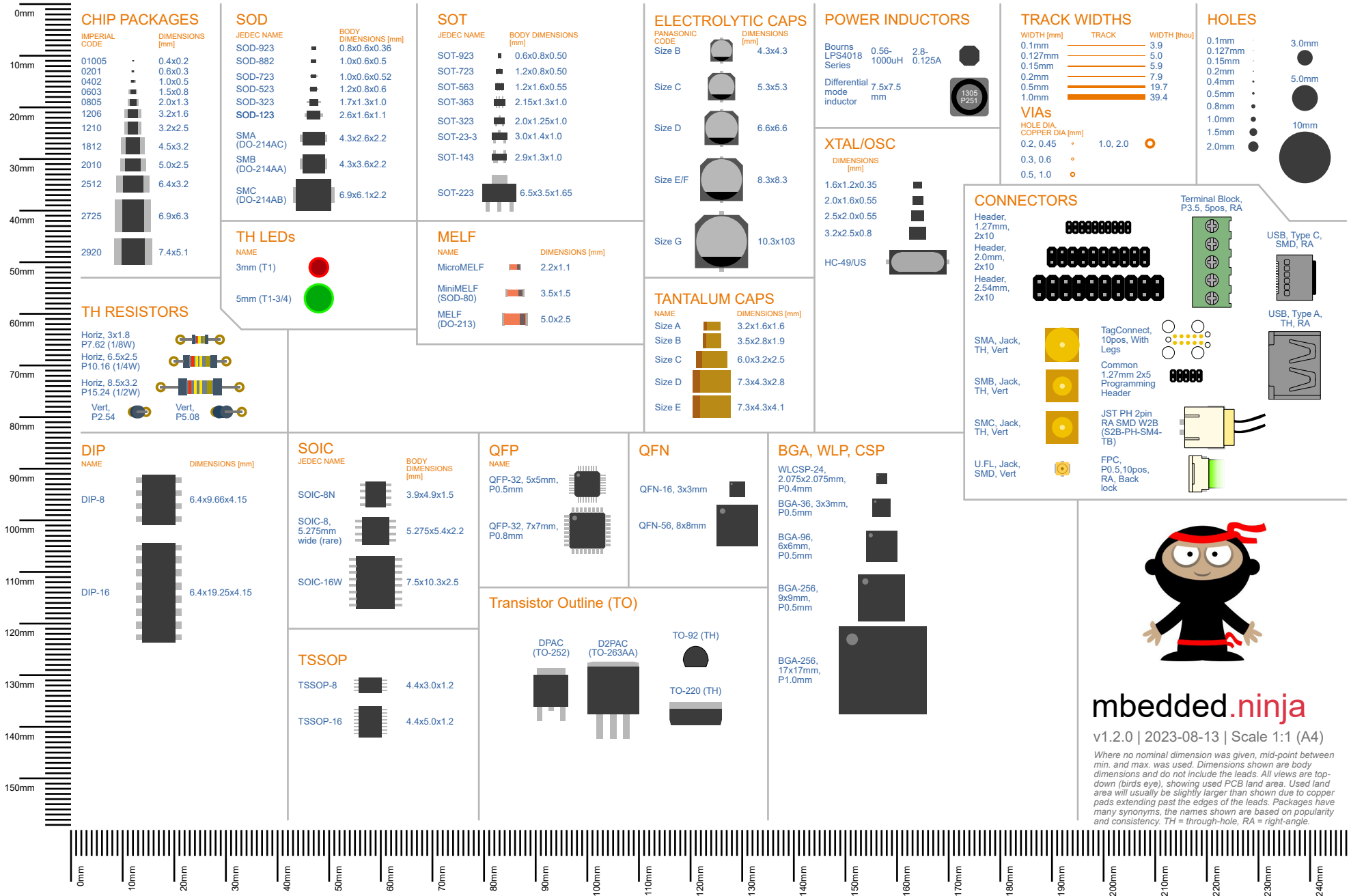


COMPONENT SIZE COMPARISON CHART



mbedded.ninja

v1.2.0 | 2023-08-13 | Scale 1:1 (A4)

Where no nominal dimension was given, mid-point between min. and max. was used. Dimensions shown are body dimensions and do not include the leads. All views are top-down (birds eye), showing used PCB land area. Used land area will usually be slightly larger than shown due to copper pads extending past the edges of the leads. Packages have many synonyms, the names shown are based on popularity and consistency. TH = through-hole, RA = right-angle.

SMD REFERENCE SHEET

PASSIVE RECTANGULAR

SMD PACKAGE		DIMENSIONS mm	DIMENSIONS in
01005		0.4 x 0.2	0.016 x 0.008
0201		0.6 x 0.3	0.02 x 0.01
0402		1.0 x 0.5	0.04 x 0.02
0603		1.5 x 0.8	0.06 x 0.03
0805		2.0 x 1.3	0.08 x 0.05
1008		2.5 x 2.0	0.10 x 0.08
1206		3.0 x 1.5	0.12 x 0.06
1210		3.2 x 2.5	0.125 x 0.10
1806		4.5 x 1.6	0.18 x 0.06
1812		4.6 x 3.0	0.18 x 0.125
2010		5.0 x 2.5	0.20 x 0.10
2512		6.3 x 3.2	0.25 x 0.125

SOD SMALL OUTLINE DIODE

SOD PACKAGE TYPE		DIM(MM)
SOD-723		1.4 x 0.6 x 0.59
SOD-523		1.25 x 0.85 x 0.65
SOD-323		1.7 x 1.25 x 0.95
SOD-128		5 x 2.7 x 1.1
SOD-123		3.68 x 1.17 x 1.6
SOD-80C		3.5 x 1.5

DO-214

DO PACKAGE TYPE		DIM(MM)
DO-214AA (SMB)		5.3 x 3.6 x 2.25
DO-214AB (SMC)		7.95 x 5.9 x 2.25
DO-214AC (SMA)		5.2 x 2.6 x 2.15

MELF METAL ELECTRODE LEADLESS FACE

SMD PACKAGE TYPE		DIMENSIONS MM	RATING
MicroMELF / 0102		2.2 x 1.1	0.2 - 0.3W / 150V
MiniMELF / 0204		3.6 x 1.4	0.25 - 0.4W / 200V
MELF / 0207		5.8 x 2.2	0.4 - 1W / 300V

TANTALUM CAPACITORS

SMD PACKAGE		DIMENSIONS mm	EIA STANDARD
Size A		3.2 x 1.6 x 1.6	EIA 3216-18
Size B		3.5 x 2.8 x 1.9	EIA 3528-21
Size C		6.0 x 3.2 x 2.2	EIA 6032-28
Size D		7.3 x 4.3 x 2.4	EIA 7343-31
Size E		7.3 x 4.3 x 4.1	EIA 7343-43

ALUMINIUM CAPACITORS

SMD PACKAGE		DIMENSIONS mm
Size A		3.3 x 3.3
Size B		4.3 x 4.3
Size C		5.3 x 5.3
Size D		6.6 x 6.6
Size E / F		8.3 x 8.3
Size G		10.3 x 10.3

SOT-23	SOT-223	TO-252	TO-263

SO8	TSSOP8	SSOP8	SOP8
3.8 x 4.8	3.1 x 4.5	2.9 x 3.15	6.5 x 5.6

PCB TRACK WIDTH

MILS	TRACE WIDTH
6	
8	
10	
12	
14	
16	
18	
20	
24	
30	
40	
60	

PCB VIA'S

15	18	20	22	24	30

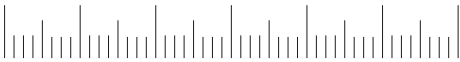
AWG	Ø MM	WIRE SIZE AMPERE
10	2.59	55
15	1.45	28
20	0.81	11
25	0.45	2.7
28	0.32	1.4
30	0.25	0.86

HOLES DIAMETER

0.5	0.6	0.7	0.8	0.9	1.0
1.2	1.4	1.5	1.6		
2.2	2.8	3.0	3.2		

PITCH REFERENCE

2.54	
2.54	
2.00	
2.00	
1.27	
1.27	
1.00	
1.00	



QFN32	32 TQFP
5.0 x 5.0	7.0 x 7.0