

The ultimate PCB design reference board

v.1.0

Front:

conversion tables
(inch / mm
mil / mm
oz / gr)

Silkscreen line width

convert.

1inch = 25.4mm
1mil = 0.0254mm
1oz = 28.35gr

mil	mm
10	0.254
20	0.508
30	0.762
40	1.016
50	1.270
60	1.524
70	1.778
80	2.032
90	2.286

Copper Thick.

105um = 3oz
70um = 2oz
35um = 1oz
18um = 1/2oz

Line width



Text style

8% <-ratio-> 15%

2.0mm 0.7mm
1.7mm 0.8mm
1.5mm 0.9mm
1.2mm 1.0mm
1.0mm 1.2mm
0.9mm 1.5mm
0.8mm 1.7mm
0.7mm 2.0mm

in uncoated cop.

Trace width Vs. I
(@35um/+10°C)

Trace width	Current
0.2mm	0.6A
0.3mm	0.9A
0.4mm	1.2A
0.5mm	1.5A
0.6mm	1.7A
0.7mm	1.8A
0.8mm	2.0A
1.0mm	2.5A
1.2mm	2.7A
1.5mm	3.2A
2.0mm	4.0A
7.6mm	10.0A

AWG D I(Pwr)

AWG	D	I(Pwr)
08	3.26mm	24A
10	2.59mm	15A
12	2.05mm	9.3A
15	1.45mm	4.7A
17	1.15mm	2.9A
20	0.81mm	1.5A
22	0.64mm	0.9A
24	0.51mm	0.6A
26	0.40mm	0.4A
27	0.36mm	0.3A
28	0.32mm	0.2A
29	0.29mm	0.2A
30	0.25mm	0.1A

Trace volt. diff. Vs fonction. clearance

Trace volt.	diff.	Vs	function.	clearance
30V	0.05	0.1	0.1	0.05mm
50V	0.1	0.6	0.6	0.13mm
100V	0.1	0.6	1.5	0.13mm
150V	0.2	0.6	3.2	0.40mm
170V	0.2	1.25	3.2	0.40mm
250V	0.2	1.25	6.4	0.40mm
300V	0.2	1.25	12.5	0.40mm
500V	0.25	2.5	12.5	0.80mm

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SChauderge 150526 v.1.0


Back:

connector pitch


8cm metric ruler

copper trace width common SMD RLC footprints common SMD diodes and transistors footprints common SMD integrated circuit footprint

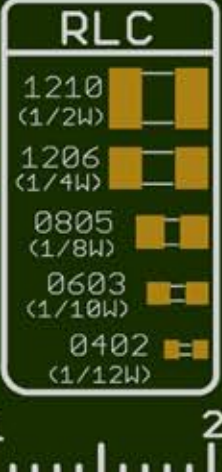
Pitch



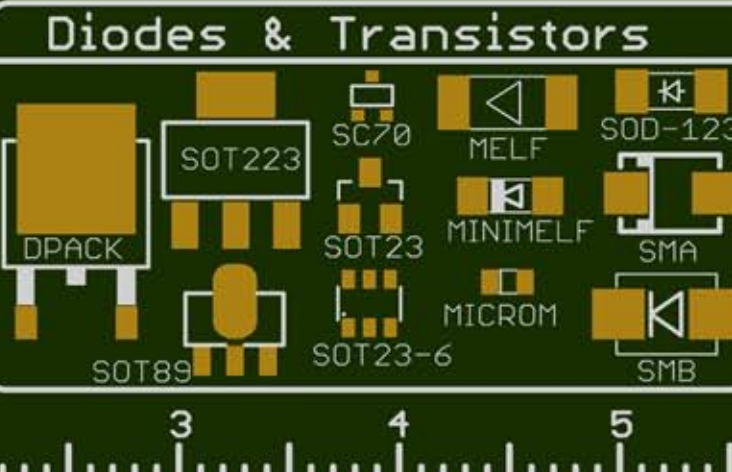
Trace



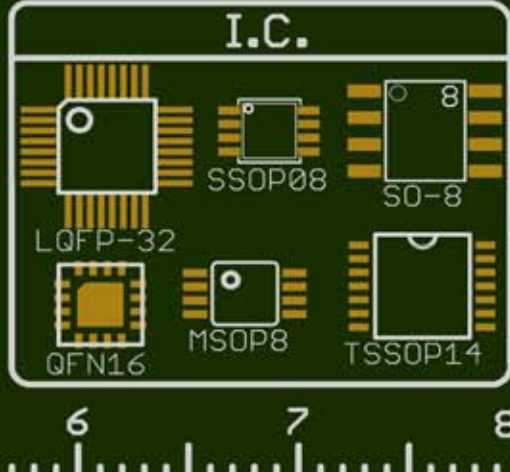
RLC



Diodes & Transistors



I.C.



Via (mm) Vs. I max

Via (mm)	I max
1.3A	0.35
1.3A	0.4
1.5A	0.5
1.7A	0.6
1.8A	0.7
1.9A	0.8
2.0A	0.9
2.2A	1.0
2.5A	1.2
2.9A	1.5
2.9A	2.0

Via drilling diameter and corresponding max. current
(given for 35um copper thick and elevation of +10°C)

Where to buy: <https://www.tindie.com/stores/sinzu/>