

# SMD cheat sheet

## PASSIVE RECTANGULAR

IMP	Size	MET	Power Rating (resistors)
01005	-	0402	0.031W
0201	-	0603	0.05W
0402	-	1005	0.062W - 0.1W
0603	-	1608	0.1W
0805	-	2012	0.125W
1008	-	2520	
1206	-	3216	0.25W
1210	-	3225	0.5W
1806	-	4516	
1812	-	4532	0.75W
2010	-	5025	0.75W
2512	-	6332	1W

## ALUMINIUM CAPACITORS

Panasonic	Size	Chemi-Con	Dimensions
A		B	3.3 x 3.3
B		D	4.3 x 4.3
C		E	5.3 x 5.3
D		F	6.6 x 6.6
E/F		H	8.3 x 8.3
G		J	10.3 x 10.3
K		K	13.0 x 13.0
H		L	13.5 x 13.5
J		M	17.0 x 17.0
K		M	19.0 x 19.0

## SOD (Small Outline Diode)

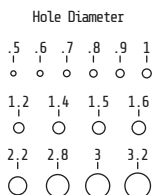
CODE	Size	Alt	Dimensions
SOD-723			1.4 x 0.6 x 0.59
SOD-523		SC-79	1.25 x 0.85 x 0.65
SOD-323		SC-90	1.7 x 1.25 x 0.95
SOD-128			5 x 2.7 x 1.1
SOD-123			3.68 x 1.17 x 1.6
SOD-80C			3.5 x 1.5

## MELF (Metal Electrode Leadless Face)

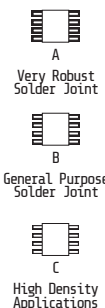
CODE	Size	Alt	l x diam	Typical Rating
MicroMELF		0102	MMU 2.2 x 1.1	0.2W to 0.3W / 150V
MiniMELF		0204	MMA 3.6 x 1.4	0.25W to 0.4W / 200V
MELF		0207	MMB 5.8 x 2.2	0.4W to 1W / 300V

## DO-214

CODE	Size	Alt	Dimensions
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



## Density Level



## Trace Width

mils	Size	mA
6		550
8		690
10		830
12		970
18		1,320
24		1,650
30		1,940
40		2,390

## AWG

AWG	mm	Size	A
10	2.59		55A
8	1.45		28A
15	0.81		11A
20	0.45		2.7A
28	0.32		1.4A
30	0.25		860mA

## Units Converter

inch	mils	mm
	8	.2032
	12	.3047
	15.740	.40
	39.370	1.00
	100	2.54
	1,000	25.40

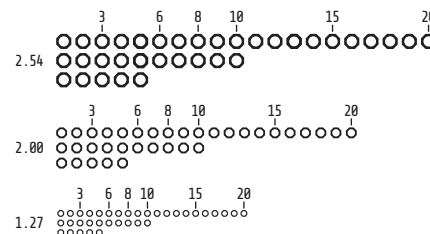
## TANTALUM CAPACITORS

EIA	Size	KEMET	AVX	Dimensions
2012-12		R	R	2.0 x 1.3 x 1.2
3216-10		I	K	3.2 x 1.6 x 1.0
3216-12		S	S	3.2 x 1.6 x 1.2
3216-18		A	A	3.2 x 1.6 x 1.8
3528-12		T	T	3.5 x 2.8 x 1.2
3528-21		B	B	3.5 x 2.8 x 2.1
6032-15		U	W	6.0 x 3.2 x 1.5
6032-28		C	C	6.0 x 3.2 x 2.8
7260-38		E	V	7.3 x 6.0 x 3.8
7343-20		V	Y	7.3 x 4.3 x 2.0
7343-31		D	D	7.3 x 4.3 x 3.1
7343-43		X	E	7.3 x 4.3 x 4.3

## LED's Packages

Code	Size	Dimensions
LCNx		5 x 3.2
LCNx		6 x 3.5
LCNx		7 x 5
LCNx/LCCx		7 x 5
2835		2.8 x 3.5
3014		3.0 x 1.4
3528		3.5 x 2.8
3535		3.5 x 3.5
5050		5.5 x 5.0

## Pitch Reference



## Vias (mils)

