



copper gross area	0.130986	in ²
	0.845269	cm ²
copper packing fraction	78%	
net copper area	0.102169	in ²
	0.659154	cm ²
max current per turn	10000	A
current density	15170.96	A/cm ²

electrical insulation layer
0.010 in Kapton

"radial" build

layer	thickness	no. in stack	subtotal thickness	total for group	Cumulative build
insulating layer	0.01	1	0.01	0.01	0.01
copper chill plate	0.04	1	0.04	0.04	0.05
ground wrap-Kapton	0.004	2	0.008	0.008	0.058
ground wrap-glass	0.01	3	0.03	0.038	0.088
turn wrap-glass	0.004	2	0.008	0.008	0.096
turn wrap-serve	0.004	1	0.004	0.004	0.1
turn copper	0.383	1	0.383	0.383	0.483
turn wrap-serve	0.004	1	0.004	0.004	0.487
turn wrap-glass	0.004	2	0.008	0.407	0.495
shim, layers 1-2	0.043	1	0.043	0.043	0.538
turn wrap-glass	0.004	2	0.008	0.008	0.546
turn wrap-serve	0.004	1	0.004	0.004	0.55
turn copper	0.383	1	0.383	0.933	0.933
turn wrap-serve	0.004	1	0.004	0.004	0.937
turn wrap-glass	0.004	2	0.008	0.407	0.945
shim, layers 2-3	0.043	1	0.043	0.043	0.988
turn wrap-glass	0.004	2	0.008	0.008	0.996
turn wrap-serve	0.004	1	0.004	0.004	1
turn copper	0.383	1	0.383	1.383	1.383
turn wrap-serve	0.004	1	0.004	0.004	1.387
turn wrap-glass	0.004	2	0.008	0.407	1.395
shim, layers 3-4	0.043	1	0.043	0.043	1.438
turn wrap-glass	0.004	2	0.008	0.008	1.446
turn wrap-serve	0.004	1	0.004	0.004	1.45
turn copper	0.383	1	0.383	1.833	1.833
turn wrap-serve	0.004	1	0.004	0.004	1.837
turn wrap-glass	0.004	2	0.008	0.407	1.845
shim, layers 4-5	0.043	1	0.043	0.043	1.888
turn wrap-glass	0.004	2	0.008	0.008	1.896
turn wrap-serve	0.004	1	0.004	0.004	1.9
turn copper	0.383	1	0.383	2.283	2.283
turn wrap-serve	0.004	1	0.004	0.004	2.287
turn wrap-glass	0.004	2	0.008	0.407	2.295
shim, layers 5-6	0.043	1	0.043	0.043	2.338
turn wrap-glass	0.004	2	0.008	0.008	2.346
turn wrap-serve	0.004	1	0.004	0.004	2.35
turn copper	0.383	1	0.383	2.733	2.733
turn wrap-serve	0.004	1	0.004	0.004	2.737
turn wrap-glass	0.004	2	0.008	0.407	2.745
shim, layers 6-7	0.043	1	0.043	0.043	2.788
turn wrap-glass	0.004	2	0.008	0.008	2.796
turn wrap-serve	0.004	1	0.004	0.004	2.8
turn copper	0.383	1	0.383	3.183	3.183
turn wrap-serve	0.004	1	0.004	0.004	3.187
turn wrap-glass	0.004	2	0.008	0.407	3.195
shim, layers 7-8	0.043	1	0.043	0.043	3.238
turn wrap-glass	0.004	2	0.008	0.008	3.246
turn wrap-serve	0.004	1	0.004	0.004	3.25
turn copper	0.383	1	0.383	3.633	3.633
turn wrap-serve	0.004	1	0.004	0.004	3.637
turn wrap-glass	0.004	2	0.008	0.407	3.645
shim, layers 8-9	0.043	1	0.043	0.043	3.688
turn wrap-glass	0.004	2	0.008	0.008	3.696
turn wrap-serve	0.004	1	0.004	0.004	3.7
turn copper	0.383	1	0.383	4.083	4.083
turn wrap-serve	0.004	1	0.004	0.004	4.087
turn wrap-glass	0.004	2	0.008	0.407	4.095
shim, layers 10	0.043	1	0.043	0.043	4.138
turn wrap-glass	0.004	2	0.008	0.008	4.146
turn wrap-serve	0.004	1	0.004	0.004	4.15
turn copper	0.383	1	0.383	4.533	4.533
turn wrap-serve	0.004	1	0.004	0.004	4.537
turn wrap-glass	0.004	2	0.008	0.407	4.545
ground wrap-Kapton	0.01	3	0.03	0.038	4.575
ground wrap-glass	0.004	2	0.008	0.008	4.583
copper chill plate	0.04	1	0.04	0.04	4.623
insulating layer	0.01	1	0.01	0.01	4.633
copper chill plate	0.04	1	0.04	0.04	4.673

"lateral" build

layer	thickness	no. in stack	subtotal thickness	total for group	Cumulative build
insulating layer	0.01	1	0.01	0.01	0.01
copper chill plate	0.04	1	0.04	0.04	0.05
ground wrap-Kapton	0.004	2	0.008	0.008	0.058
ground wrap-glass	0.01	3	0.03	0.038	0.098
turn wrap-glass	0.004	2	0.008	0.008	0.096
turn wrap-serve	0.004	1	0.004	0.004	0.1
turn copper	0.342	1	0.342	0.442	0.442
turn wrap-serve	0.004	1	0.004	0.004	0.446
turn wrap-glass	0.004	2	0.008	0.386	0.454
shim, turn A-B	0	1	0	0	0.454
turn wrap-serve	0.004	2	0.008	0.008	0.462
turn wrap-glass	0.004	1	0.004	0.004	0.466
turn copper	0.342	1	0.342	0.808	0.808
turn wrap-serve	0.004	1	0.004	0.004	0.812
turn wrap-glass	0.004	2	0.008	0.386	0.82
shim, turn B-C	0.045	1	0.045	0.045	0.865
turn wrap-glass	0.004	2	0.008	0.008	0.873
turn wrap-serve	0.004	1	0.004	0.004	0.877
turn copper	0.342	1	0.342	1.219	1.219
turn wrap-serve	0.004	1	0.004	0.004	1.223
turn wrap-glass	0.004	2	0.008	0.386	1.231
shim, turn C-D	0	1	0	0	1.231
turn wrap-glass	0.004	2	0.008	0.008	1.239
turn wrap-serve	0.004	1	0.004	0.004	1.243
turn copper	0.342	1	0.342	1.585	1.585
turn wrap-serve	0.004	1	0.004	0.004	1.589
turn wrap-glass	0.004	2	0.008	0.386	1.597
ground wrap-glass	0.01	3	0.03	0.038	1.627
ground wrap-Kapton	0.004	2	0.008	0.008	1.635
copper chill plate	0.04	1	0.04	0.04	1.675
insulating layer	0	1	0	0	1.675