

Time	kOhms	Temperature	raw deltaT	smoothed deltaT	smth delT/sec	heat dissipation (W)	above ambient by (C)	dissipation/ temp diff (W/C)	expected operating temp range (C)	Dissipation in expected operating range (W)	
5	6.51	36.5	-	-			13.5		30	439.7055944	
10	6.96	34.5	-2	-			11.5		35	753.781019	
15	7.18	33.75	-0.75	-2.75	-0.275	2517.405	10.75	234.1772093	40	1067.856444	
20	7.48	32.5	-1.25	-2	-0.2	1830.84	9.5	192.72	45	1381.931868	
25	7.45	32.5	0	-1.25	-0.125	1144.275	9.5	120.45	50	1696.007293	
30	7.6	32	-0.5	-0.5	-0.05	457.71	9	50.85666667	55	2010.082717	
35	7.64	32	0	-0.5	-0.05	457.71	9	50.85666667	60	2324.158142	
40	7.68	32	0	0	0	0	9	0	65	2638.233566	
45	7.75	31.5	-0.5	-0.5	-0.05	457.71	8.5	53.84823529			
50	7.79	31.5	0	-0.5	-0.05	457.71	8.5	53.84823529			
55	7.89	31.25	-0.25	-0.25	-0.025	228.855	8.25	27.74			
60	7.9	31	-0.25	-0.5	-0.05	457.71	8	57.21375			
120	8.31	29.75	-1.25	-1.5	-0.02307692308	211.2507692	6.75	31.29641026		water mass (kg) 2.19	
180	8.63	28.75	-1	-2.25	-0.01875	171.64125	5.75	29.85065217		water cp (kJ/kg°C) 4.18	
240	9.03	27.5	-1.25	-2.25	-0.01875	171.64125	4.5	38.1425		Ambient temp (C) 23	
300	9.34	26.5	-1	-2.25	-0.01875	171.64125	3.5	49.04035714			
360	9.6	25.75	-0.75	-1.75	-0.01458333333	133.49875	2.75	48.545			
420	9.8	25.25	-0.5	-1.25	-0.01041666667	95.35625	2.25	42.38055556			
480	9.96	25	-0.25	-0.75	-0.00625	57.21375	2	28.606875			
540	10.08	24.5	-0.5	-0.75	-0.00625	57.21375	1.5	38.1425			
600	10.18	24.25	-0.25	-0.75	-0.00625	57.21375	1.25	45.771			
Mean									62.81508491		

