



Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.
B1-.040W	3.47	34	118	1800°C	F3-2X.040W	4.00	68	272	1800°C	FB1-.010Ta	2.93	462	1354	1600°C
B1-3X.025W	4.22	43	181	1800°C	F3-3X.025W	4.61	48	221	1800°C	FB1-.015Mo	1.38	634	875	1400°C
B1-3X.030W	3.69	53	196	1800°C	F3-3X.030W	4.15	60	249	1800°C	FB1-.015Ta	2.57	641	1647	1600°C
B2-.040W	3.04	36	109	1800°C	F3-4X.030W	4.00	77	308	1800°C	FB2-.005Mo	1.90	320	608	1400°C
B2-3X.025W	3.50	44	154	1800°C	F4-.040W	3.70	38	141	1800°C	FB2-.005Ta	3.88	348	1350	1600°C
B2-3X.030W	3.00	54	162	1800°C	F4-2X.040W	3.97	66	262	1800°C	FB2-.010Mo	1.38	448	618	1400°C
B3-.040W	5.40	33	178	1800°C	F4-3X.025W	5.29	48	254	1800°C	FB2-.010Ta	2.77	491	1360	1600°C
B3-3X.025W	3.51	42	147	1800°C	F4-3X.030W	4.28	62	265	1800°C	FB2-.015Mo	1.16	547	635	1400°C
B4-.060W	4.02	59	237	1800°C	F4-4X.030W	3.63	73	265	1800°C	FB2-.015Ta	2.56	657	1682	1600°C
B4-3X.030W	5.24	52	272	1800°C	F5-.040W	6.90	37	255	1800°C	FB3-.005Mo	2.23	303	676	1400°C
B5-.040W	5.50	33	182	1800°C	F5-2X.040W	6.82	64	436	1800°C	FB3-.005Ta	4.60	301	1385	1600°C
B5-3X.025W	5.83	37	216	1800°C	F5-3X.025W	8.05	45	362	1800°C	FB3-.010Mo	1.60	431	690	1400°C
B6-.040W	6.62	32	212	1800°C	F5-3X.030W	6.58	57	375	1800°C	FB3-.010Ta	3.89	521	2027	1600°C
B6-3X.025W	7.04	39	275	1800°C	F5-3X.040W	5.60	83	465	1800°C	FB3-.015Mo	1.38	536	740	1400°C
B7-.040W	6.22	32	199	1800°C	F5-4X.030W	6.10	69	421	1800°C	FB3-.015Ta	3.73	736	2745	1600°C
B7-3X.025W	6.84	38	260	1800°C	F6-2X.040W	7.20	64	461	1800°C	FB4-.005Mo	2.18	300	654	1400°C
B8A-3X.025W	6.28	47	295	1800°C	F6-3X.025W	8.72	44	384	1800°C	FB4-.005Ta	4.14	277	1147	1600°C
B8A-3X.030W	6.06	55	333	1800°C	F6-3X.030W	8.25	58	478	1800°C	FB4-.010Mo	1.60	413	661	1400°C
B8B-3X.025W	5.80	43	249	1800°C	F6-3X.040W	6.42	84	539	1800°C	FB4-.010Ta	3.64	495	1802	1600°C
B8B-3X.030W	5.15	57	294	1800°C	F6-4X.030W	7.29	71	518	1800°C	FB4-.015Mo	1.72	663	1140	1400°C
B9-3X.030W	8.42	57	480	1800°C	F7-2X.040W	10.97	55	603	1800°C	FB4-.015Ta	3.15	646	2035	1600°C
B9-3X.040W	7.18	85	610	1800°C	F7-3X.030W	11.65	52	606	1800°C	FB10-.005Mo	0.75	166	125	1400°C
B9-4X.030W	7.76	70	543	1800°C	F7-3X.040W	9.40	78	733	1800°C	FB10-.005Ta	1.56	159	248	1600°C
B10-3X.040W	8.73	85	742	1800°C	F7-4X.030W	10.31	65	670	1800°C	FB10-.010Mo	0.66	265	175	1400°C
B10-4X.030W	9.76	71	693	1800°C	F8-2X.040W	5.00	66	330	1800°C	FB10-.010Ta	1.12	242	271	1600°C
B11-3X.040W	19.70	84	1655	1800°C	F8-3X.030W	5.39	62	334	1800°C	FB10-.015Mo	0.68	351	237	1400°C
B12A-.040W	5.00	37	185	1800°C	F8-3X.040W	4.61	87	401	1800°C	FB10-.015Ta	1.12	341	382	1600°C
B12A-3X.025W	5.31	44	234	1800°C	F8-4X.030W	5.09	74	377	1800°C	FB11-.005Mo	1.11	118	131	1400°C
B12A-3X.030W	4.80	55	264	1800°C	F9-2X.040W	6.66	65	433	1800°C	FB11-.005Ta	2.12	137	290	1600°C
B12B-.040W	3.96	33	131	1800°C	F9-3X.030W	6.50	57	370	1800°C	FB11-.010Mo	0.76	186	141	1400°C
B12B-.060W	2.54	99	251	1800°C	F9-3X.040W	5.43	86	467	1800°C	FB11-.010Ta	1.69	207	350	1600°C
B12B-3X.025W	4.56	41	187	1800°C	F9-4X.030W	6.07	71	431	1800°C	FB11-.015Mo	0.71	243	173	1400°C
B12B-3X.030W	3.17	57	181	1800°C	F10-2X.040W	10.62	61	648	1800°C	FB11-.015Ta	1.45	253	367	1600°C
B13-.040W	3.22	37	119	1800°C	F10-3X.030W	10.90	55	600	1800°C	FB12-.005Mo	1.20	143	172	1400°C
B13-3X.025W	4.04	45	182	1800°C	F10-3X.040W	9.02	83	749	1800°C	FB12-.005Ta	2.00	141	282	1600°C
B13-3X.030W	3.36	57	192	1800°C	F10-4X.030W	10.00	68	680	1800°C	FB12-.010Mo	0.88	211	185	1400°C
B14-.060W	4.83	54	261	1800°C	F11-2X.040W	6.74	65	438	1800°C	FB12-.010Ta	1.63	200	326	1600°C
B14-3X.030W	6.25	50	312	1800°C	F11-3X.030W	7.07	58	410	1800°C	FB12-.015Mo	0.83	272	227	1400°C
B14-4X.030W	5.82	62	361	1800°C	F11-3X.040W	5.70	87	496	1800°C	FB12-.015Ta	1.49	257	383	1600°C
CH-1	1.34	273	366	1600°C	F11-4X.030W	6.40	70	443	1800°C	H1-.040W	7.90	31	245	1800°C
CH-5	1.79	346	619	1600°C	F12-3X.025W	4.44	46	204	1800°C	H1-.060W	6.10	71	433	1800°C
CH-6	1.90	395	751	1600°C	F12-3X.030W	3.82	57	218	1800°C	H2-.040W	4.18	36	150	1800°C
CH-7	1.47	187	275	1600°C	F13-3X.025W	11.00	44	484	1800°C	H2-.060W	2.83	69	195	1800°C
CH-8	1.73	199	344	1600°C	F13-3X.030W	9.06	57	516	1800°C	H3-.040W	7.39	34	251	1800°C
CH-9	1.93	191	369	1600°C	F13-4X.030W	8.59	71	610	1800°C	H3-.060W	5.22	63	329	1800°C
CH-10	1.70	191	325	1600°C	F14-3X.030W	9.44	56	529	1800°C	ME1	1.45	266	386	1600°C
CH-11	1.70	191	325	1600°C	F14-3X.040W	8.20	88	722	1800°C	ME2	2.52	141	355	1600°C
CH-12	2.19	339	742	1600°C	F14-4X.030W	8.80	68	598	1800°C	ME2/ME2A	1.74	176	306	1600°C
CH-13	2.19	339	742	1600°C	F15-3X.030W	11.53	57	657	1800°C	ME3-.005Mo	0.94	150	141	1400°C
CH-14	3.82	525	2006	1600°C	F15-3X.040W	9.66	85	821	1800°C	ME3-.005Ta	1.77	138	244	1600°C
CRW-1	1.05	78	82	1800°C	F15-4X.030W	10.63	70	744	1800°C	ME3-.005W	2.00	202	404	1800°C
CRW-2	2.02	78	158	1800°C	F16-3X.040W	6.26	85	532	1800°C	ME3-AO-Mo	0.86	151	130	1200°C
CRW-3	2.40	77	185	1800°C	F16-4X.030W	6.75	69	466	1800°C	ME4-.005Mo	0.94	93	87	1400°C
F1-.040W	3.07	36	111	1800°C	F16A	1.12	148	166	1500°C	ME4-.005Ta	1.50	98	147	1600°C
F1-3X.025W	3.00	42	126	1800°C	F16B	1.19	149	177	1500°C	ME4-.005W	1.83	143	262	1800°C
F1-3X.030W	2.94	54	159	1800°C	F16C	1.30	172	224	1500°C	ME4-AO-Mo	0.83	116	96	1200°C
F2-3X.025W	3.43	49	168	1800°C	F16D	3.62	223	807	1500°C	ME5-.005Mo	0.85	58	49	1400°C
F2-3X.030W	3.08	63	194	1800°C	FB1-.005Mo	1.65	293	483	1400°C	ME5-.005Ta	1.40	55	77	1600°C
F2-4X.030W	2.70	77	208	1800°C	FB1-.005Ta	3.78	339	1281	1600°C	ME5-.005W	1.69	80	135	1800°C
F3-.040W	3.91	39	152	1800°C	FB1-.010Mo	1.21	413	500	1400°C	ME6A-.005Mo	0.85	102	87	1400°C

Power table for above sources is for reference only. With evaporant added the power required could change significantly. Sources were tested without evaporant or crucibles installed.

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Temperature measurements were taken with an infrared thermometer at the refractory temperature indicated above. Part # P8 power based on 12" length.



VACUUM EVAPORATION POWER REQUIREMENT TABLE

Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.
ME6A-.005Ta	1.85	95	176	1600°C	ME25-AO-Mo	0.94	274	258	1200°C	S4-.005Mo	1.31	63	83	1400°C
ME6A-.005W	1.83	145	265	1800°C	P1-.060W	2.08	73	152	1800°C	S4-.005Ta	2.62	64	168	1600°C
ME6B-.005Mo	0.90	97	87	1400°C	P1-3X.025W	2.95	50	148	1800°C	S4-.005W	2.76	96	265	1800°C
ME6B-.005Ta	1.73	96	166	1600°C	P1-3X.030W	2.36	65	153	1800°C	S4-.010Mo	0.97	93	90	1400°C
ME6B-.005W	1.88	144	271	1800°C	P1-4X.030W	2.76	80	221	1800°C	S4-.010Ta	1.83	93	170	1600°C
ME6B-AO-Mo	0.84	106	89	1200°C	P2-.060W	1.84	75	138	1800°C	S4-.010W	2.03	138	280	1800°C
ME7-.005Mo	1.12	53	59	1400°C	P2-3X.025W	2.83	48	136	1800°C	S4-.015W	1.51	191	288	1800°C
ME7-.005Ta	1.72	49	84	1600°C	P2-3X.030W	3.56	78	278	1800°C	S5-.005Mo	1.59	133	211	1400°C
ME7-.005W	2.03	76	154	1800°C	P2-4X.030W	2.04	82	167	1800°C	S5-.005Ta	3.29	149	490	1600°C
ME8-.005Mo	1.04	79	82	1400°C	P3-.060W	1.39	79	110	1800°C	S5-.005W	3.18	199	633	1800°C
ME8-.005Ta	2.16	93	201	1600°C	P3-3X.025W	2.26	50	113	1800°C	S5-.010Mo	1.02	208	212	1400°C
ME8-.005W	2.57	129	332	1800°C	P3-3X.030W	1.94	64	124	1800°C	S5-.010Ta	2.09	220	460	1600°C
ME9-.005Mo	0.80	72	58	1400°C	P3-4X.030W	1.59	84	134	1800°C	S6-.005Mo	1.46	123	180	1400°C
ME9-.005Ta	1.48	67	99	1600°C	P4-.060W	2.04	74	151	1800°C	S6-.005Ta	2.77	133	368	1600°C
ME9-.005W	1.55	97	150	1800°C	P4-3X.025W	3.20	51	163	1800°C	S6-.005W	3.04	199	605	1800°C
ME9-AO-Mo	0.80	83	66	1200°C	P4-3X.030W	2.04	64	131	1800°C	S6-.010Mo	0.99	181	179	1400°C
ME10-.005Ta	1.07	131	140	1600°C	P4-4X.030W	2.69	80	215	1800°C	S6-.010Ta	2.00	186	372	1600°C
ME11-.030W	3.59	25	90	1800°C	P5-.040W	3.44	40	138	1800°C	S6-.010W	2.14	263	563	1800°C
ME11-3X.025W	3.13	44	138	1800°C	P5-.060W	3.09	71	219	1800°C	S7-.005Mo	1.21	108	131	1400°C
ME12-.030W	2.47	27	67	1800°C	P5-3X.025W	3.80	51	194	1800°C	S7-.005Ta	2.48	138	342	1600°C
ME12-3X.025W	2.30	47	108	1800°C	P5-3X.030W	3.50	66	231	1800°C	S7-.005W	2.49	181	451	1800°C
ME13A-.030W	1.25	33	41	1800°C	P5-4X.030W	3.13	79	247	1800°C	S7-.010Mo	0.96	180	173	1400°C
ME13A-3X.025W	1.08	61	66	1800°C	P6-.040W	1.94	42	81	1800°C	S7-.010Ta	1.80	155	279	1600°C
ME13B-.030W	1.95	27	53	1800°C	P6-.060W	1.46	75	109	1800°C	S7-.010W	1.92	258	495	1800°C
ME13B-3X.025W	1.68	52	87	1800°C	P6-3X.025W	2.08	51	106	1800°C	S8A-.005Mo	1.95	78	152	1400°C
ME13C-.030W	1.95	26	51	1800°C	P7-3X.030W	2.78	69	192	1800°C	S8A-.005Ta	4.44	92	408	1600°C
ME13C-3X.025W	1.56	53	83	1800°C	P7-4X.030W	2.42	87	211	1800°C	S8A-.005W	4.96	136	675	1800°C
ME14-.030W	3.21	24	77	1800°C	P8-3X.025W	9.48	54	512	1800°C	S8A-.010Mo	1.33	112	149	1400°C
ME14-.040W	2.90	36	104	1800°C	P8-3X.030W	8.28	72	596	1800°C	S8A-.010Ta	2.92	129	377	1600°C
ME15-.030W	4.18	23	96	1800°C	S1-.005Mo	1.29	63	81	1400°C	S8A-.010W	3.11	185	575	1800°C
ME15-.040W	3.63	34	123	1800°C	S1-.005Ta	2.72	64	174	1600°C	S8A-.015W	2.37	234	555	1800°C
ME16A-.030W	2.48	23	57	1800°C	S1-.005W	2.25	101	227	1800°C	S8B-.005Mo	1.92	123	236	1400°C
ME16A-3X.025W	2.30	39	90	1800°C	S1-.010Mo	0.96	96	92	1400°C	S8B-.005Ta	4.44	139	617	1600°C
ME16B-.030W	2.90	23	67	1800°C	S1-.010Ta	1.91	96	183	1600°C	S8B-.005W	3.71	204	757	1800°C
ME16B-3X.025W	2.66	42	112	1800°C	S1-.010W	1.79	144	258	1800°C	S8B-.010Mo	1.40	170	238	1400°C
ME16C-.030W	3.77	23	87	1800°C	S1-.015W	1.50	184	276	1800°C	S8B-.010Ta	2.86	190	543	1600°C
ME16C-3X.025W	3.54	43	152	1800°C	S1-AO-Mo	0.95	105	100	1200°C	S8B-.010W	2.85	292	832	1800°C
ME16D-.030W	5.96	21	125	1800°C	S1-AO-W	1.00	106	106	1200°C	S8B-.015W	2.24	374	838	1800°C
ME16D-3X.025W	5.51	40	220	1800°C	S2A-.005Mo	1.72	86	148	1400°C	S8C-.010Mo	1.27	241	306	1400°C
ME16E-.040W	4.25	32	136	1800°C	S2A-.005Ta	3.37	100	337	1600°C	S8C-.010Ta	2.97	276	820	1600°C
ME16E-3X.025W	5.00	44	220	1800°C	S2A-.005W	3.85	140	539	1800°C	S8C-.010W	2.99	387	1157	1800°C
ME17-.030W	4.93	22	108	1800°C	S2A-.010Mo	1.13	130	147	1400°C	S8C-.015Mo	1.07	300	321	1400°C
ME17-.030W-AO	4.44	18	80	1200°C	S2A-.010Ta	2.27	133	302	1600°C	S8C-.015Ta	2.37	337	799	1600°C
ME17-3X.025W	4.57	40	183	1800°C	S2A-.010W	2.57	185	475	1800°C	S8C-AO-Mo	1.31	253	331	1200°C
ME18A-3X.025W	6.56	48	315	1800°C	S2A-.015W	2.20	242	532	1800°C	S8C-AO-W	1.27	257	326	1200°C
ME18A-3X.030W	5.00	55	275	1800°C	S2B-.005Mo	1.15	119	137	1400°C	S8D-.010Mo	1.27	241	306	1400°C
ME18B-3X.025W	4.70	43	202	1800°C	S2B-.005Ta	3.42	97	332	1600°C	S8D-.010Ta	2.97	262	778	1600°C
ME18B-3X.030W	4.25	56	238	1800°C	S2B-.005W	3.87	140	542	1800°C	S8D-.010W	2.94	378	1111	1800°C
ME19	1.26	257	324	1600°C	S2B-.010Mo	1.10	131	144	1400°C	S8D-.015Mo	1.11	300	333	1400°C
ME20	1.16	169	196	1600°C	S2B-.010Ta	2.33	130	303	1600°C	S8D-.015Ta	2.37	325	770	1600°C
ME21-.005Mo	0.94	147	138	1400°C	S2B-.010W	2.58	187	482	1800°C	S8E-.005Mo	1.92	123	236	1400°C
ME21-.005Ta	1.75	141	247	1600°C	S2B-.015W	2.06	245	505	1800°C	S8E-.005Ta	4.44	139	617	1600°C
ME21-.005W	1.96	213	417	1800°C	S2B-AO-Mo	1.12	141	158	1200°C	S8E-.005W	3.71	204	757	1800°C
ME22	1.87	196	367	1600°C	S2B-AO-W	1.13	141	159	1200°C	S8E-.010Mo	1.40	170	238	1400°C
ME22/ME22A	1.45	265	384	1600°C	S3-.005Mo	0.98	64	63	1400°C	S8E-.010Ta	2.86	190	543	1600°C
ME22B/ME22A-AO	1.09	293	319	1200°C	S3-.005Ta	2.04	64	131	1600°C	S8E-.010W	2.85	292	832	1800°C
ME22B-AO-Ta	1.30	259	337	1200°C	S3-.005W	1.95	100	195	1800°C	S9A-.005Mo	1.70	87	148	1400°C
ME23-.005Mo	0.79	251	198	1400°C	S3-.010Mo	0.77	103	79	1400°C	S9A-.005Ta	3.80	93	353	1600°C
ME23-.005Ta	1.51	215	325	1600°C	S3-.010Ta	1.44	92	132	1600°C	S9A-.005W	3.95	185	731	1800°C
ME23-.005W	1.40	327	458	1800°C	S3-.010W	1.47	158	232	1800°C	S9A-.010Mo	1.25	121	151	1400°C
ME24-.005Mo	0.83	248	206	1400°C	S3-.015W	1.96	130	255	1800°C	S9A-.010Ta	2.69	135	363	1600°C
ME24-.005Ta	1.47	230	338	1600°C	S3-AO-Mo	0.79	114	90	1200°C	S9A-.010W	2.84	194	551	1800°C
ME24-.005W	1.66	322	535	1800°C	S3-AO-W	0.83	117	97	1200°C	S9A-.015W	2.29	253	579	1800°C

Power table for above sources is for reference only. With evaporant added the power required could change significantly. Sources were tested without evaporant or crucibles installed.

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Temperature measurements were taken with an infrared thermometer at the refractory temperature indicated above. Part # P8 power based on 12" length.



VACUUM EVAPORATION POWER REQUIREMENT TABLE

Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.
S9A-AO-Mo	1.21	130	157	1200°C	S13-.010Mo	0.97	156	151	1400°C	S25-.010Ta	2.16	272	588	1600°C
S9A-AO-W	1.17	125	146	1200°C	S13-.010Ta	1.92	158	303	1600°C	S25-.010W	2.30	375	862	1800°C
S9B-.005Mo	2.01	132	265	1400°C	S14-.005Mo	1.71	170	291	1400°C	S26-.010Mo	1.10	278	306	1400°C
S9B-.005Ta	4.43	146	647	1600°C	S14-.005Ta	3.92	179	702	1600°C	S26-.010Ta	2.40	293	703	1600°C
S9B-.005W	3.50	280	980	1800°C	S14-.005W	4.21	283	1191	1800°C	S26-.010W	2.14	383	820	1800°C
S9B-.010Mo	1.30	186	242	1400°C	S14-.010Mo	1.19	240	286	1400°C	S27-.005Mo	0.94	94	88	1600°C
S9B-.010Ta	2.98	207	617	1600°C	S14-.010Ta	2.53	259	655	1600°C	S27-.005Ta	2.09	99	207	1600°C
S9B-.010W	3.10	325	1008	1800°C	S14-.010W	2.52	402	1013	1800°C	S27-.005W	2.22	134	297	1800°C
S9B-.015W	2.76	386	1065	1800°C	S14-.015W	2.40	459	1102	1800°C	S27-.010Mo	0.75	148	111	1600°C
S9B-AO-Mo	1.34	201	269	1200°C	S15-.005Mo	1.76	86	151	1400°C	S27-.010Ta	1.48	137	203	1600°C
S9B-AO-W	1.29	190	245	1200°C	S15-.005Ta	3.80	90	342	1600°C	S27-.010W	1.57	185	290	1800°C
S9C-.010Mo	1.36	257	350	1400°C	S15-.005W	4.08	144	588	1800°C	S28-.005Mo	1.92	86	165	1400°C
S9C-.010Ta	3.27	281	919	1600°C	S15-.010Mo	1.23	129	159	1400°C	S28-.005Ta	3.74	92	344	1600°C
S9C-.010W	3.08	407	1254	1800°C	S15-.010Ta	2.86	133	380	1600°C	S28-.005W	3.81	131	499	1800°C
S9C-.015Mo	1.09	315	343	1400°C	S15-.010W	3.04	200	608	1800°C	S28-.010Mo	1.27	127	161	1400°C
S9C-.015Ta	2.31	333	769	1600°C	S15-.015W	2.23	249	555	1800°C	S28-.010Ta	2.69	132	355	1600°C
S9C-AO-Mo	1.14	248	283	1200°C	S16-.005Mo	0.87	73	64	1400°C	S28-.010W	2.93	187	548	1800°C
S9C-AO-W	1.35	268	362	1200°C	S16-.005Ta	1.49	65	97	1600°C	S29-.005Mo	2.10	198	416	1400°C
S9D-.010Mo	1.34	260	348	1400°C	S16-.005W	1.58	110	174	1800°C	S29-.005Ta	4.50	221	994	1600°C
S9D-.010Ta	2.89	262	757	1600°C	S16-.010Mo	0.72	131	94	1400°C	S29-.005W	4.29	316	1356	1800°C
S9D-.010W	3.06	411	1258	1800°C	S16-.010Ta	1.17	115	135	1600°C	S29-.010Mo	1.43	281	402	1400°C
S9D-.015Mo	1.12	318	356	1400°C	S16-.010W	1.11	143	159	1800°C	S29-.010Ta	3.36	322	1082	1600°C
S9D-.015Ta	2.35	333	783	1600°C	S17A-.005Ta	2.15	158	340	1600°C	S29-.010W	3.30	451	1488	1800°C
S9D-.025Ta	1.86	431	802	1600°C	S17A-.010Ta	1.40	183	256	1600°C	S29-.015Ta	2.56	406	1039	1600°C
S9E-.010Mo	1.36	316	430	1400°C	S17B-.005Ta	1.93	125	241	1600°C	S29-AO-Mo	1.41	220	310	1200°C
S9E-.010Ta	2.97	340	1010	1600°C	S17B-.010Ta	1.43	187	267	1600°C	S29-AO-W	1.34	294	394	1200°C
S9E-.010W	3.21	525	1685	1800°C	S18-C	11.35	317	3598	2000°C	S30-.010Mo	1.05	286	300	1400°C
S9E-.015Mo	1.12	417	467	1400°C	S18-Mo	0.78	983	767	1400°C	S30-.010Ta	2.32	311	722	1600°C
S9E-.015Ta	2.00	366	732	1600°C	S18-Ta	1.10	870	957	1600°C	S30-.010W	2.06	404	832	1800°C
S9E-.025Ta	1.93	539	1040	1600°C	S19A-Ta	1.71	130	222	1600°C	S30A-.005Ta	2.60	268	703	1600°C
S9F-.010Mo	1.61	559	900	1400°C	S19B-Ta	1.83	134	245	1600°C	S30A-.005W	2.60	400	1040	1800°C
S9F-.010Ta	3.12	601	1875	1600°C	S19C-Ta	2.64	132	348	1600°C	S30A-.010Ta	1.44	296	427	1600°C
S9F-.010W	3.31	811	2684	1800°C	S20A-.005Mo	1.84	81	149	1400°C	S30A-.010W	1.50	444	666	1800°C
S9F-.015Mo	1.44	682	982	1400°C	S20A-.005Ta	3.40	94	320	1600°C	S31-.010Mo	1.08	305	329	1400°C
S9F-.015Ta	2.70	721	1947	1600°C	S20A-.005W	3.95	140	553	1800°C	S31-.010Ta	2.37	323	766	1600°C
S9F-.025Ta	2.50	948	2370	1600°C	S20A-.010Mo	1.27	129	164	1400°C	S31-.010W	1.92	392	753	1800°C
S9F-AO-Mo	1.50	586	879	1200°C	S20A-.010Ta	2.61	129	337	1600°C	S31A-.005Mo	0.66	75	50	1400°C
S9F-AO-W	1.40	635	889	1200°C	S20A-.010W	2.90	196	568	1800°C	S31A-.005Ta	1.24	83	103	1600°C
S9G-.10Mo	1.77	615	1088	1400°C	S20A-.015W	2.10	250	525	1800°C	S31A-.005W	2.00	166	332	1800°C
S9G-.10Ta	3.43	661	2267	1600°C	S21-.005Mo	2.11	123	260	1400°C	S31A-.010Mo	0.53	129	68	1400°C
S10-.005Mo	2.03	170	345	1400°C	S21-.005Ta	4.50	138	621	1600°C	S31A-.010Ta	0.98	119	117	1600°C
S10-.005Ta	4.26	193	822	1600°C	S21-.005W	3.26	144	469	1800°C	S31A-.010W	1.63	214	349	1800°C
S10-.005W	4.40	267	1175	1800°C	S21-.010Mo	1.47	184	270	1400°C	S31A-.015Mo	0.55	173	95	1400°C
S10-.010Mo	1.34	247	331	1400°C	S21-.010Ta	2.87	198	568	1600°C	S31A-.015Ta	1.07	155	166	1600°C
S10-.010Ta	4.24	194	823	1600°C	S21-.010W	3.28	300	984	1800°C	S31A-.015W	1.40	261	365	1800°C
S10-.010W	3.35	381	1276	1800°C	S21-AO-Mo	1.34	207	277	1200°C	S32-.010W	2.38	738	1756	2000°C
S11-.005Mo	1.95	165	322	1400°C	S21-AO-W	1.47	204	300	1200°C	S32A-.010W	2.36	740	1746	2000°C
S11-.005Ta	4.10	180	738	1600°C	S22-.005Mo	1.54	122	188	1400°C	S33-.005Mo	1.46	94	137	1400°C
S11-.005W	3.94	261	1028	1800°C	S22-.005Ta	2.94	150	441	1600°C	S33-.005Ta	3.27	94	307	1600°C
S11-.010Mo	1.29	236	304	1400°C	S22-.005W	3.32	198	657	1800°C	S33-.005W	3.26	144	469	1800°C
S11-.010Ta	2.86	262	749	1600°C	S22-.010Mo	1.09	190	207	1400°C	S34-.005Mo	1.70	123	209	1400°C
S11-.010W	3.03	372	1127	1800°C	S22-.010Ta	2.28	209	477	1600°C	S34-.005Ta	3.82	135	516	1600°C
S12A-.005Mo	1.46	181	264	1400°C	S22-.010W	2.55	283	722	1800°C	S34-.005W	3.46	181	626	1800°C
S12A-.005Ta	2.97	197	585	1600°C	S23-.010Mo	0.88	301	265	1400°C	S34-.010Mo	1.25	169	211	1400°C
S12A-.010Mo	1.11	267	296	1400°C	S23-.010Ta	1.68	295	496	1600°C	S34-.010Ta	2.75	177	487	1600°C
S12A-.010Ta	2.22	273	606	1600°C	S23-.010W	1.50	375	562	1800°C	S34-.010W	2.66	259	689	1800°C
S12B-.005Mo	0.96	196	188	1400°C	S24-.005Mo	1.24	202	250	1400°C	S35-.005Mo	1.44	87	125	1400°C
S12B-.005Ta	1.82	203	369	1600°C	S24-.005Ta	2.28	190	433	1600°C	S35-.005Ta	3.10	91	282	1600°C
S12B-.010Mo	0.78	320	250	1400°C	S24-.005W	2.21	256	566	1800°C	S35-.005W	3.37	140	472	1800°C
S12B-.010Ta	1.48	298	441	1600°C	S24-.010Mo	0.83	297	247	1400°C	S35-.010Mo	1.05	124	130	1400°C
S13-.005Mo	1.32	106	140	1400°C	S24-.010Ta	1.77	329	582	1600°C	S35-.010Ta	2.13	134	285	1600°C
S13-.005Ta	2.87	110	316	1600°C	S24-.010W	1.70	386	656	1800°C	S35-.010W	2.26	207	468	1800°C
S13-.005W	3.04	149	453	1800°C	S25-.010Mo	1.14	300	342	1400°C	S35A-AO-Mo	1.05	144	151	1200°C

Power table for above sources is for reference only. With evaporant added the power required could change significantly. Sources were tested without evaporant or crucibles installed.

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Temperature measurements were taken with an infrared thermometer at the refractory temperature indicated above. Part # P8 power based on 12" length.



VACUUM EVAPORATION POWER REQUIREMENT TABLE

Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.	Part #	Volts	Amps	Watts	Temp.
S35A-AO-W	0.95	136	129	1200°C	S45-.010W	3.39	394	1336	1800°C	SB-4/SB-4A	2.83	479	1356	1600°C
S35B-AO-Mo	0.90	137	123	1200°C	S45-.015Mo	1.29	310	400	1400°C	SB-5	2.96	371	1098	1600°C
S35B-AO-W	0.89	130	116	1200°C	S45-.015Ta	2.55	320	816	1600°C	SB-5/SB-5A	2.12	380	806	1600°C
S36-.010Mo	1.33	251	334	1400°C	S45-.015W	2.72	503	1368	1800°C	SB-5/SB5A-AO	1.63	334	544	1200°C
S36-.010Ta	2.98	250	745	1600°C	S45B-AO-Mo	1.27	264	335	1200°C	SB-5-AO-Ta	2.20	314	691	1200°C
S36-.010W	3.01	391	1177	1800°C	S45B-AO-W	1.43	264	378	1200°C	SB-6	3.58	280	1002	1600°C
S36-.015Ta	2.27	322	731	1600°C	S46-.005Mo	2.10	207	435	1400°C	SB-6/SB-6A	2.69	310	834	1600°C
S36-AO-Mo	1.34	289	387	1200°C	S46-.005Ta	4.87	221	1076	1600°C	SB-7-A,B,C-.005Mo	1.21	547	662	1400°C
S36-AO-W	1.25	268	335	1200°C	S46-.005W	4.34	340	1476	1800°C	SB-7-A,B,C-.005Ta	2.28	572	1304	1600°C
S37-.005Mo	1.84	201	370	1400°C	S46-.010Mo	1.49	293	437	1400°C	SB-7-A,B,C-.010Mo	1.08	705	761	1400°C
S37-.005Ta	4.26	222	946	1600°C	S46-.010Ta	3.20	306	979	1600°C	SB-7-A,B,C-.010Ta	2.10	680	1428	1600°C
S37-.010Mo	1.30	289	376	1400°C	S46-.010W	3.34	485	1620	1800°C	SB-8-A,B,C-.005Mo	1.44	850	1224	1400°C
S37-.010Ta	3.21	319	1024	1600°C	S47-.010Mo	1.18	142	168	1400°C	SB-8-A,B,C-.005Ta	2.51	880	2209	1600°C
S37-AO-Mo	1.23	326	401	1200°C	S47-.010Ta	2.59	144	373	1600°C	SB-8-A,B,C-.010Mo	1.39	1042	1448	1400°C
S38-.005Mo	1.77	114	202	1400°C	S47-.010W	2.87	212	608	1800°C	SB-8-A,B,C-.010Ta	2.36	1115	2631	1600°C
S38-.005Ta	4.01	114	457	1600°C	S47-.015Mo	1.00	179	179	1400°C	SB-9-A,B,C-.005Mo	1.87	731	1367	1400°C
S38-.005W	3.98	169	673	1800°C	S47-.015Ta	2.06	190	391	1600°C	SB-9-A,B,C-.005Ta	3.44	750	2580	1600°C
S38-.010Mo	1.26	164	207	1400°C	S47-.015W	2.18	287	626	1800°C	SB-9-A,B,C-.010Mo	1.62	890	1442	1400°C
S38-.010Ta	2.70	197	532	1600°C	S47-.020Ta	1.91	210	401	1600°C	SB-9-A,B,C-.010Ta	3.40	998	3393	1600°C
S38-.010W	2.77	254	704	1800°C	S47-.020W	2.00	333	666	1800°C	SB-10-A,B,C-.005Mo	2.11	1222	2578	1400°C
S38A-AO-Mo	1.22	181	221	1200°C	S48-.005W	3.67	81	297	1800°C	SB-10-A,B,C-.005Ta	3.66	1220	4465	1600°C
S38A-AO-W	1.20	169	203	1200°C	S48-.010Mo	1.24	75	93	1400°C	SB-10-A,B,C-.010Mo	2.02	1530	3091	1400°C
S38B-AO-Mo	1.04	167	174	1200°C	S48-.010Ta	2.41	81	195	1600°C	SB-10-A,B,C-.010Ta	3.37	1550	5224	1600°C
S38B-AO-W	1.04	156	162	1200°C	S48-.010W	2.82	115	324	1800°C	SM-8	1.08	255	275	1200°C
S39-.005Mo	1.32	100	132	1400°C	S49-.010Mo	1.58	249	393	1400°C	SM-9	1.00	242	242	1200°C
S39-.005Ta	2.72	106	288	1600°C	S49-.010Ta	3.35	281	941	1600°C	SM-10	1.25	226	282	1200°C
S39-.010Mo	0.90	158	142	1400°C	S49-.010W	2.82	269	759	1800°C	SM-11	1.26	236	297	1200°C
S39-.010Ta	1.95	165	322	1600°C	S49-.015Mo	1.27	310	394	1400°C	SM-12	1.36	283	385	1200°C
S40-.005Mo	1.39	105	146	1400°C	S49-.015Ta	2.61	328	856	1600°C	SM-13	1.60	318	509	1200°C
S40-.005Ta	2.61	120	313	1600°C	S49-.015W	2.57	508	1306	1800°C	SM-14	1.66	340	564	1200°C
S40-.005W	2.71	155	420	1800°C	S49-.020Ta	2.35	401	942	1600°C	SM-15	1.70	349	593	1200°C
S40-.010Mo	0.92	149	138	1400°C	S49-.020W	1.97	726	1430	1800°C	SM-16	2.06	357	735	1200°C
S40-.010Ta	2.01	156	314	1600°C	S50-.010Mo	1.36	316	430	1400°C	SM-17	1.86	327	608	1200°C
S42-.005W	3.67	188	690	1800°C	S50-.010Ta	2.97	340	1010	1600°C	SO-10	1.40	257	360	1200°C
S42-.010Mo	1.58	249	393	1400°C	S50-.010W	1.36	316	430	1800°C	SO-11	1.40	256	358	1200°C
S42-.010Ta	3.35	281	941	1600°C	S50-.015Mo	1.12	417	467	1400°C	SO-20	0.86	333	286	1200°C
S42-.010W	2.82	269	759	1800°C	S50-.015Ta	2.00	366	732	1600°C	SO-21	0.91	328	298	1200°C
S42-.015Mo	1.27	310	394	1400°C	S50-.015W	1.15	384	442	1800°C	SO-22	1.34	246	330	1200°C
S42-.015Ta	2.61	328	856	1600°C	S50-.020Ta	2.08	485	1009	1600°C	SO-23	1.31	236	309	1200°C
S42-.015W	2.57	508	1306	1800°C	S50-.020W	0.95	451	428	1800°C	SO-24	1.67	264	441	1200°C
S42B-AO-Mo	1.35	262	354	1200°C	S51-.010Mo	1.20	280	336	1400°C	SO-25	1.58	272	430	1200°C
S42B-AO-W	1.41	245	345	1200°C	S51-.010Ta	2.42	295	714	1600°C	SO-26	1.62	271	439	1200°C
S43-.005W	4.59	372	1707	1800°C	S51-.010W	2.20	388	854	1800°C	SO-32	1.23	217	267	1200°C
S43-.010Mo	1.52	317	482	1400°C	S51-AO-Mo	0.94	287	270	1200°C	SO-34	1.27	289	367	1200°C
S43-.010Ta	3.48	338	1176	1600°C	S52-.010Mo	1.30	198	257	1400°C	SO-36	1.30	373	485	1200°C
S43-.010W	3.53	531	1874	1800°C	S52-.010Ta	2.90	218	632	1600°C	SO-38	1.43	447	640	1200°C
S43-.015Mo	1.22	389	475	1400°C	S52-.010W	3.10	330	1023	1800°C	SO-100	3.70	540	1998	1200°C
S43-.015Ta	2.83	416	1177	1600°C	S52-.020W	2.60	354	920	1800°C	SO-150	3.90	620	2418	1200°C
S43-.015W	2.91	654	1903	1800°C	S52-.025W	2.10	457	960	1800°C	SO-200	4.10	860	3526	1200°C
S44-.005Mo	2.05	117	240	1400°C	S53-.010Mo	1.45	320	464	1400°C	SO-250	4.15	955	3963	1200°C
S44-.005Ta	3.80	115	437	1600°C	S53-.010Ta	3.20	345	1104	1600°C	SO-300	4.20	1075	4515	1200°C
S44-.005W	3.73	182	679	1800°C	S53-.010W	1.90	310	589	1800°C	SO-500	4.30	1135	4881	1200°C
S44-.010Mo	1.33	170	226	1400°C	S53-.020Ta	2.20	495	1089	1600°C	SO-800	4.40	1210	5324	1200°C
S44-.010Ta	2.90	178	516	1600°C	S53-.020W	1.10	460	506	1800°C	SO-1000	4.50	1440	6480	1200°C
S44-.010W	2.87	260	746	1800°C	SB-1	4.14	707	2927	1600°C	SO-1500	4.60	1580	7268	1200°C
S44-.015Mo	1.06	207	219	1400°C	SB-1/SB-1A	3.20	749	2397	1600°C	SO-2000	4.80	1620	7776	1200°C
S44-.015Ta	2.38	220	524	1600°C	SB-2	3.70	388	1436	1600°C	WBAO-1	5.70	11	63	1475°C
S44-.015W	2.31	327	755	1800°C	SB-2/SB-2A	2.91	398	1158	1600°C	WBAO-2	6.20	40	248	1475°C
S45-.005Mo	2.11	176	371	1400°C	SB-3	2.08	366	761	1600°C	WBAO-3	6.90	39	272	1475°C
S45-.005Ta	4.60	189	869	1600°C	SB-3/SB-3A	1.63	380	619	1600°C	WBAO-4	13.00	33	429	1475°C
S45-.005W	4.41	276	1217	1800°C	SB-3/SB3A-AO	1.49	345	514	1200°C	WBAO-5	7.00	50	350	1475°C
S45-.010Mo	1.45	249	361	1400°C	SB-3-AO-Ta	1.54	295	454	1200°C	WBAO-6	15.80	49	768	1475°C
S45-.010Ta	3.16	257	812	1600°C	SB-4	3.57	438	1564	1600°C	Z1-3X.030W	4.28	62	265	1800°C

Power table for above sources is for reference only. With evaporant added the power required could change significantly. Sources were tested without evaporant or crucibles installed.

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Temperature measurements were taken with an infrared thermometer at the refractory temperature indicated above. Part # P8 power based on 12" length.