



HRL Series

Extended Discharge Tables

6V + 12V Top Terminal VRLA-AGM

* Published specification data is subject to change without notice

HRL634W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	60.4	47.4	41.7	37.6	30.9	26.6	18.7	14.4	10.3	7.39	5.84	4.66
1.65V	57.6	45.3	39.9	36.0	29.8	25.6	18.6	14.3	10.2	7.35	5.81	4.64
1.67V	56.5	44.4	39.2	35.4	29.3	25.2	18.6	14.3	10.2	7.33	5.80	4.63
1.70V	54.9	43.1	37.9	34.2	28.6	24.6	18.5	14.2	10.1	7.29	5.78	4.62
1.75V	51.9	40.7	35.8	32.3	27.0	23.8	18.3	14.1	10.0	7.23	5.74	4.57
1.80V	48.9	37.9	33.7	30.6	25.8	23.0	18.1	13.9	9.94	7.17	5.69	4.52
1.85V	45.4	35.1	31.4	28.6	24.6	22.0	17.9	13.8	9.84	7.11	5.65	4.47

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	327	260	231	209	175	150	110	84.0	60.7	43.7	34.6	27.7
1.65V	316	250	221	200	169	145	109	83.0	60.4	43.6	34.5	27.6
1.67V	312	246	218	197	167	143	109	82.6	60.3	43.5	34.5	27.6
1.70V	305	240	212	192	163	140	108	82.0	59.7	43.2	34.4	27.5
1.75V	292	228	202	183	155	135	104	81.0	59.3	43.0	34.2	27.3
1.80V	278	215	191	173	147	129	100	80.0	58.9	42.6	33.9	27.1
1.85V	265	203	181	164	139	123	96.0	79.0	58.1	42.2	33.7	26.9

HRL1210W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	19.2	13.7	11.8	10.5	8.84	7.47	5.51	4.24	3.06	2.14	1.66	1.29
1.65V	18.6	13.4	11.6	10.3	8.74	7.40	5.45	4.21	3.04	2.12	1.65	1.28
1.67V	18.3	13.3	11.5	10.2	8.70	7.37	5.43	4.20	3.03	2.12	1.64	1.28
1.70V	17.9	13.0	11.3	10.1	8.64	7.32	5.39	4.18	3.02	2.11	1.63	1.27
1.75V	17.1	12.5	11.0	9.85	8.37	7.15	5.27	4.10	2.98	2.09	1.62	1.26
1.80V	16.3	11.8	10.5	9.50	8.10	6.98	5.14	4.02	2.93	2.06	1.60	1.25
1.85V	15.6	11.1	10.0	9.15	7.83	6.81	5.02	3.94	2.89	2.04	1.59	1.24

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	200	147	127	113	95.6	81.5	60.9	47.0	34.1	24.0	18.7	14.7
1.65V	195	144	125	111	94.5	80.8	60.3	46.6	34.0	23.9	18.6	14.6
1.67V	193	143	124	110	94.0	80.5	60.0	46.5	34.0	23.9	18.6	14.6
1.70V	189	140	121	108	92.9	79.8	59.3	46.3	33.9	23.8	18.5	14.5
1.75V	182	134	118	106	91.0	78.9	58.5	46.0	33.5	23.6	18.4	14.4
1.80V	175	128	114	103	89.1	77.3	57.2	45.2	33.0	23.3	18.2	14.3
1.85V	169	121	109	100	86.6	75.8	55.8	44.5	32.6	23.1	18.1	14.2



HRL Series

Extended Discharge Tables

6V + 12V Top Terminal VRLA-AGM

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HRL1225W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	57.1	38.1	32.6	28.1	22.2	19.2	13.9	11.0	7.96	5.70	4.50	3.22
1.65V	52.1	36.6	31.9	27.2	21.9	18.9	13.8	10.9	7.88	5.65	4.46	3.20
1.67V	51.9	36.0	31.7	26.9	21.7	18.8	13.7	10.9	7.85	5.63	4.45	3.19
1.70V	49.4	34.7	30.5	26.1	21.4	18.6	13.6	10.8	7.78	5.59	4.42	3.18
1.75V	44.8	33.5	28.1	24.3	20.5	17.9	13.2	10.5	7.60	5.48	4.35	3.13
1.80V	39.1	29.2	24.9	22.5	19.3	16.7	12.5	10.0	7.32	5.30	4.21	3.05
1.85V	33.1	24.1	21.9	20.1	18.3	15.5	11.9	9.44	6.84	4.96	3.95	2.87

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	572	381	336	300	247	212	156	124	90.0	64.6	51.1	36.6
1.65V	548	372	328	294	244	209	155	123	89.5	64.3	50.8	36.5
1.67V	539	369	325	292	242	208	154	123	89.2	64.1	50.7	36.4
1.70V	520	361	318	286	239	206	153	122	88.7	63.8	50.5	36.3
1.75V	453	340	302	273	231	199	149	119	87.1	62.8	49.8	35.9
1.80V	403	312	280	254	218	188	143	115	84.3	61.0	48.5	35.1
1.85V	360	281	252	231	197	172	131	106	79.3	57.6	45.9	33.4

HRL1234W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	77.1	50.2	43.1	37.9	30.7	25.9	18.8	14.8	10.7	7.59	5.97	4.26
1.65V	71.7	48.7	42.1	37.2	30.3	25.7	18.7	14.8	10.6	7.57	5.96	4.25
1.67V	69.6	48.0	41.7	36.9	30.2	25.6	18.6	14.7	10.6	7.56	5.95	4.25
1.70V	66.0	46.6	40.8	36.2	29.7	25.4	18.5	14.6	10.5	7.55	5.94	4.24
1.75V	60.0	43.6	38.5	34.6	28.7	24.6	18.2	14.4	10.4	7.48	5.90	4.22
1.80V	53.2	39.8	35.5	32.3	27.0	23.4	17.5	14.0	10.2	7.32	5.79	4.16
1.85V	45.8	35.3	31.9	29.0	24.8	21.4	16.4	13.2	9.69	6.99	5.55	4.00

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	754	530	464	412	339	290	215	171	125	89.4	70.9	51.1
1.65V	715	519	455	406	336	288	214	170	124	89.2	70.8	51.1
1.67V	699	514	452	404	334	287	213	170	124	89.2	70.7	51.0
1.70V	689	503	443	398	330	284	212	169	123	89.0	70.6	50.9
1.75V	639	477	424	383	321	278	209	167	122	88.3	70.2	50.7
1.80V	582	441	397	359	306	266	203	163	120	86.8	69.1	50.1
1.85V	515	400	359	329	283	247	191	155	115	83.4	66.6	48.5



HRL Series

Extended Discharge Tables

6V + 12V Top Terminal VRLA-AGM

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HRL1250W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	99.4	69.2	60.6	53.8	44.1	37.5	27.6	22.0	15.9	11.4	9.04	6.49
1.65V	92.3	66.2	58.5	52.3	43.2	37.0	27.3	21.8	15.8	11.4	8.98	6.45
1.67V	89.5	65.0	57.6	51.7	42.8	36.7	27.2	21.7	15.8	11.3	8.96	6.43
1.70V	85.1	62.8	55.8	50.4	41.9	36.1	26.9	21.5	15.7	11.2	8.92	6.41
1.75V	75.3	58.1	52.1	47.4	39.9	34.6	26.2	21.0	15.4	11.1	8.80	6.34
1.80V	65.9	52.2	47.5	43.1	37.1	32.2	24.9	20.1	14.9	10.8	8.59	6.22
1.85V	55.7	45.4	41.3	38.2	32.9	29.0	22.7	18.6	14.0	10.2	8.15	5.94

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	979	727	636	569	475	410	309	247	181	132	105	76.0
1.65V	931	701	619	557	468	405	307	246	181	131	104	75.8
1.67V	911	691	612	552	465	403	306	246	180	131	104	75.7
1.70V	879	669	597	540	458	397	303	244	179	130	103	75.5
1.75V	805	626	564	513	441	384	297	239	177	129	102	75.0
1.80V	731	574	518	477	412	362	284	230	172	126	101	73.8
1.85V	617	503	464	432	372	331	261	214	162	119	96.3	71.0

HRL1280W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	165	113	98.4	87.9	72.3	62.4	44.4	35.0	24.9	18.2	14.6	10.6
1.65V	149	106	92.9	83.5	70.3	59.8	43.8	34.3	24.7	18.1	14.5	10.5
1.67V	142	103	90.7	81.7	69.5	58.7	43.5	34.0	24.6	18.0	14.4	10.4
1.70V	133	98.6	88.3	80.7	67.8	58.1	42.4	33.7	24.3	17.7	14.2	10.2
1.75V	119	92.3	82.6	75.5	64.3	54.3	41.6	32.9	23.7	17.4	14.0	10.1
1.80V	105	83.2	75.7	70.0	60.8	51.8	39.8	32.1	23.0	16.9	13.6	10.0
1.85V	92.3	76.6	70.1	65.2	56.8	49.2	37.6	30.1	22.1	16.6	13.5	9.84

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	1584	1171	1047	955	790	691	496	391	282	209	169	122
1.65V	1475	1101	993	912	769	670	488	385	281	208	168	121
1.67V	1431	1073	971	895	761	661	485	382	280	207	167	121
1.70V	1369	1045	953	884	743	660	475	381	275	204	165	118
1.75V	1270	983	897	832	708	626	468	370	270	200	161	117
1.80V	1173	909	836	781	679	593	453	364	266	197	159	116
1.85V	1091	855	786	734	641	561	426	346	257	192	156	115



HRL Series

Extended Discharge Tables

6V + 12V Top Terminal VRLA-AGM

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HRL12110W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	170	145	129	118	97.5	81.6	61.4	48.0	33.6	25.7	21.3	14.9
1.65V	156	134	121	111	92.9	78.7	60.1	47.3	33.3	25.4	20.9	14.8
1.67V	151	129	117	108	91.1	77.5	59.6	47.0	33.2	25.3	20.8	14.7
1.70V	141	121	111	103	88.3	75.7	58.6	46.3	32.7	24.8	20.4	14.5
1.75V	125	108	100	93.2	82.7	72.2	56.1	44.7	32.3	24.4	20.0	14.4
1.80V	109	94.0	88.2	83.7	76.4	68.7	53.7	42.5	31.9	24.0	19.6	14.2
1.85V	89.3	78.7	75.9	73.6	69.2	64.4	51.0	40.8	29.7	22.4	18.3	14.0

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	1806	1541	1385	1270	1053	888	682	554	385	297	247	174
1.65V	1676	1430	1298	1199	1007	862	670	540	379	293	244	173
1.67V	1624	1386	1263	1171	988	852	665	535	377	292	243	173
1.70V	1530	1316	1197	1107	956	827	655	526	372	287	239	171
1.75V	1358	1190	1093	1020	900	796	636	510	361	280	234	170
1.80V	1177	1054	990	941	851	764	610	495	352	274	229	168
1.85V	995	918	882	854	793	733	589	478	337	260	217	167

HRL12150W / HRL12150WG

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	--	--	169	153	127	116	86.7	69.6	50.4	36.4	28.9	20.8
1.65V	--	--	157	143	119	110	83.5	67.2	49.0	35.6	28.7	20.6
1.67V	--	--	152	139	116	107	82.2	66.3	48.4	35.3	28.6	20.5
1.70V	--	--	144	132	112	103	80.0	64.7	47.5	34.8	28.4	20.4
1.75V	--	--	132	122	104	96.8	76.0	62.0	45.7	33.6	27.8	20.0
1.80V	--	--	119	111	96.2	90.0	71.1	58.4	43.8	32.2	26.8	19.5
1.85V	--	--	107	100	88.0	82.8	67.0	55.1	41.7	30.9	25.0	18.6

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	--	--	1794	1636	1373	1263	968	788	577	421	335	244
1.65V	--	--	1673	1534	1303	1205	944	763	564	417	334	240
1.67V	--	--	1624	1494	1275	1182	935	753	559	415	334	239
1.70V	--	--	1549	1430	1228	1143	916	737	548	409	332	236
1.75V	--	--	1422	1321	1149	1075	877	704	530	399	325	231
1.80V	--	--	1302	1217	1069	1006	825	675	507	383	314	226
1.85V	--	--	1188	1118	996	943	773	639	486	364	296	222



HRL Series

Extended Discharge Tables

6V + 12V Top Terminal VRLA-AGM

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HRL12200W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	304	256	243	221	190	164	123	98.9	71.9	52.6	41.8	29.9
1.65V	286	239	225	209	181	159	119	97.5	71.4	52.2	41.4	29.6
1.67V	279	232	218	205	177	157	118	97.0	71.2	52.0	41.2	29.5
1.70V	260	218	209	196	170	151	116	95.7	70.3	51.8	41.1	29.4
1.75V	233	197	192	176	156	141	111	92.0	68.2	50.7	40.3	29.1
1.80V	198	172	165	156	140	126	102	85.2	64.6	48.7	38.9	28.2
1.85V	162	146	145	136	120	110	91.3	76.1	59.0	45.3	36.2	26.6

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	3094	2572	2448	2279	1962	1745	1333	1098	816	602	476	343
1.65V	2928	2445	2347	2170	1899	1689	1315	1087	811	601	475	342
1.67V	2861	2395	2306	2127	1874	1666	1308	1083	809	600	475	342
1.70V	2732	2308	2207	2045	1815	1625	1282	1066	796	596	474	339
1.75V	2458	2120	2022	1904	1717	1523	1232	1027	772	585	464	335
1.80V	2231	1889	1840	1765	1562	1409	1158	959	738	564	452	326
1.85V	1764	1691	1659	1544	1376	1255	1035	873	687	529	423	310

HRL12280W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	404	334	318	287	237	216	167	137	103	76.0	59.9	44.6
1.65V	363	313	293	267	223	205	158	131	100	73.8	58.3	42.8
1.67V	345	305	283	258	217	200	155	128	98.3	72.9	57.7	42.1
1.70V	312	293	266	244	207	192	149	124	96.3	71.2	55.6	40.6
1.75V	288	254	236	218	188	175	141	117	91.3	68.5	53.8	38.5
1.80V	249	219	207	194	171	161	131	111	85.4	63.7	50.1	36.3
1.85V	215	190	178	169	152	145	122	105	81.3	59.7	47.3	34.7

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	4363	3522	3354	3039	2519	2304	1788	1476	1110	822	648	485
1.65V	3956	3246	3127	2852	2396	2205	1725	1434	1088	809	639	471
1.67V	3807	3150	3036	2778	2347	2166	1700	1417	1079	804	636	466
1.70V	3570	3013	2880	2650	2263	2100	1643	1384	1060	792	618	454
1.75V	3244	2780	2615	2422	2095	1955	1575	1326	1023	780	600	436
1.80V	2833	2476	2329	2176	1913	1800	1493	1274	980	738	581	422
1.85V	2468	2093	2016	1914	1735	1656	1408	1212	938	694	550	404



HRL Series

Extended Discharge Tables

6V + 12V Top Terminal VRLA-AGM

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HRL12330W / HRL12330WG

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	5MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN	5HR	10HR	20HR
1.60V	530	409	271	202	162	119	86.0	68.4	49.6	18.7	10.0	5.16
1.65V	495	380	260	197	159	117	85.3	68.0	49.5	18.6	9.93	5.13
1.67V	482	369	256	196	158	117	85.1	67.9	49.4	18.6	9.91	5.12
1.70V	454	350	248	191	155	116	84.4	67.5	49.3	18.5	9.86	5.10
1.75V	405	317	230	181	149	112	82.6	66.4	48.9	18.2	9.74	5.06
1.80V	337	273	206	168	139	106	79.1	64.1	47.7	17.8	9.51	4.97
1.85V	252	234	180	150	125	97.1	73.2	59.9	45.1	17.0	9.09	4.77

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	5MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN	5HR	10HR	20HR
1.60V	4597	3930	2870	2187	1772	1318	972	784	578	217	117	61.4
1.65V	4454	3809	2775	2147	1748	1308	967	780	577	217	116	61.1
1.67V	4397	3761	2737	2131	1738	1304	965	779	576	216	116	61.0
1.70V	4285	3597	2656	2093	1713	1292	958	775	575	216	116	60.9
1.75V	4043	3300	2485	2009	1656	1260	941	764	571	214	115	60.5
1.80V	3660	2993	2276	1883	1564	1204	907	742	559	210	113	59.6
1.85V	2976	2589	2042	1676	1416	1116	850	700	534	202	108	57.6

HRL12390W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	589	499	465	423	362	315	239	192	140	101	79.6	57.1
1.65V	548	469	430	397	342	303	232	188	139	100	79.1	56.9
1.67V	532	456	416	386	334	298	230	186	138	99.6	78.9	56.8
1.70V	504	428	395	367	320	288	224	183	137	98.6	78.2	56.4
1.75V	463	384	354	330	296	266	212	174	132	96.1	76.7	55.7
1.80V	382	330	310	296	266	239	197	163	125	91.8	73.8	54.2
1.85V	296	285	270	253	228	210	175	147	114	84.9	68.8	51.2

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	5767	4830	4543	4188	3683	3299	2550	2083	1566	1142	913	666
1.65V	5442	4635	4296	3996	3565	3186	2502	2052	1551	1134	908	664
1.67V	5312	4557	4197	3919	3518	3141	2483	2039	1545	1130	906	663
1.70V	5049	4348	4030	3787	3434	3048	2440	2010	1529	1122	900	660
1.75V	4583	3970	3736	3555	3190	2861	2348	1943	1488	1098	885	653
1.80V	4044	3587	3451	3253	2893	2641	2215	1843	1423	1059	858	639
1.85V	3486	3160	2959	2804	2576	2412	2006	1690	1328	996	812	609



HRL Series

Extended Discharge Tables

6V + 12V Top Terminal VRLA-AGM

* Published specification data is subject to change without notice

HRL12540W

Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	720	572	530	498	436	394	308	256	187	134	106	75.5
1.65V	640	533	494	465	415	377	298	248	183	132	105	74.6
1.67V	608	517	480	452	406	370	294	245	181	132	105	74.3
1.70V	564	493	457	430	392	354	286	240	178	129	103	73.8
1.75V	501	440	416	398	365	327	270	228	172	126	101	72.0
1.80V	430	391	375	362	323	296	252	209	161	120	97.9	70.3
1.85V	379	340	320	304	282	265	222	187	147	111	90.3	66.2

Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	6874	5883	5483	5176	4688	4186	3421	2716	2057	1518	1224	885
1.65V	6398	5484	5156	4903	4398	3971	3299	2655	2021	1500	1214	871
1.67V	6207	5325	5026	4794	4282	3885	3250	2630	2006	1492	1210	865
1.70V	5768	4937	4717	4544	4016	3661	3097	2564	1988	1480	1201	863
1.75V	5225	4639	4390	4196	3766	3472	2951	2454	1925	1441	1174	849
1.80V	4561	4310	4032	3818	3442	3233	2723	2306	1846	1385	1129	824
1.85V	4227	3643	3482	3356	3146	3010	2443	2104	1715	1295	1061	784