

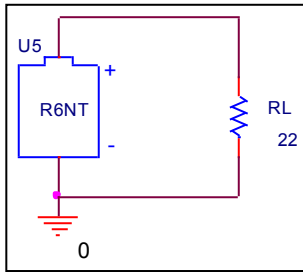
Device Modeling Report

COMPONENTS: Manganese Cell
PART NUMBER: R6NT
MANUFACTURER: PANASONIC
CONDITION: $RL=22(\Omega)$

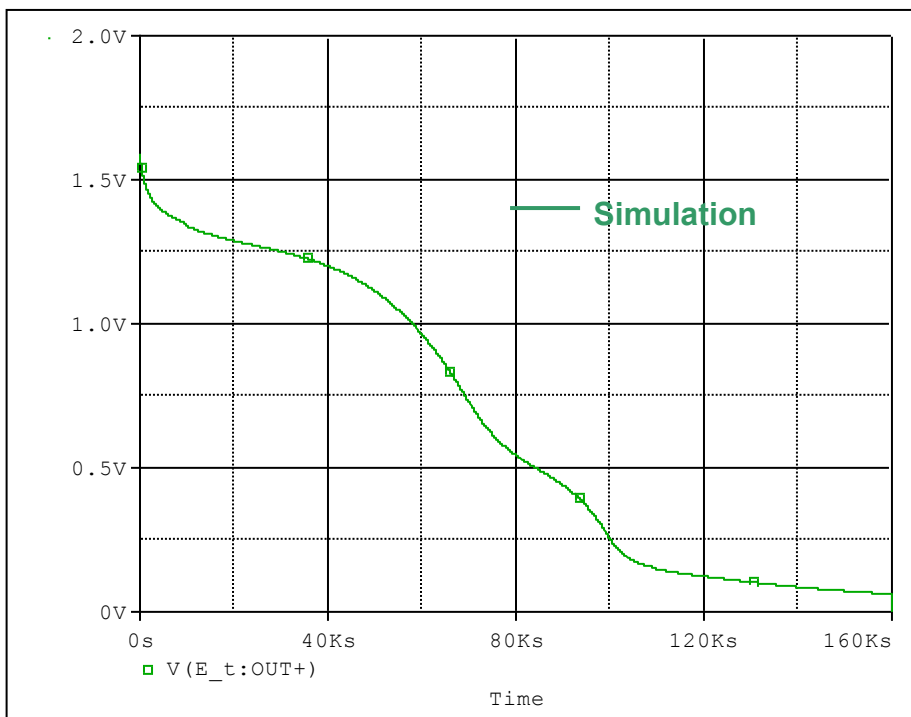


Bee Technologies Inc.

Evaluation Circuit



Simulation result



Comparison Table

Time (Sec)	Vdc(V) Measurement	Vdc(V) Simulation	%Error
10.002	1.5891	1.5857	-0.2153
100.002	1.5706	1.5716	0.0655
200.002	1.5552	1.5574	0.1411
300.002	1.5428	1.5447	0.1206
400.002	1.5323	1.5333	0.0653
500.002	1.5231	1.5233	0.0162
600.002	1.5148	1.5143	-0.0323
700.002	1.5073	1.5064	-0.0622
800.002	1.5006	1.4994	-0.0790
900.002	1.4944	1.4932	-0.0782
1000.002	1.4886	1.4876	-0.0702
1200.002	1.4784	1.4782	-0.0114
1400.002	1.4693	1.4701	0.0576
1600.002	1.4610	1.4625	0.1041
1800.002	1.4535	1.4545	0.0722
2000.002	1.4465	1.4445	-0.1391
2500.002	1.4314	1.4322	0.0591
3000.002	1.4202	1.4213	0.0780
3500.002	1.4115	1.4117	0.0171
4000.002	1.4021	1.4033	0.0839
4500.002	1.3947	1.3960	0.0898
5000.002	1.3901	1.3896	-0.0388
5500.002	1.3856	1.3840	-0.1137
6000.002	1.3807	1.3789	-0.1301
6500.002	1.3756	1.3743	-0.0918
7000.002	1.3704	1.3700	-0.0306
7500.002	1.3654	1.3658	0.0288
8000.002	1.3606	1.3616	0.0741
8500.002	1.3559	1.3572	0.0945
9000.002	1.3512	1.3524	0.0878
10000.002	1.3428	1.3410	-0.1306
11000.002	1.3340	1.3318	-0.1631
12000.002	1.3261	1.3259	-0.0165
13000.002	1.3192	1.3204	0.0883
14000.002	1.3133	1.3151	0.1360
15000.002	1.3079	1.3101	0.1701
16000.002	1.3030	1.3053	0.1727
17000.002	1.2995	1.3008	0.0964

Time (Sec)	Vdc(V) Measurement	Vdc(V) Simulation	%Error
18000.002	1.2952	1.2964	0.0959
19000.002	1.2915	1.2923	0.0643
20000.002	1.2876	1.2881	0.0409
22000.002	1.2805	1.2805	0.0039
24000.002	1.2729	1.2730	0.0062
26000.002	1.2660	1.2658	-0.0135
28000.002	1.2593	1.2584	-0.0737
30000.002	1.2518	1.2507	-0.0843
32000.002	1.2435	1.2424	-0.0878
34000.002	1.2345	1.2335	-0.0808
36000.002	1.2245	1.2237	-0.0613
38000.002	1.2132	1.2126	-0.0522
40000.002	1.2007	1.2002	-0.0409
42000.002	1.1866	1.1868	0.0163
44000.002	1.1710	1.1713	0.0265
46000.002	1.1539	1.1540	0.0101
48000.002	1.1352	1.1345	-0.0629
50000.002	1.1145	1.1129	-0.1424
55000.002	1.0496	1.0473	-0.2192
58000.002	0.9989	0.9991	0.0152
60000.002	0.9617	0.9630	0.1285
61000.002	0.9423	0.9436	0.1388
62000.002	0.9220	0.9233	0.1404
63000.002	0.9009	0.9021	0.1306
64000.002	0.8786	0.8800	0.1605
65000.002	0.8551	0.8569	0.2114
66000.002	0.8309	0.8305	-0.0549
67000.002	0.8063	0.8076	0.1677
68000.002	0.7817	0.7809	-0.1015
69000.002	0.7564	0.7536	-0.3737
70000.002	0.7303	0.7308	0.0675
71000.002	0.7042	0.7034	-0.1104
72000.002	0.6789	0.6781	-0.1181
73000.002	0.6554	0.6553	-0.0205
74000.002	0.6341	0.6348	0.1074
75000.002	0.6153	0.6158	0.0879
76000.002	0.5987	0.5986	-0.0143
77000.002	0.5839	0.5826	-0.2221
78000.002	0.5704	0.5671	-0.5748
79000.002	0.5580	0.5549	-0.5569

Time (Sec)	Vdc(V) Measurement	Vdc(V) Simulation	% Error
80000.002	0.5463	0.5432	-0.5595
81000.002	0.5345	0.5319	-0.4890
82000.002	0.5236	0.5213	-0.4500
83000.002	0.5130	0.5111	-0.3671
84000.002	0.5024	0.5011	-0.2631
85000.002	0.4917	0.4917	-0.0021
86000.002	0.4810	0.4821	0.2261
87000.002	0.4703	0.4723	0.4240
88000.002	0.4595	0.4621	0.5603
89000.002	0.4485	0.4512	0.6080
90000.002	0.4378	0.4401	0.5270
91000.002	0.4269	0.4279	0.2320
92000.002	0.4156	0.4142	-0.3560
93000.002	0.4038	0.4003	-0.8564
94000.002	0.3907	0.3846	-1.5599
95000.002	0.3734	0.3673	-1.6281
96000.002	0.3524	0.3483	-1.1596
97000.002	0.3294	0.3271	-0.6989
98000.002	0.3044	0.3042	-0.0752
99000.002	0.2752	0.2794	1.5234
100000.002	0.2475	0.2516	1.6505
101000.002	0.2228	0.2304	3.3923
102000.002	0.2061	0.2127	3.2028
103000.002	0.1934	0.1984	2.5837
104000.002	0.1817	0.1870	2.8956
105000.002	0.1728	0.1780	2.9973
106000.002	0.1649	0.1708	3.5597
107000.002	0.1595	0.1650	3.4370
108000.002	0.1534	0.1601	4.3790
109000.002	0.1490	0.1555	4.3767
110000.002	0.1457	0.1459	0.1437
112000.002	0.1411	0.1423	0.8560
114000.002	0.1378	0.1382	0.2988
116000.002	0.1341	0.1337	-0.2745
118000.002	0.1286	0.1290	0.3017
120000.002	0.1232	0.1240	0.6747
122000.002	0.1185	0.1194	0.7836
124000.002	0.1143	0.1148	0.4679
126000.002	0.1103	0.1105	0.2532
128000.002	0.1064	0.1067	0.2837
130000.002	0.1028	0.0983	-4.3026

Time (Sec)	Vdc(V) Measurement	Vdc(V) Simulation	%Error
131000.002	0.1010	0.1006	-0.3649
134000.002	0.0959	0.0957	-0.1416
140000.002	0.0866	0.0833	-3.7838
150000.002	0.0732	0.0725	-0.8464
160000.002	0.0616	0.0625	1.5039

Comparison Graph

