UL0.7-4

4V 0.7AH

General

Ultracell®

'Quality in Every Language'

UL0.7-4

Awaiting Image

Physical Specification

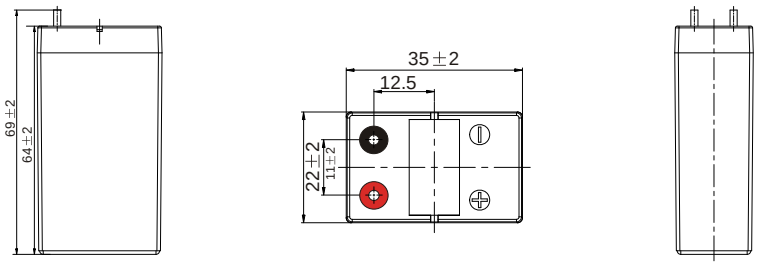
Part Number	**UL0.7-4**
Length	**35.00 ± 2 mm**
Width	**22.00 ± 2 mm**
Container Height	**64.00 ± 2 mm**
Total Height (with terminal)	**69.00 ± 2 mm**
Approx Weight	**0.10 kg**

Specifications

	Nominal Voltage	4V
	Nominal Capacity (10HR)	0.7AH
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	UL94-V0
Rated Capacity	20hr, 1.80V/cell, 25°C	0.70 AH/0.035A
	10hr, 1.80V/cell, 25°C	0.65 AH/0.065A
	5hr, 1.75V/cell, 25°C	0.595 AH/0.119A
	3hr, 1.75V/cell, 25°C	0.537 AH/0.179A
	1hr, 1.60V/cell, 25°C	0.440 AH/0.440A
Max Discharge Current	10.5A (5s)	
Internal Resistance	Approx 90m Ω	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C
		Charge: 0 ~ 40°C
		Storage: -15 ~ 40°C
	Nominal Operating Temp. Range	25 ± 3°C
	Cycle Use	Initial Charging Current less than 0.21A Voltage 4.8V ~ 5.0V Temp. Coefficient -10mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 4.5V ~ 4.6V Temp. Coefficient -6mV/°C
	Capacity affect by Temperature	40°C 103%
		25°C 100%
		0°C 86%
Design Floating Life at 20°C	5 Years	
Self Discharge	Ultracell batteries may be stored for up to 6 months at 25°C(77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

Dimensions

■ **Terminal**



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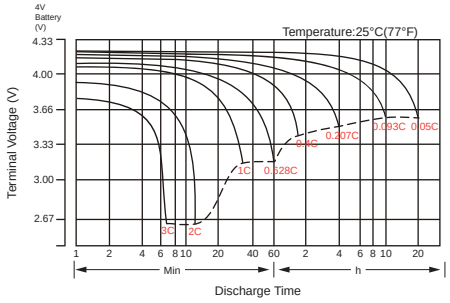
Constant Current Discharge (Amperes) at 20°C

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1.33	1.02	0.85	0.733	0.567	0.418	0.352	0.208	0.163	0.132	0.108	0.094	0.076	0.063	0.035
1.80V/cell	1.79	1.31	1.02	0.867	0.669	0.486	0.394	0.227	0.175	0.141	0.116	0.101	0.080	0.065	0.035
1.75V/cell	2.02	1.44	1.12	0.932	0.694	0.504	0.413	0.236	0.179	0.145	0.119	0.103	0.082	0.067	0.035
1.70V/cell	2.22	1.57	1.19	0.980	0.723	0.524	0.426	0.242	0.183	0.148	0.122	0.105	0.083	0.068	0.036
1.65V/cell	2.45	1.69	1.27	1.041	0.763	0.537	0.435	0.245	0.191	0.154	0.125	0.108	0.084	0.070	0.036
1.60V/cell	2.70	1.84	1.36	1.109	0.805	0.560	0.440	0.256	0.197	0.158	0.130	0.110	0.085	0.070	0.037

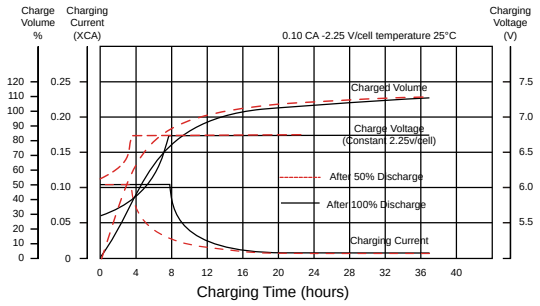
Constant Power Discharge (Watts) at 20°C

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	2.44	1.89	1.58	1.38	1.08	0.803	0.679	0.404	0.318	0.259	0.212	0.184	0.149	0.125	0.069
1.80V/cell	3.24	2.39	1.89	1.61	1.26	0.926	0757	0.438	0.340	0.275	0.226	0.197	0.158	0.129	0.069
1.75V/cell	3.57	2.58	2.03	1.72	1.29	0.952	0.788	0.453	0.345	0.280	0.231	0.202	0.160	0.132	0.070
1.70V/cell	3.82	2.75	2.14	1.79	1.34	0.986	0.810	0.463	0.354	0.287	0.237	0.205	0.162	0.134	0.071
1.65V/cell	4.16	2.94	2.26	1.89	1.40	1.002	0.823	0.467	0.367	0.296	0.243	0.209	0.164	0.137	0.072
1.60V/cell	4.48	3.12	2.38	1.89	1.47	1.039	0.826	0.485	0.376	0.304	0.250	0.213	0.166	0.138	0.072

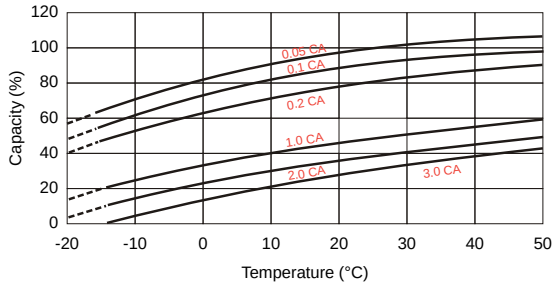
Discharge Characteristics



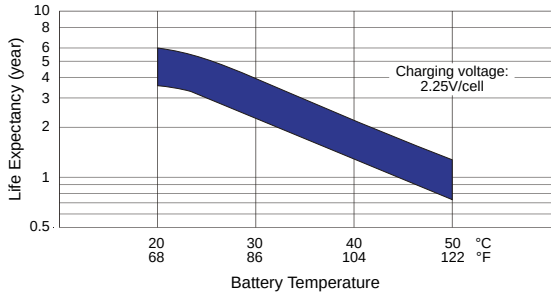
Float Charging Characteristics



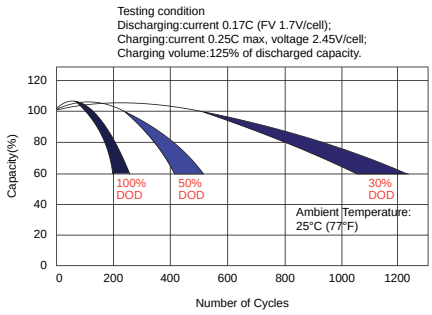
Temperature Effects in Relation to Battery Capacity



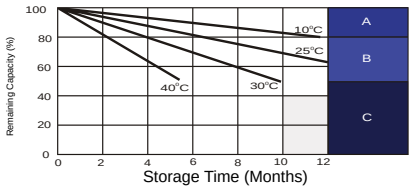
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



A — No supplementary required (Carryout supplementary charge before use if 100% capacity is required.)

B — Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.25Vcell.
3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

C — Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

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