

### UL55-12



### Physical Specification

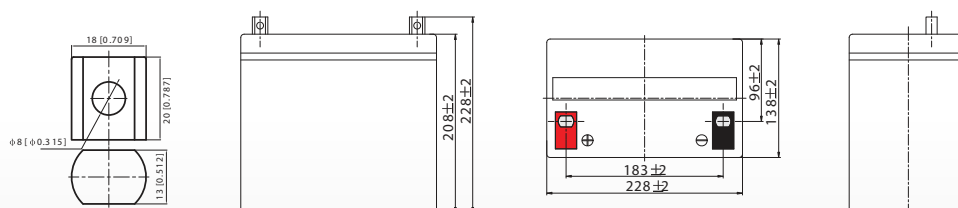
Part Number:	<b>UL55-12</b>
Length:	<b>229 ± 2 mm (9.02 inches)</b>
Width:	<b>138 ± 2 mm (5.43 inches)</b>
Container Height:	<b>205 ± 2 mm (8.07 inches)</b>
Total Height (with terminal):	<b>226 ± 2 mm (8.90 inches)</b>
Approx Weight:	<b>Approx 17.0kg (37.5lbs)</b>

### Specifications

	Normal Voltage	12V
	Normal Capacity (20HR)	55AH
Terminal Type	Standard Terminal	F6
	Optional Terminal	F9/F14
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	UL94:VO
Rated Capacity	57.2 AH/2.86A	(20hr, 1.80V/cell, 25°C / 77°F)
	55.0 AH/5.50A	(10hr, 1.80V/cell, 25°C / 77°F)
	47.3 AH/9.46A	(5hr, 1.75V/cell, 25°C / 77°F)
	42.9 AH/14.3A	(3hr, 1.75V/cell, 25°C / 77°F)
	33.6 AH/33.6A	(1hr, 1.60V/cell, 25°C / 77°F)
Max Discharge Current	660A (5s)	
Internal Resistance	Approx 7.5mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (5 ~ 104°F)
		Storage: -15 ~ 40°C (5 ~ 104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 16.5A. Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F) 103%	
	25°C (77°F) 100%	
	0°C (32°F) 86%	
Design Floating Life at 20°C	10 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

#### F6 Terminal



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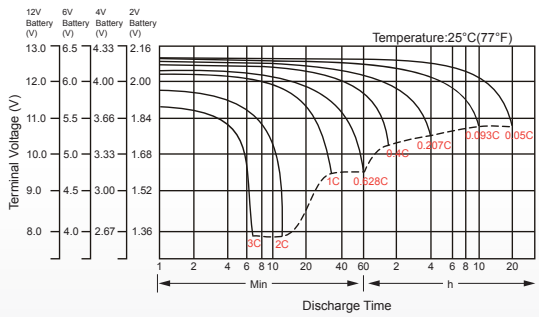
### Constant Current Discharge (Amperes) at 25°C (77°F)

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	94.1	74.0	62.9	52.6	41.8	31.7	25.9	16.5	13.1	10.7	8.60	7.49	6.08	5.19	2.83
1.80V/cell	126.4	94.6	76.0	62.2	49.4	36.8	29.0	18.0	14.1	11.4	9.23	8.03	6.45	5.50	2.86
1.75V/cell	142.5	103.9	83.1	66.9	51.3	38.2	30.4	18.7	14.3	11.6	9.46	8.25	6.56	5.56	2.89
1.70V/cell	156.9	113.3	88.7	70.4	53.3	39.7	31.3	19.4	14.7	11.9	9.71	8.42	6.65	5.61	2.94
1.65V/cell	173.0	122.2	94.3	74.7	56.3	40.7	32.4	20.0	15.3	12.4	9.98	8.61	6.75	5.73	2.98
1.60V/cell	190.8	132.7	100.8	79.6	59.4	42.5	33.6	20.7	15.8	12.7	10.3	8.79	6.82	5.79	3.00

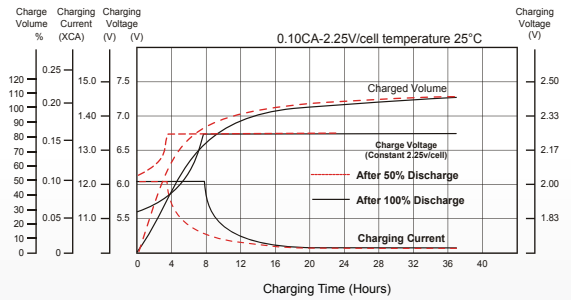
### Constant Power Discharge (Watts) at 25°C (77°F)

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	172.1	136.7	117.4	99.2	79.7	60.9	50.0	32.1	25.5	20.9	16.9	14.7	12.0	10.3	5.61
1.80V/cell	228.6	172.6	140.0	115.6	92.7	70.2	55.7	34.8	27.2	22.2	18.0	15.7	12.7	10.9	5.66
1.75V/cell	252.2	186.6	151.0	123.1	95.4	72.2	58.0	35.9	27.6	22.6	18.4	16.1	12.9	11.0	5.70
1.70V/cell	270.0	198.8	159.0	128.4	98.7	74.8	59.7	37.3	28.4	23.1	18.9	16.4	13.0	11.1	5.81
1.65V/cell	293.6	212.6	167.8	135.4	103.3	76.0	61.2	38.1	29.4	23.8	19.3	16.7	13.2	11.3	5.88
1.60V/cell	316.3	225.5	176.5	142.7	108.3	78.8	63.1	39.2	30.2	24.5	19.9	17.0	13.3	11.4	5.90

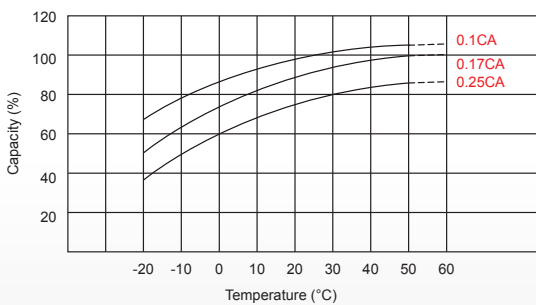
### Discharge Characteristics



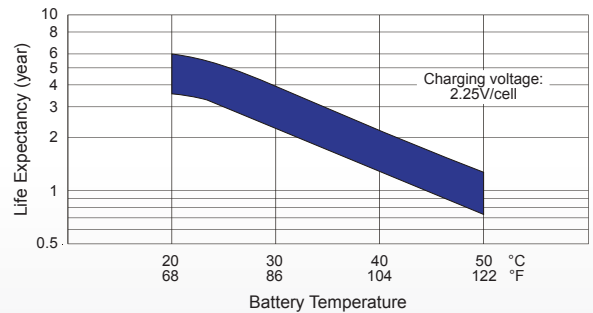
### Float Charging Characteristics



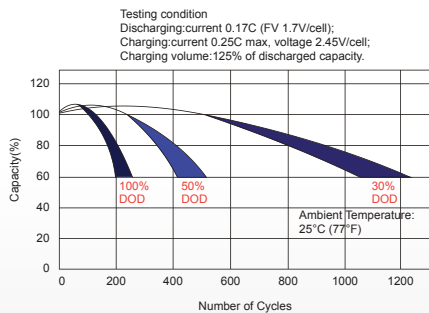
### Temperature Effects in Relation to Battery Capacity



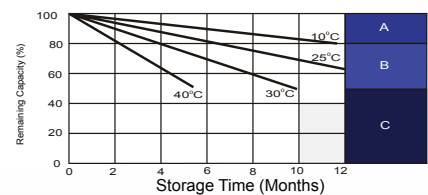
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



- A** No supplementary charge 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 2.25V/cell.
  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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