

## U1-33H 12Volt 33Ah

### Specifications

**Nominal Voltage(V)** 12V

#### Nominal Capacity

20 hour rate	(1.65A to 10.50V)	33Ah
10 hour rate	(3.135A to 10.50V)	31.35Ah
5 hour rate	(5.61A to 10.20V)	28.05Ah
1 C	(33A to 9.60V)	18.7Ah
3 C	(99A to 9.60V)	13.2Ah

**Weight** Approx. 9.9kg(21.78Lbs.)

**Internal Resistance (at 1KHz)** Approx. 10 mΩ

#### Maximum Discharge Current for

5 seconds: 495A

#### Charging Methods at 25 (77 )

##### Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mv/ /cell

Maximum Charging Current : 9.9A

##### Standby use:

Float Charging Voltage 13.50 to 13.80V

Coefficient -3.0mv/ /cell

#### Operating Temperature Range

Charge -15 (5 ) to 40 (104 )

Discharge -15 (5 ) to 50 (122 )

Storage -15 (5 ) to 40 (104 )

#### Charge Retention (shelf life) at 20 (68 )

1 month 92%

3 month 90%

6 month 80%

**Case Material** ABS

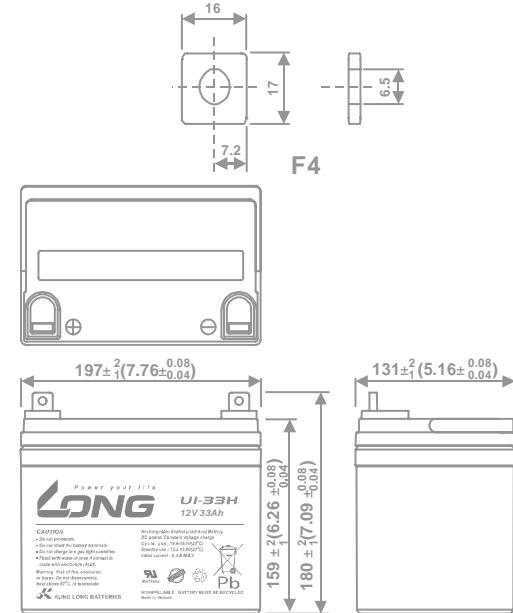
(Option: UL94 HB & UL94 V-0 flame retardant )

**Terminal** F4

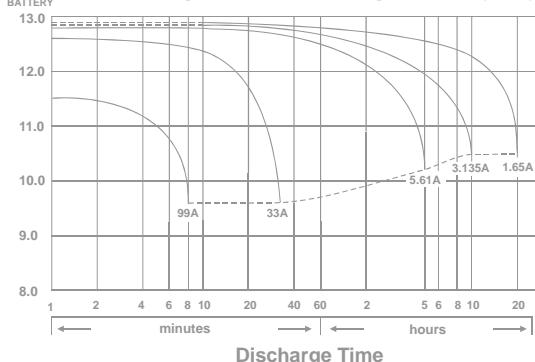


### Dimensions

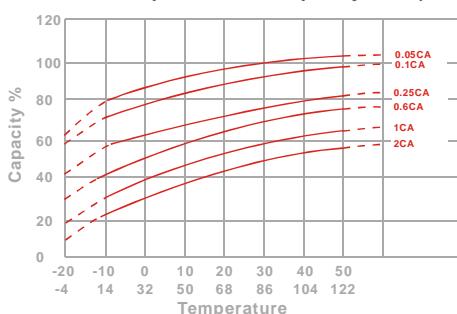
mm(inch)



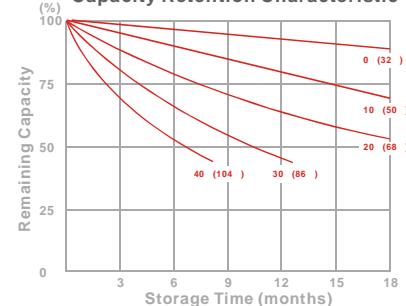
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25 )



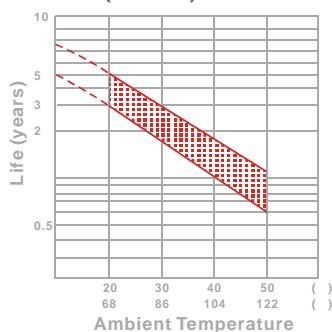
Effect of Temperature on Capacity 25 (77 )



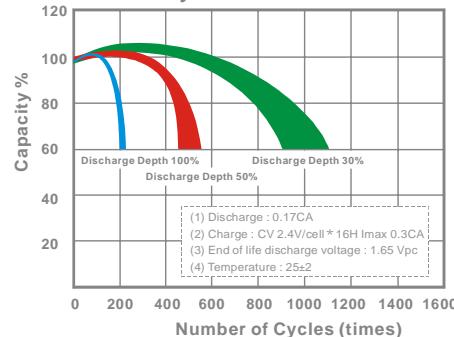
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



## - PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25 (77 )

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V		
		5	10	15	30	60	120	180	240	300
5	min	978	1149	1267	1338	1362	1389	1415	1452	1495
10	min	663	780	860	908	921	935	952	971	991
15	min	515	596	650	682	691	701	712	724	734
30	min	289	333	362	378	383	389	396	400	406
60	min	182	199	210	221	225	229	234	238	244
120	min	114	123	129	134	136	138	141	144	147
180	min	81.8	88.4	93.2	96.6	98.2	100	102	104	106
240	min	65.7	70.4	73.6	77.0	78.1	79.2	80.6	81.5	82.4
300	min	57.4	61.9	65.2	67.6	68.3	69.1	70.1	70.8	71.6
600	min	33.1	35.8	38.1	39.4	39.8	40.2	40.8	41.2	41.6
1200	min	17.4	18.8	20.0	20.7	21.0	21.3	21.6	21.8	22.0

- Discharge Rates in Amperes to Various End Voltages at 25 (77 )

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
		5	10	15	30	60	120	180
5	min	86.7	106	120	129	132	136	140
10	min	58.5	68.4	74.5	79.8	81.7	84.2	87.3
15	min	41.1	49.3	54.2	58.4	59.6	61.5	63.0
30	min	27.4	31.3	32.9	34.2	34.6	35.1	35.6
60	min	16.4	17.7	18.6	19.3	19.5	19.8	20.1
120	min	9.67	10.3	10.8	11.2	11.3	11.5	11.7
180	min	6.86	7.36	7.82	8.08	8.15	8.23	8.36
240	min	5.45	5.89	6.27	6.46	6.51	6.58	6.69
300	min	4.74	5.11	5.43	5.61	5.65	5.70	5.78
600	min	2.73	2.95	3.15	3.24	3.27	3.30	3.34
1200	min	1.48	1.59	1.66	1.71	1.72	1.74	1.76

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%), 10min X < 60min(+8% ~-8%), X 60min(+5%~-5%)