

## MSK100A 2Volt 100Ah

### Specifications

Nominal Voltage(V) **2V**

#### Nominal Capacity

10 hour rate	(10A to 1.80V)	<b>100Ah</b>
5 hour rate	(17A to 1.70V)	<b>85Ah</b>
1 hour rate	(60A to 1.60V)	<b>60Ah</b>
1C	(100A to 1.60V)	<b>50Ah</b>

Weight **Approx. 7.5kg(16.50Lbs.)**

Internal Resistance (at 1 KHz) **Approx. 1.4 mΩ**

Maximum Discharge Current for  
5 seconds: **600A**

#### Charging Methods at 25 (77 )

##### Cycle use:

Charging Voltage **2.40 to 2.50V**  
Coefficient -5.0mv/ /cell  
Maximum Charging Current : **30A**

##### Standby use:

Float Charging Voltage **2.25 to 2.30V**  
Coefficient -3.0mv/ /cell

Design Life **12 years**

#### 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	<b>98%</b>
3 month	<b>94%</b>
6 month	<b>85%</b>

Case Material **ABS**

(UL94-V0 flame retardant case / cover )

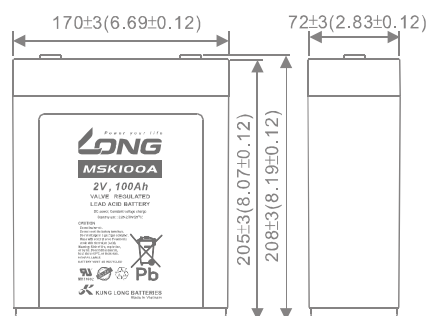
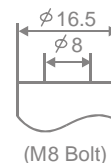
#### Description of torque value of hard ware for the terminals:

Recommended torque value **M8: 7.35 N-m (75kg-cm)**  
Maximum allowable torque value **M8: 9.8 N-m (100kg-cm)**

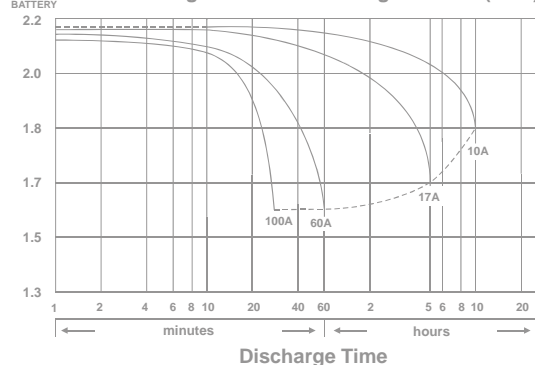


### Dimensions

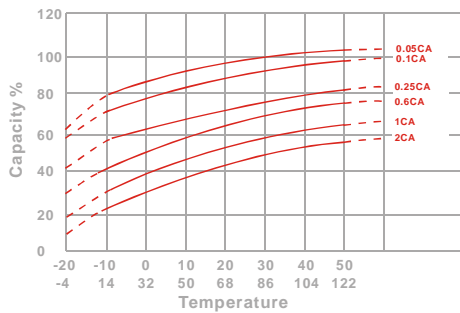
mm(inch)



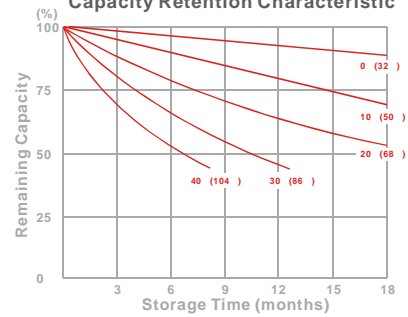
(V) FOR 2V BATTERY Discharge Time VS. Discharge Current (25 )



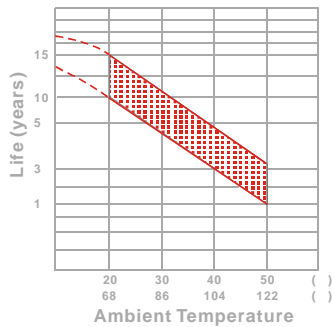
Effect of Temperature on Capacity 25 (77 )



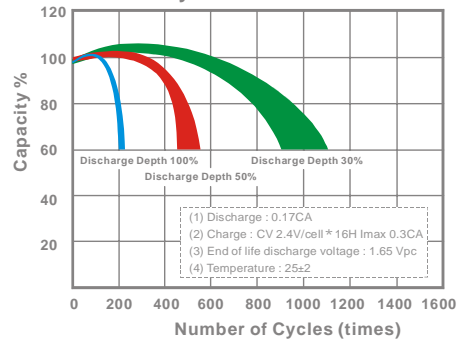
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



## - PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.60V
Time							
20	min	155	177	196	211	223	232
30	min	143	163	175	185	192	198
60	min	101	108	113	118	121	124
120	min	59.1	62.8	66.0	69.0	71.6	74.1
180	min	42.4	45.8	48.5	50.9	55.2	57.2
240	min	37.1	39.8	42.2	44.2	45.6	46.8
300	min	32.8	34.7	36.3	38.0	39.2	40.1
360	min	30.5	31.7	32.7	33.5	34.3	35.1
480	min	23.9	24.9	25.7	26.5	27.2	27.8
600	min	20.1	20.8	21.4	22.1	22.6	23.0
1200	min	10.0	10.6	11.1	11.7	12.1	12.3

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.60V
Time							
20	min	81.9	94.5	105	114	122	127
30	min	76.8	86.5	92.3	97.4	102	105
60	min	46.8	52.7	56.2	58.9	61.1	63.0
120	min	28.1	31.2	33.4	35.3	36.6	37.7
180	min	22.9	24.2	25.3	26.2	27.1	27.9
240	min	18.1	19.1	20.0	20.8	21.5	22.1
300	min	15.6	16.4	17.1	17.7	18.3	18.8
360	min	13.6	14.3	14.9	15.5	16.0	16.4
480	min	11.1	11.6	12.0	12.3	12.7	13.0
600	min	9.64	10.0	10.3	10.5	10.7	10.9
1200	min	4.90	5.13	5.33	5.51	5.64	5.73

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%)