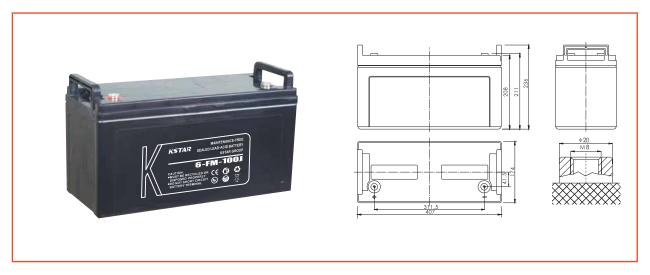
## **COLLOID BATTERY SERIES (AGM)**



## 6-FM-100J



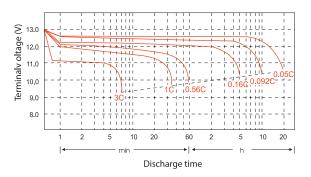
### ■ Specifications

Nominal Voltage		12V				
Rated Capacity (20 hour rate)		100Ah				
Dimensions	Total Height (with terminals)	8.62 inches(219mm)				
	Height	8.35 inches(212mm)				
	length	15.98 inches(406mm)				
	width	6.81 inches(173mm)				
Weight		Approx.72.6 Pound(33.0kg)				

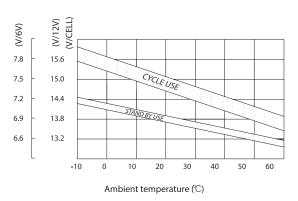
### Characteristics

		20 hour rate (5.0A)	100 Ah			
		10 hour rate (9.20A)	92 Ah			
Capacity 77⊠ (25 °C)		5 hour rate (16.0A)	80 Ah			
77M (25 C)		1hour rate (60.0A)	60 Ah			
	15Minute Full char Prince 100 Full char Full c	15Minute Rate (164A)	41 Ah			
Internal Resistance		Full charged Battery 77 (25 °C)	4.5 ΜΩ			
		104 (40 °C)	102%			
Capacity affected by		77 (25 °C)	100%			
emperature (20hour rate)	32 (0 °C)	85%				
		5 (-15 ℃)	65%			
Colf Discharge		Capacity after 3 month storage	91%			
Self-Discharge Capacity after 3 month st	Capacity after 6 month storage	81%				
77 12 (23 0)		Capacity after 12 month storage	DA) 80 Ah DA) 60 Ah DA) 6			
Max. Discharge Curre 77 ☑ (25 °C)	nt	800A(5S)				
Terminal		M3				
	Cycle	Initial Charging Current less than 30A				
Charge (Constant Voltage)	Cycle	Voltage 14.4~14.7 V / 77	(25 °C)			
(==::===::=voitage)	Float	Voltage 13.5~13.8V / 77	(25 °C)			

## ■ Discharge Curves 77°F (25°C)



# ■ Relationship between charge voltage and temperature



### ■ Constant Current Discharge (AMPERES @25°C)

F. V/Time	5Min	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	10Hour	24Hour
1.65	311	217	168	102	80.1	54.2	37.8	26.1	17.5	9.80	4.33
1.70	285	205	157	86.8	75.7	51.9	36.9	25.0	16.9	9.59	4.25
1.80	227	173	137	78.4	71.5	49.4	35.3	23.6	16.0	9.20	4.18

## ■ Constant Power Discharge (WATTS PER CELL@25 °C)

Cut off voltage V/cell	5Min	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	10Hour	24Hour
1.60	571	394	307	191	148	119	70.0	49.1	32.4	18.3	8.11
1.65	542	389	304	185	146	115	69.1	49.0	32.2	18.2	8.10
1.67	540	386	302	173	144	114	68.8	48.6	31.9	18.2	8.09
1.70	506	379	291	162	142	111	68.4	47.7	31.6	18.1	8.07
1.75	461	346	274	156	141	108	67.9	46.4	31.0	18.0	8.06
1.80	423	330	264	151	138	107	66.6	46.1	30.5	17.7	8.04
1.85	339	273	231	141	127	104	64.2	45.0	29.5	16.9	7.62

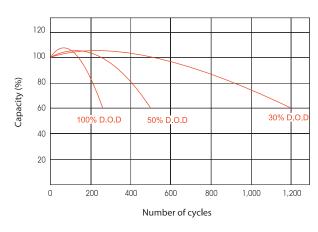
## **COLLOID BATTERY SERIES (AGM)**



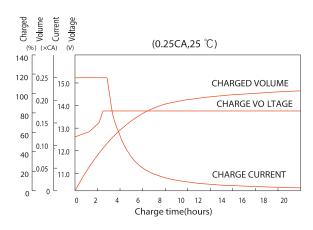
## 6-FM-100J

The operating environment temperature above  $40^{\circ}\text{C}$  should be avoided ,After long term storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles. To get the longest life, KSTAR battery should be fully charged before storage.

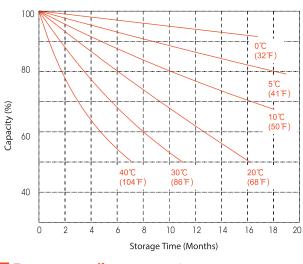
### ■ Cycle service life in relation to depth of discharge



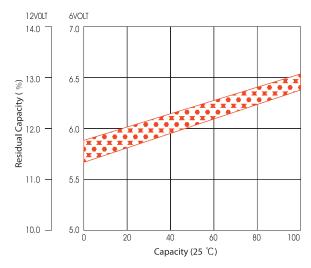
#### Constant voltage charge characteristic



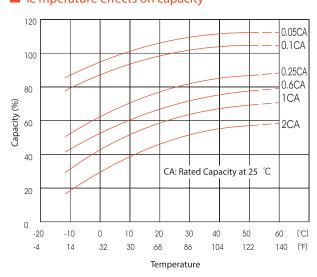
### ■ Self-Discharge Characteristics



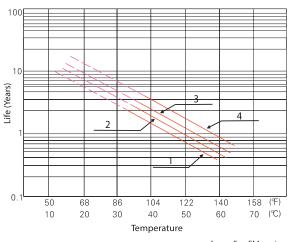
### ■ Relationship of OCV and Residual Capacity % (25 °C)



### ■ Te mperature effects on capacity



#### ■ Te mperature effects float life



2----- For FML series 3----- For FMH series 4----- For GFM series