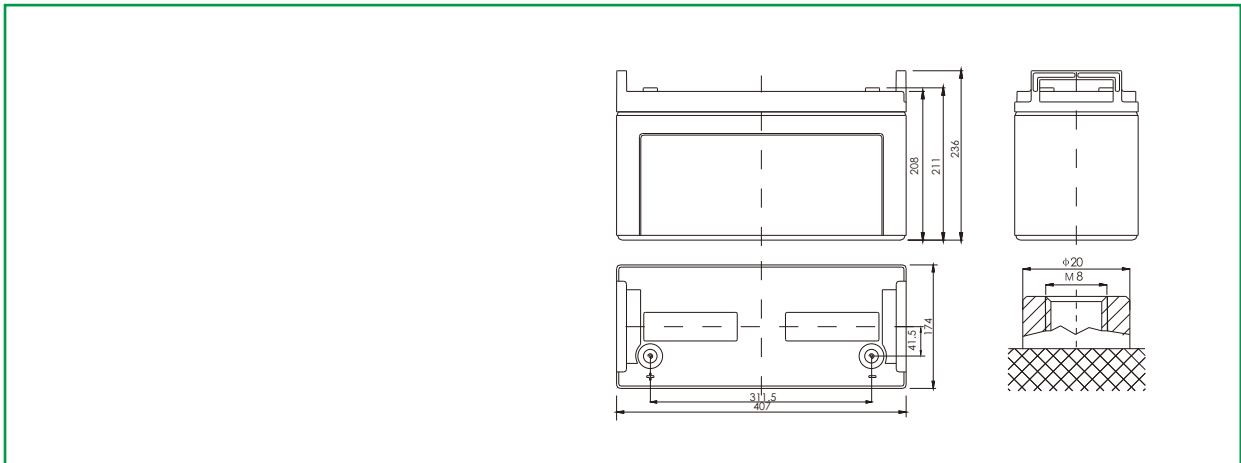


# 6-FM-100

FM Series  
Battery For General Use



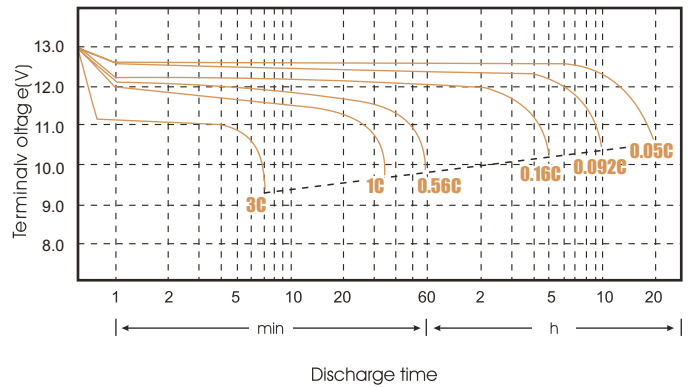
## Specifications

Nominal Voltage		12V
Rated Capacity(20 hour rate)		100Ah
Dimensions	Total Height (with terminals)	9.29inches (236mm)
	Height	8.19inches (208mm)
	Length	16.02inches (407mm)
	Width	6.85inches (174mm)
Weight		Approx. 71.28pound(32.4kg)

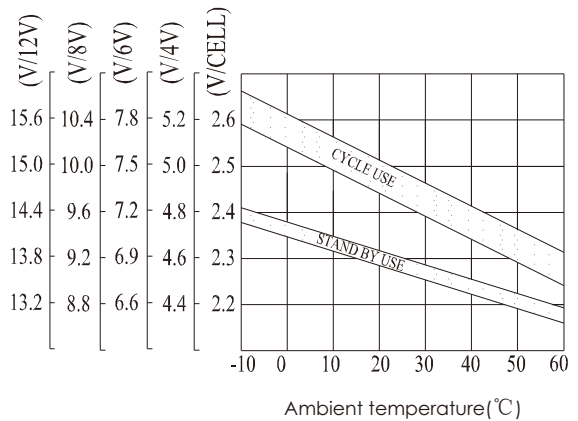
## Characteristics

Capacity 77°F(25°C)	20 hour rate (5.0A)	100Ah
	10 hour rate (9.2A)	92Ah
	5 hour rate (16.0A)	80Ah
	1 hour rate (60.0A)	60Ah
	15 minute Rate(164A)	41Ah
Internal Resistance	Full charged Battery 77°F(25°C)	5mΩ
Capacity affected by Temperature (20 hour rate)	104°F(40°C)	102%
	77°F(25°C)	100%
	32°F(0°C)	85%
	5°F(-15°C)	65%
Self-Discharge 77°F(20°C)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	81%
	Capacity after 12 month storage	60%
Max. Discharge Current 77°F(25°C)	800A(5S)	
Terminal	M2	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 30A Voltage 14.4~14.7V/77°F(25°C)
	Float	Voltage 13.5~13.8V/77°F(25°C)

## Discharge Curves 77 °F(25 °C)



## Relationship between charge voltage and temperature



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

F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.65	217	168	102	80.1	54.2	37.8	26.1	17.5	12.4	9.80	8.41	4.33
1.70	205	157	86.8	75.7	51.9	36.9	25.0	16.9	11.9	9.59	8.16	4.25
1.80	173	137	78.4	71.5	49.4	35.3	23.6	16.0	11.2	9.20	7.93	4.18

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

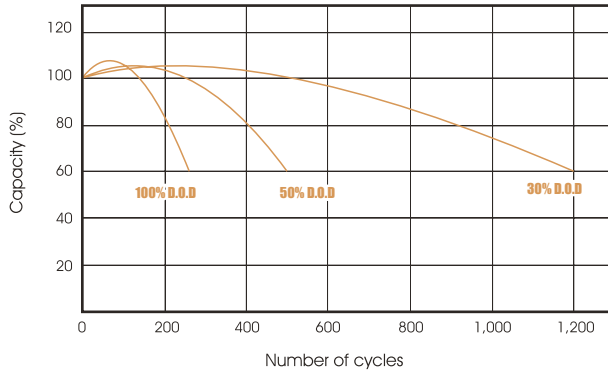
F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.60	394	307	191	148	119	70.0	49.1	32.4	22.9	18.3	15.7	8.11
1.65	389	304	185	146	115	69.1	49	32.2	22.8	18.2	15.6	8.1
1.67	386	302	173	144	114	68.8	48.6	31.9	22.7	18.2	15.5	8.09
1.70	379	291	162	142	111	68.4	47.7	31.6	22.3	18.1	15.4	8.07
1.75	346	274	156	141	108	67.9	46.4	31.0	21.7	18.0	15.3	8.06
1.80	330	264	151	138	107	66.6	46.1	30.5	21.4	17.7	15.2	8.04
1.85	273	231	141	127	104	64.2	45.0	29.5	20.1	16.9	14.4	7.62
1.90	226	202	132	117	101.1	61.9	43.9	28.5	18.88	16.14	13.64	7.22

# 6-FM-100

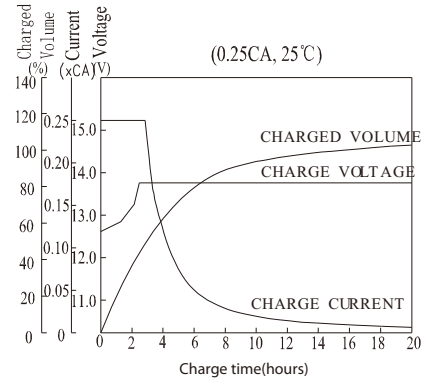
FM Series  
Battery For General Use

The operating environment temperature above 40°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, OTP battery should be fully charged before storage.

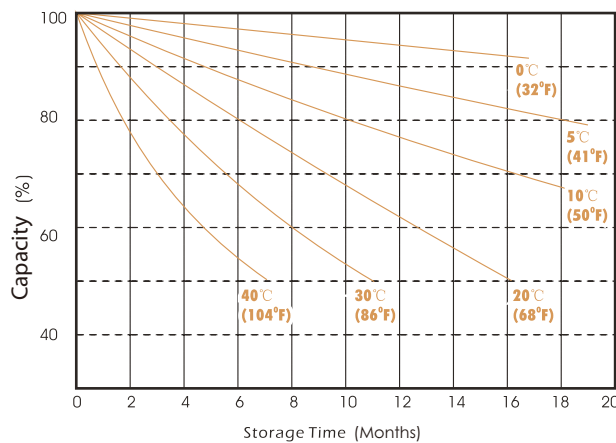
## Cycle service life in relation to depth of discharge



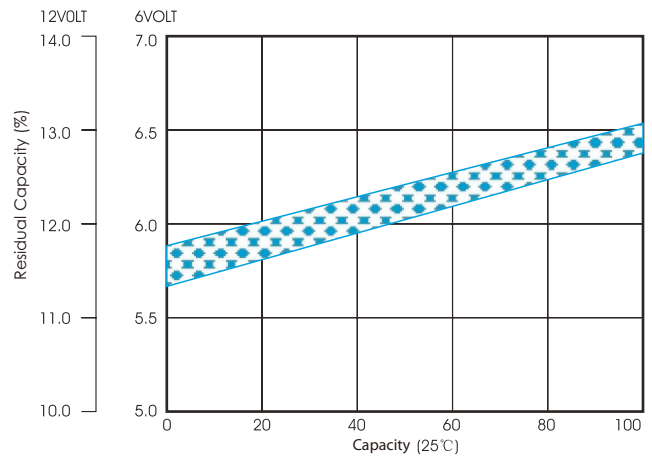
## Constant voltage charge characteristic



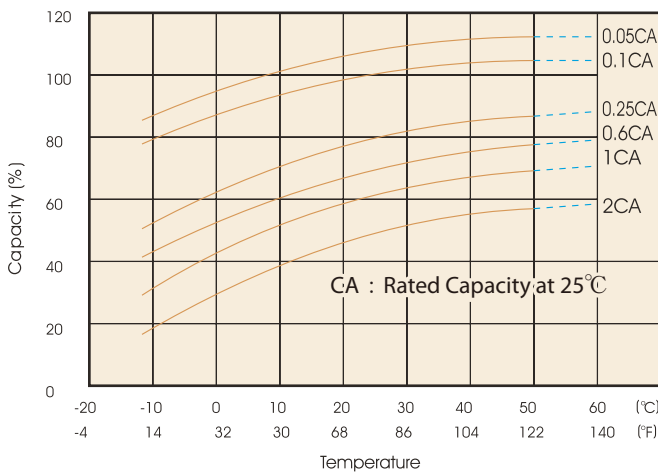
## Self-Discharge Characteristics.



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



## Temperature effects on capacity



## Temperature effects on float life

