

MB0.8Ah-12V

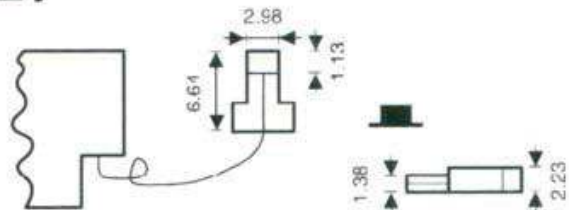
Master Bat

VALVE REGULATED LEAD-ACID BATTERY

www.masterbattery.eu



F27



Application

- Measuring equipment and instrument
- Telephone sets
- Lighting equipment
- Security systems

General Features

- Designed floating charging service life: 8 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 10°C-40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

PHYSICAL SPECIFICATIONS

Nominal Voltage		12V
Nominal Capacity (20HR)		0.8AH
Dimensions	Length	97±1mm
	Width	25±1mm
	Container height	63±1mm
	Total Height (with terminal)	63±1mm
Weight±3%		Approx 0.36Kg(0.79lbs)
Internal Resistance(In full charge status)		≈128.5mΩ
Standard Terminals		F27(standard)

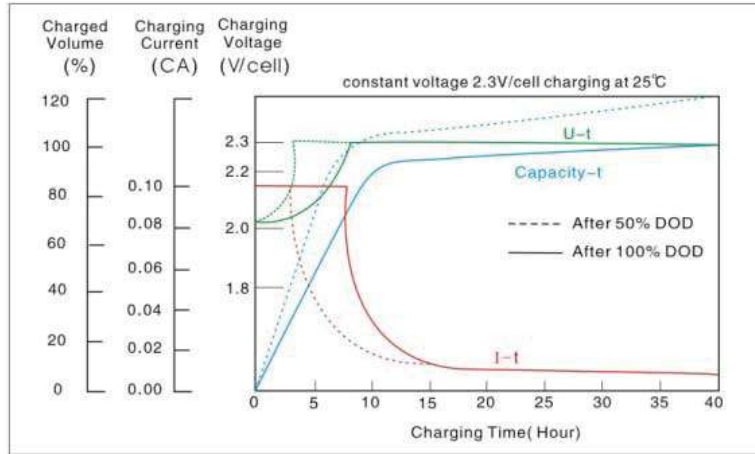
Constant – Voltage Charge

Cycle application	<ol style="list-style-type: none"> 1. Limit initial current less than 0.2A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C (77F) . 3. Hold at 14.1V to 14.4V until current drop to under 0.005A for at least 3 hours. 4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby service	<ol style="list-style-type: none"> 1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit 0.2A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status. 2. Temperature compensation coefficient of charging voltage is -18mV/°C

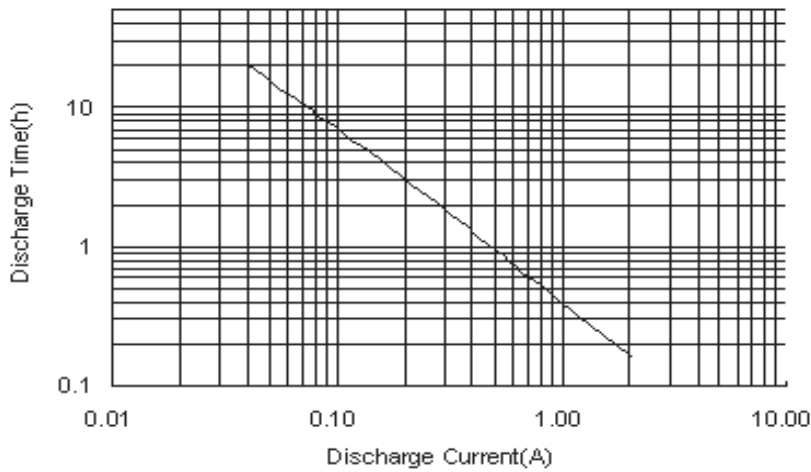
NOTE : The battery should be charged within 6 months of storage ,Otherwise , permanent loss of capacity might occur



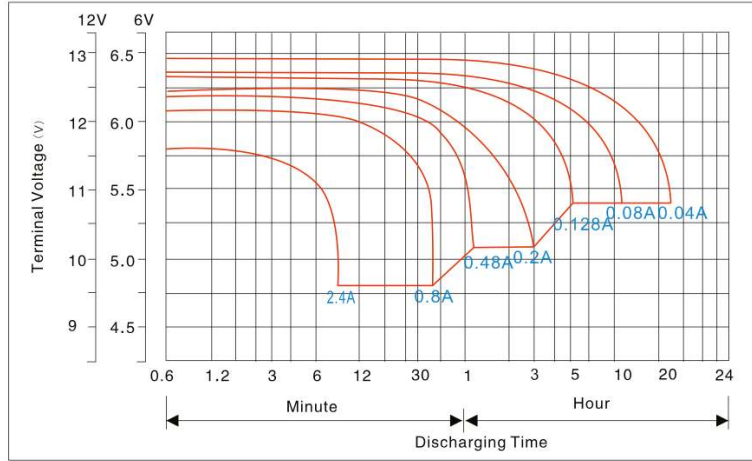
Charge Characteristics



Discharge Current & Discharge Duration Time (25°C/77°F)



Discharge Characteristic (25°C/77°F)



ELECTRICAL SPECIFICATIONS

Rated Capacity	20 hour rate(40mA)	0.83AH
	10 hour rate(80mA)	0.76AH
	5 hour rate(128mA)	0.64AH
	27 minute rate(0.8mA)	0.36AH
	7 minute rate (2.4A)	0.28AH
Capacity affected by Temperature (20Hour Rate)	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

Constant Current Discharge Data Sheet (Amperes at 25°C)

End Voltage/cell	Minute (M)				Hour (H)					
	5	10	20	45	1	2	4	8	10	20
1.70	3.003	1.958	1.097	0.564	0.492	0.287	0.164	0.093	0.078	0.043
1.75	2.973	1.937	1.087	0.554	0.487	0.277	0.160	0.092	0.077	0.042
1.80	2.942	1.917	1.076	0.552	0.482	0.267	0.157	0.091	0.076	0.041

Constant Power Discharge Data Sheet (Watt at 25°C)

End Voltage/cell	Minute (M)				Hour (H)					
	5	10	20	45	1	2	4	8	10	20
1.70	36.08	23.47	13.12	6.765	5.904	3.444	1.968	1.117	0.927	0.500
1.75	35.67	23.22	13.02	6.704	5.843	3.321	1.927	1.107	0.903	0.494
1.80	35.26	22.96	12.92	6.632	5.781	3.198	1.886	1.097	0.878	0.488



