

# SEALED LEAD-ACID BATTERIES v1.2

# TCB

## LEAD-ACID RECHARGEABLE BATTERY

MODEL: 6 HI%&A &" 5 7 'fl 2V 2.3AhD



### Application

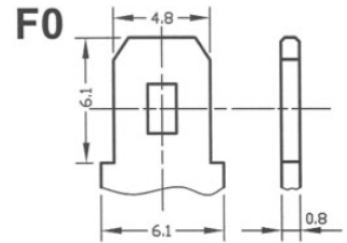
- ☆ Measuring equipment and instrument
- ☆ Telephone sets
- ☆ Lighting equipment
- ☆ Security systems
- ☆ UPS power supply

### 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

<b>Nominal Voltage</b>		12V
<b>Nominal Capacity (20HR)</b>		2.3AH
<b>Dimensions</b>	<b>Length</b>	178±2mm
	<b>Width</b>	35±1mm
	<b>Container height</b>	61±1mm
	<b>Total Height (with terminal)</b>	66±1mm
<b>Weight±3%</b>		Approx.0.86Kg(1.896lbs)
<b>Internal Resistance(In full charge status)</b>		≈60.5mΩ
<b>Standard Terminals</b>		F0(standard)



### ELECTRICAL SPECIFICATIONS

<b>Rated Capacity</b>	20 hour rate(115mA)	2.35AH
	10 hour rate(230mA)	2.20AH
	5 hour rate(368mA)	1.84AH
	27 minute rate(2.3A)	1.04AH
	7 minute rate (6.9A)	0.8AH
<b>Capacity affected by Temperature (20Hour Rate)</b>	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	8.521	5.548	3.096	1.614	1.338	0.835	0.464	0.264	0.228	0.120
1.75	8.439	5.497	3.065	1.604	1.328	0.802	0.455	0.266	0.225	0.119
1.80	8.347	5.435	3.034	1.584	1.318	0.769	0.446	0.258	0.224	0.117

### 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	102.2	66.4	37.1	19.31	16.14	9.992	5.568	3.167	2.718	1.43
1.75	101.1	65.8	36.8	19.16	15.99	9.609	5.466	3.137	2.687	1.42
1.80	100.1	65.2	36.5	19.00	15.84	9.226	5.354	3.106	2.656	1.40

### CYCLE APPLICATION

1. Limit initial current less than 0,575A.
2. Charge until battery voltage (under charge) reaches 14,1V to 14,4V at 25°C.
3. Hold at 14,1V to 14,4V until current drop to under 0,014A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.

### STANDBY SERVICE

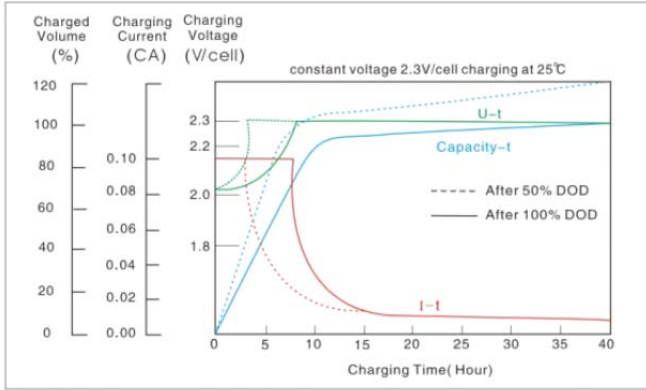
1. Hold battery across constant voltage source of 13,6V to 13,8V with current limit 0,575A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

**NOTE:** the battery should be charged within 6 months of storage. Otherwise, permanent loss of capacity might occur as a result of sulfation.

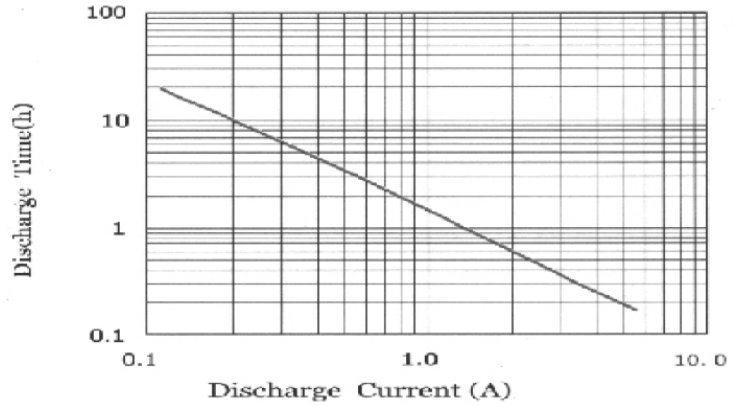


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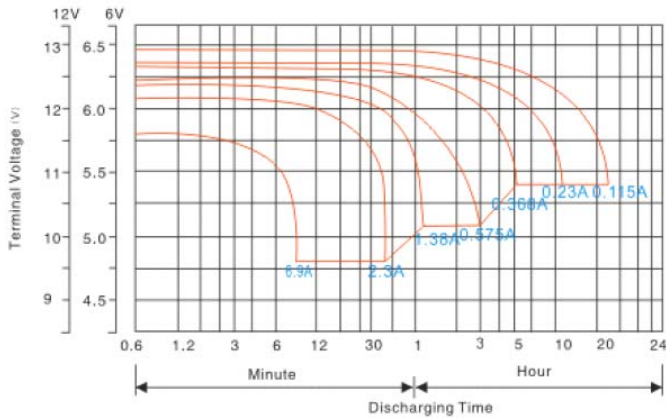
MODEL: 6 HI%&A;" 57 fl 2V 2.3AhL



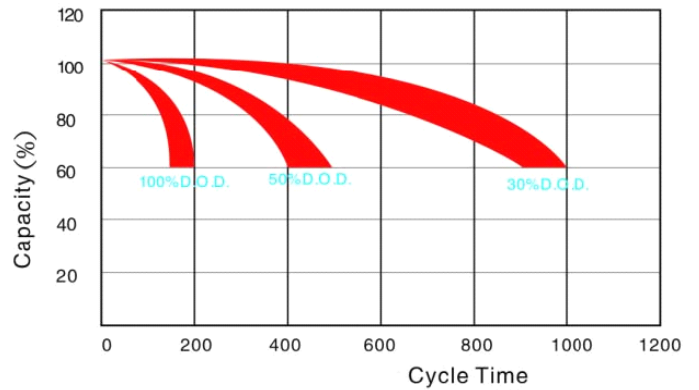
Charge Characteristics



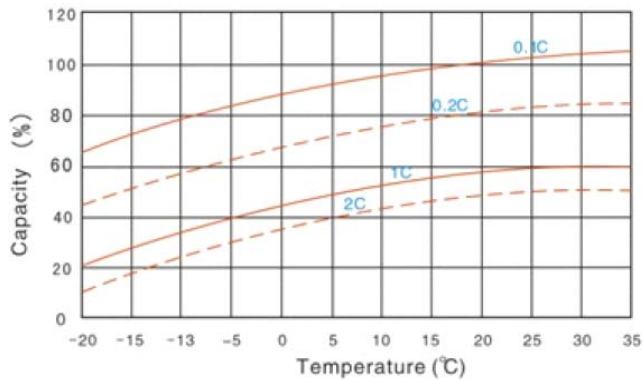
Discharge Current & Discharge Duration (25°C)



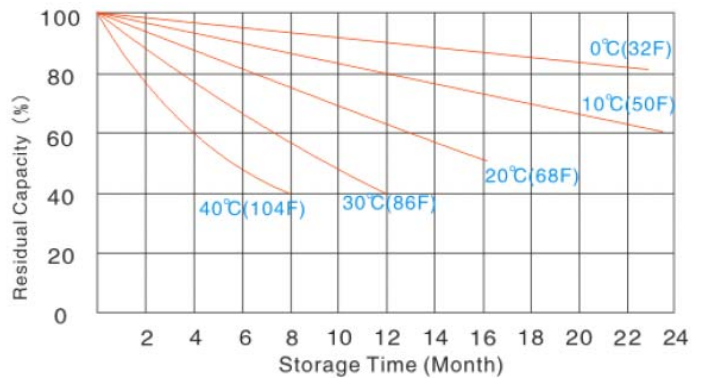
Discharge Characteristics



The Relationship Between Lifetime and Depth Of Discharge(25°C)



Capacity Curve at Different Temperature



Storage Characteristics