

# AVIVO BATTERY

## Specification

Nominal Voltage	12V		
Nominal Capacity(20HR)	2.3AH		
Dimensions	Length	178±2mm (7.00 inches)	
	Width	35±1mm (1.38 inches)	
	Container Height	60±1mm (2.36 inches)	
	Total Height (with Terminal)	66±1mm (2.60 inches)	
Approx Weight	Approx 0.93 kg		
Terminal	F1		
Container Material	ABS		
Rated Capacity	2.30	AH/0.115A	(20hr, 1.80V/cell, 25°C/77°F)
	2.14	AH/0.214A	(10hr, 1.80V/cell, 25°C/77°F)
	1.84	AH/0.368A	(5hr, 1.75V/cell, 25°C/77°F)
	1.725	AH/0.575A	(3hr, 1.75V/cell, 25°C/77°F)
	1.403	AH/1.403A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	34.5A (5s)		
Internal Resistance	Approx 90mΩ		
Operating Temp. Range	Discharge : -15~50°C (5~122°F)		
	Charge : 0~40°C (32~104°F)		
	Storage : -15~40°C (5~104°F)		
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Cycle Use	Initial Charging Current less than 0.69A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C		
	Standby Use No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C		
Capacity affected by Temperature	40°C (104°F)	103%	
	25°C (77°F)	100%	
	0°C (32°F)	86%	
Self Discharge	Pattern PT series battery may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.		

## 6-GFM-2.3



## Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system

Intertek



ISO14001



ISO9001



## Constant Current Discharge (Amperes) at 25 °C (77°F)

15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h	V/cell
2.530	2.185	1.748	1.334	1.081	0.690	0.529	0.437	0.345	0.299	0.253	0.203	0.110	1.85
3.220	2.599	2.047	1.449	1.219	0.736	0.552	0.460	0.357	0.322	0.285	0.214	0.115	1.80
3.450	2.806	2.139	1.541	1.265	0.759	0.575	0.483	0.368	0.334	0.299	0.220	0.120	1.75
3.680	2.944	2.231	1.633	1.311	0.782	0.598	0.501	0.391	0.345	0.334	0.229	0.124	1.70
3.910	3.105	2.300	1.702	1.357	0.828	0.621	0.518	0.414	0.357	0.345	0.237	0.129	1.65
4.140	3.220	2.415	1.771	1.403	0.874	0.644	0.541	0.437	0.380	0.368	0.246	0.133	1.60

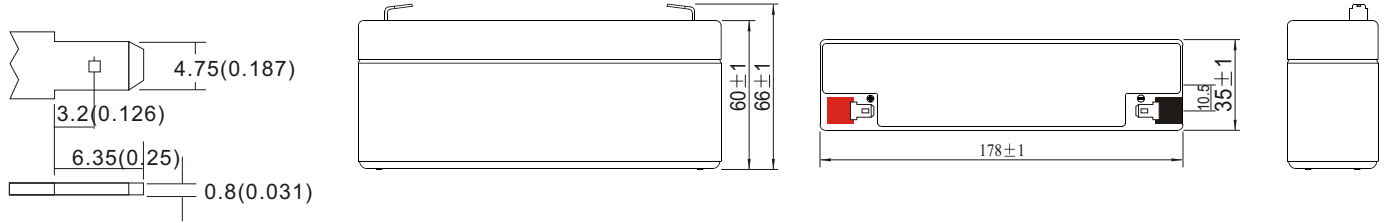
## Constant Power Discharge (Watts/cell) at 25 °C (77°F)

15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h	V/cell
4.681	4.042	3.234	2.468	2.000	1.277	0.979	0.808	0.638	0.553	0.468	0.376	0.204	1.85
5.796	4.678	3.685	2.608	2.194	1.325	0.994	0.828	0.642	0.580	0.513	0.385	0.207	1.80
6.038	4.911	3.743	2.697	2.214	1.328	1.006	0.845	0.644	0.584	0.523	0.386	0.209	1.75
6.256	5.005	3.793	2.776	2.229	1.329	1.017	0.852	0.665	0.587	0.567	0.389	0.211	1.70
6.452	5.123	3.795	2.808	2.239	1.366	1.025	0.854	0.683	0.588	0.569	0.392	0.213	1.65
6.624	5.152	3.864	2.834	2.245	1.398	1.030	0.865	0.699	0.607	0.589	0.394	0.213	1.60

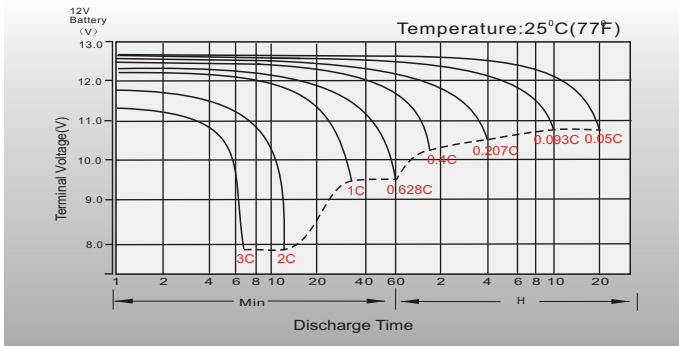
# Dimensions

## F1 Terminal

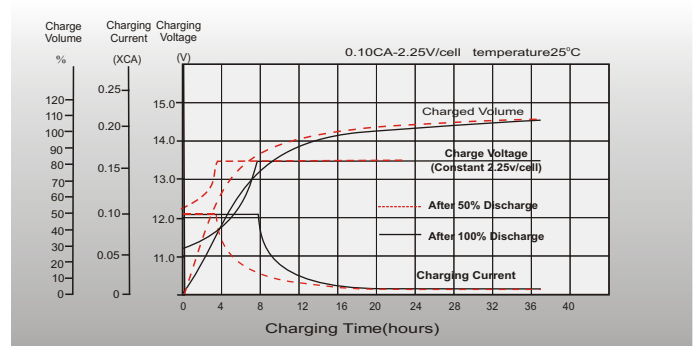
Unit: mm [inches]



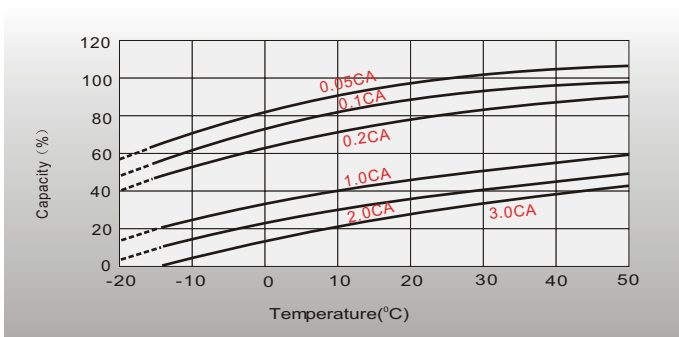
## Discharge Characteristics



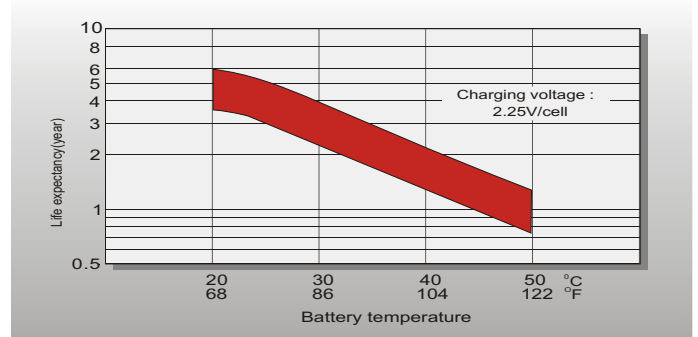
## Float Charging Characteristics



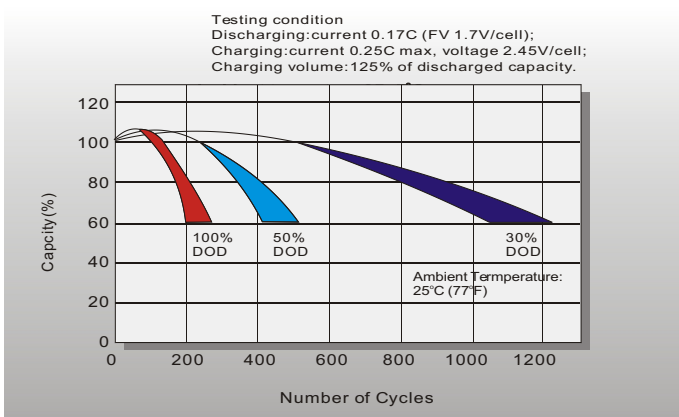
## Temperature Effects in Relation to Battery Capacity



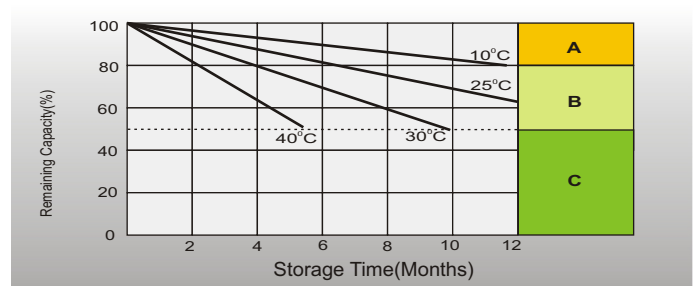
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.