

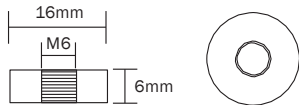
**PGFT-12V100 FR 12 Volt 106.8 AH @ 20-hr. rate**  
**100.0 AH @ 8-hr. rate**

**Rechargeable Sealed Lead Acid Battery**  
**Designed for Cyclic, Standby, and Solar Applications**

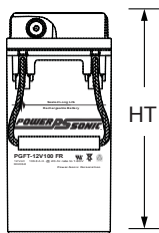
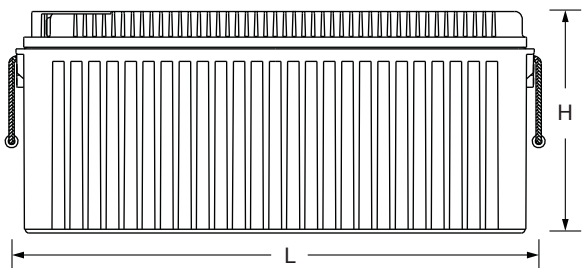
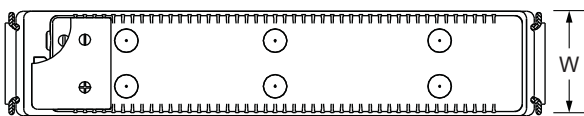


### Terminals (mm)

- T13: Threaded insert w. 6 mm stud fastener



### Physical Dimensions: in (mm)



**L: 21.46 (545) W: 4.33 (110) H: 9.17 (233) HT: 9.17 (233)**

Tolerances are ±0.04 in. (±1mm) and ±0.08 in. (±2mm) for height dimensions.

### Features

- **Long Service Life** - Thick plate design and efficient gas recombination yield a service life expectancy of up to 12 years in standby mode.
- **Low Internal Resistance** - Superb high-rate discharge characteristics ensure reliable performance in UPS and Telecom applications.
- **Maintenance-Free, Non-Spillable** - Proven VRLA technology guarantees safe operation without maintenance and 'non-restricted article' status for transportation.
- **Handles** - Integral carrying handles.
- **Low Self-Discharge** - Lead-calcium alloy grids and use of high purity lead account for superior shelf-life characteristics permitting storage for extended periods of time.
- **Designed-In Reliability** - Cutting-edge manufacturing and process control combined with meticulous quality assurance procedures guarantee consistent and dependable performance.

### Performance Specifications

**Nominal Voltage** ..... 12 volts (6 cells)

#### Nominal Capacity

20-hr. (5.34A to 10.80 volts) .....	106.8 AH
10-hr. (10.0A to 10.80 volts) .....	100.0 AH
8-hr. (12.1A to 10.50 volts).....	96.8 AH
5-hr. (17.8A to 10.50 volts) .....	89.0 AH
3-hr. (27.0A to 9.60 volts) .....	85.8 AH
1-hr. (65.3A to 9.60 volts) .....	65.3 AH

**Approximate Weight** ..... 78.5 lbs. (35.6 kg)

**Energy Density (10-hr. rate)** ..... 1.41 W-h/in<sup>3</sup> (85.94 W-h/l)

**Specific Energy (10-hr. rate)** ..... 15.29 W-h/lb (33.70 W-h/kg)

**Internal Resistance (approx.)** ..... 4.3 milliohms

**Max Short-Duration Discharge Current (10 Sec.)**..... 1068 amperes

#### Shelf Life (% of nominal capacity at 68°F (20°C))

1 Month .....	97%
3 Months.....	91%
6 Months .....	83%

#### Operating Temperature Range

Charge.. ..... -4°F (-20°C) to 122°F (50°C)

Discharge..... -40°F (-40°C) to 140°F (60°C)

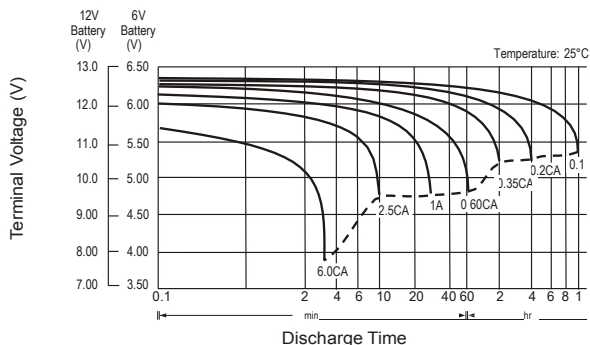
**Case** ..... ABS Plastic (UL94 V-0 flame retardant)

**Power-Sonic Chargers** ..... n/a

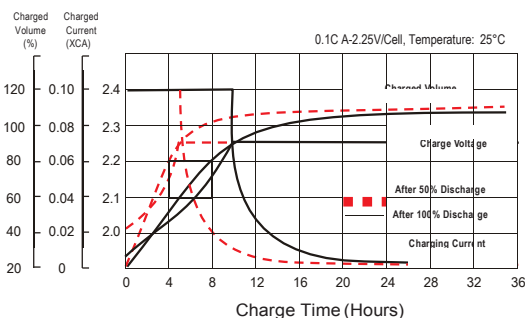
## AMPS/WATTS @ 25° C

	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V	154.2/287.9	132.0/249.0	117.0/222.9	93.4/179.9	71.3/138.5	57.4/111.9	33.8/66.3	25.0/49.2	20.2/39.8	17.0/33.7	11.8/23.6	9.75/19.5	5.18/10.4
1.80V	181.2/334.4	150.8/280.6	129.6/243.3	101.2/192.0	75.3/145.2	59.9/116.1	34.8/67.8	25.7/50.4	20.7/40.7	17.5/34.6	12.1/24.1	10.0/20.0	5.34/10.7
1.75V	195.0/354.2	159.6/293.4	135.6/252.1	104.8/197.2	77.6/148.1	61.7/119.1	35.6/69.0	26.1/51.0	21.1/41.2	17.8/35.0	12.3/24.4	10.1/20.2	5.41/10.8
1.70V	205.8/365.4	167.6/303.9	141.3/260.8	107.4/200.9	79.1/150.4	63.1/121.4	36.1/69.9	26.6/51.8	21.3/41.7	18.0/35.4	12.4/24.6	10.2/20.4	5.47/10.9
1.67V	216.0/382.0	172.4/311.3	145.2/266.9	110.0/205.4	80.8/151.2	64.3/123.4	36.7/71.0	27.0/52.4	21.6/42.2	18.2/35.7	12.5/24.8	10.3/20.5	5.50/11.0
1.60V	223.2/383.9	177.2/313.6	148.8/269.7	112.0/206.4	82.3/154.3	65.3/124.1	37.3/71.5	27.4/52.9	21.9/42.5	18.5/36.0	12.7/25.0	10.4/20.6	5.53/11.0

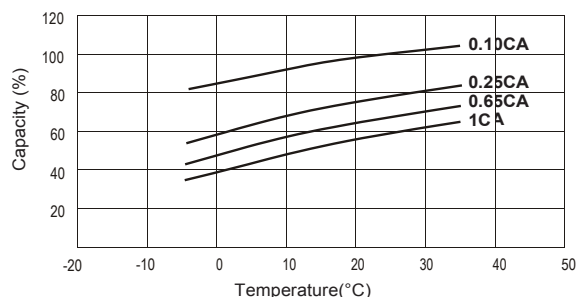
### Discharge Characteristics



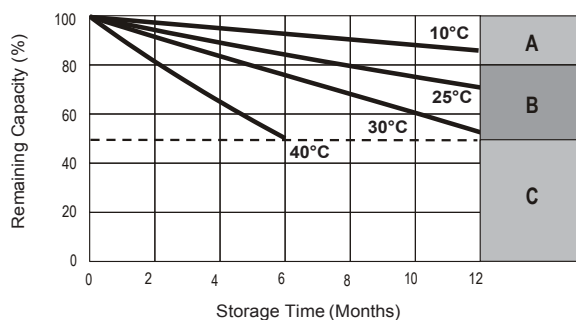
### Float Charging Characteristics



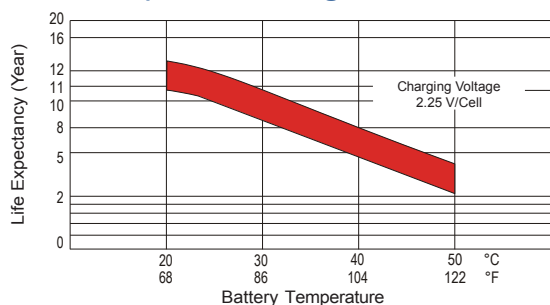
### Temperature Effects in Relation to Battery Capacity



### Self Discharge Characteristics



### Effect of Temperature on Long-Term Float Life



- 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 20hours at limited current 0.25CA and constant voltage 2.45V/cell. 3. Charged for 8~10hours 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

## Charging

**Cycle Applications:** Limit initial current to 32A. Charge until battery voltage (under charge) reaches 14.4 to 14.7 volts at 68° F (20° C). Hold at 14.4 to 14.7 volts until current drops to under 1068mA. Battery is fully charged under these conditions, and charger should be disconnected or switched to “float” voltage.

**“Float” or “Stand-By” Service:** Hold battery across constant voltage source of 13.5 to 13.8 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

**Note:** Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

