

**DCG12-50 12 Volt 50.0 AH @ 20-hr. rate**  
**46.5 AH @ 10-hr. rate**

**Rechargeable Sealed Lead Acid Battery**  
**Power-Gel Series™**



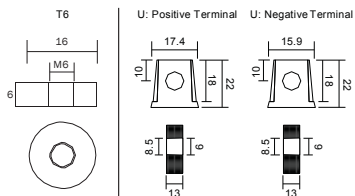
## Features

- Thixotropic gel electrolyte for enhanced performance
- Valve regulated, spill proof construction allows safe operation in any position
- Superior capabilities
- Power/volume ratio yielding unrivaled energy density
- Rugged ABS plastic (UL94-HB) case and cover
- Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified
- U.L. recognized - MH 20845
- CE compliant

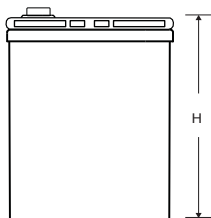
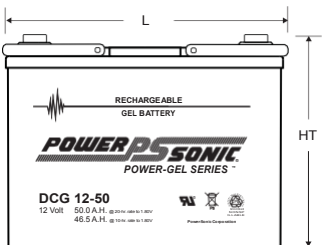
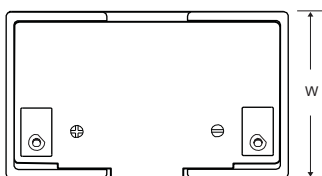
## Terminals

(mm)

- T6: Threaded insert w. 6 mm stud fastener
- U: Universal terminals: Heavy-duty posts with 'nut & bolt' fasteners



## Physical Dimensions: in(mm)



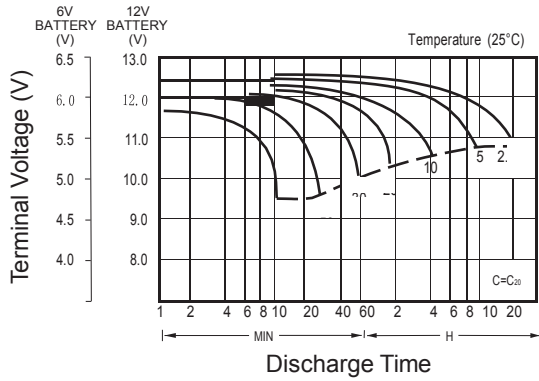
**L: 9.02 (229) W: 5.45 (138) H: 8.07 (205) HT: 8.31 (211)**

Tolerances are +/- 0.08 in. (+/- 2mm) for all dimensions.  
 All data subject to change without notice.

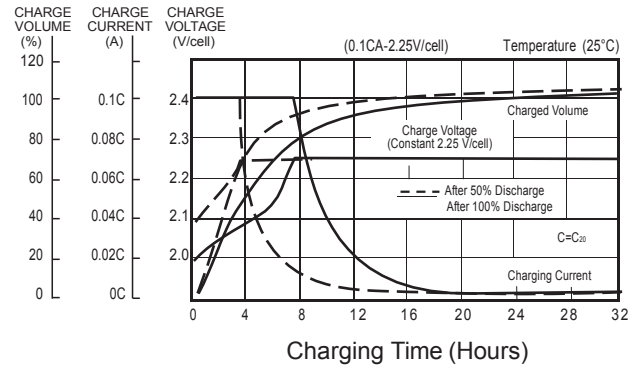
## Performance Specifications

Nominal Voltage.....	12 volts (6 cells)
Nominal Capacity	
20-hr. (2.5A to 10.8 volts) .....	50.0 AH
10-hr. (4.65A to 10.5 volts) .....	46.5 AH
5-hr. (8.0A to 10.5 volts) .....	40.0 AH
3-hr. (11.6A to 10.5 volts) .....	34.8 AH
1-hr. (27.5A to 10.0 volts) .....	27.5 AH
Approximate Weight .....	36.6 lbs. (16.6 kg)
Energy Density (20-hr. rate) .....	1.51 W-h/in <sup>3</sup> (92.29 W-h/l)
Specific Energy (20-hr. rate) .....	16.30 W-h/lb (35.94 W-h/kg)
Internal Resistance (approx.) .....	9.0 milliohms
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 HB)
Recommended Power-Sonic Chargers .....	n/a

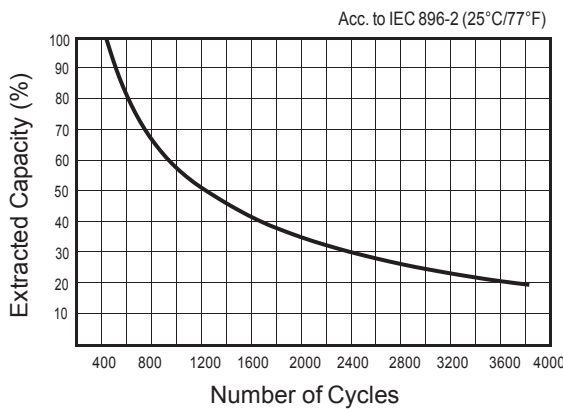
**Discharge Characteristics**



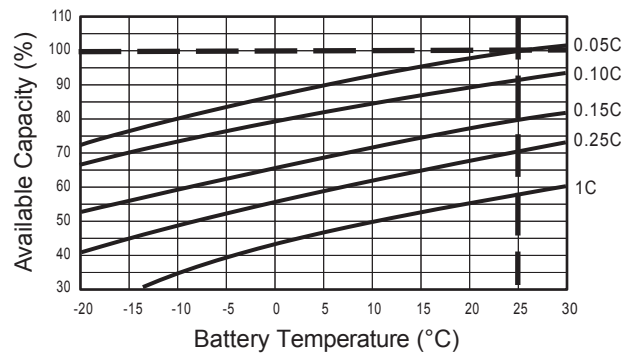
**Float Charging Characteristics**



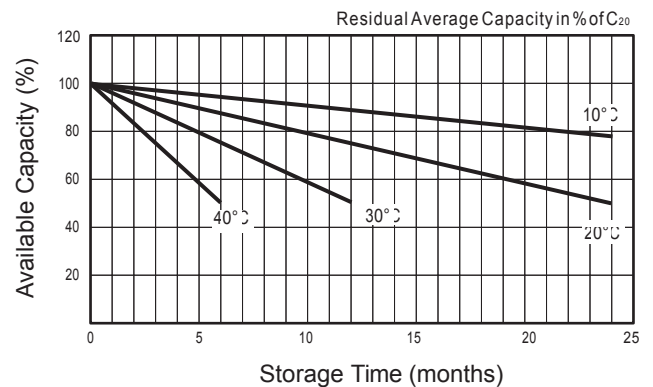
**Cycle Life in Relation to Depth of Discharge**



**Temperature Effects in Relation to Battery Capacity**



**General Relation of Capacity vs. Storage Time**



**Charging**

**Cycle Applications:** Limit initial current to less than 12.5A. Charge until battery voltage (under charge) reaches 14.40 to 15.00 volts at 77 °F (25 °C).

**“Float” or “Stand-By” Service:** Hold battery across constant voltage source of 13.50 to 13.80 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, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

**Chargers**

Power-Sonic offers a wide range of chargers suitable for batteries up to 100AH. Please refer to the Charger Selection Guide in our specification sheets for “C-Series Switch Mode Chargers” and “Transformer Type A and F Series”. Please contact our Technical department for advice if you have difficulty in locating suitable models.

**Further Information**

Please refer to our website [www.power-sonic.com](http://www.power-sonic.com) for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc..

**Contact Information**



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