

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

Rechargeable Sealed Lead Acid Battery
Power-Gel Series™



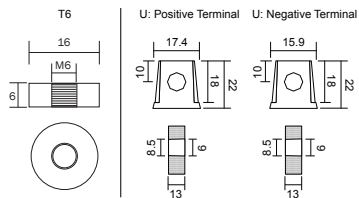
Features

- 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

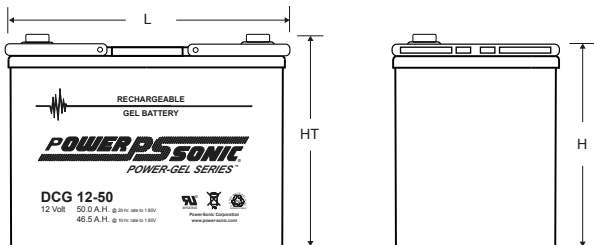
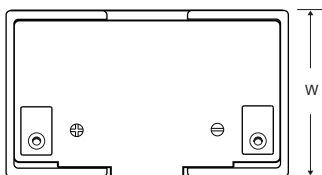
Terminals

(mm)

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



Physical Dimensions: in(mm)



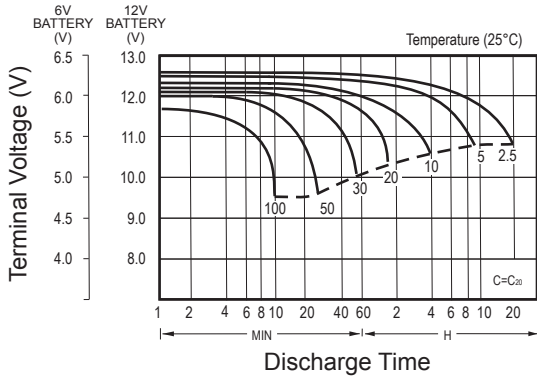
L: 9.02 (229) W: 5.45 (138) H: 8.07 (205) HT: 8.31 (211)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

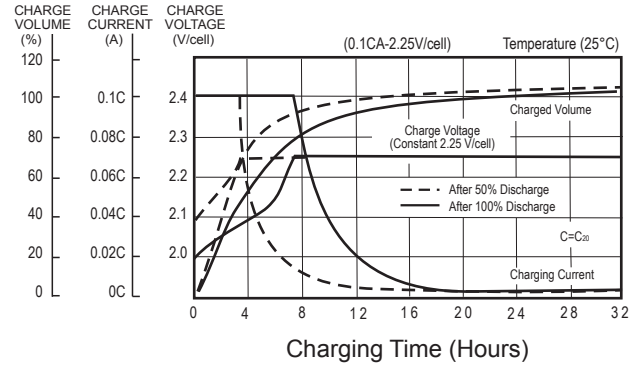
Performance Specifications

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. (12.30A to 10.5 volts)	36.9 AH
1-hr. (27.5A to 10.0 volts)	27.5 AH
Approximate Weight	36.8 lbs. (16.7 kg)
Energy Density (20-hr. rate)	1.51 W-h/in ³ (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

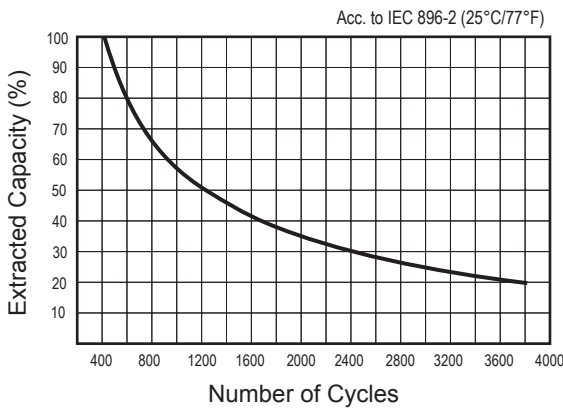
Discharge Characteristics



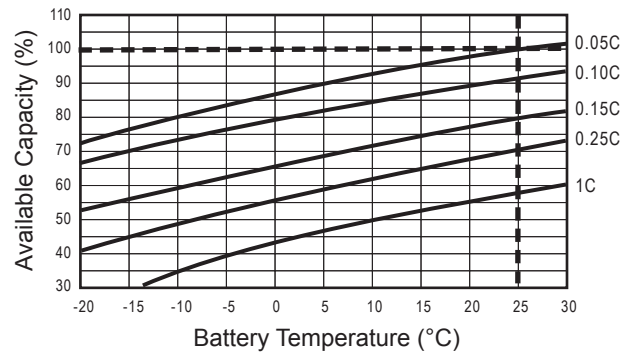
Float Charging Characteristics



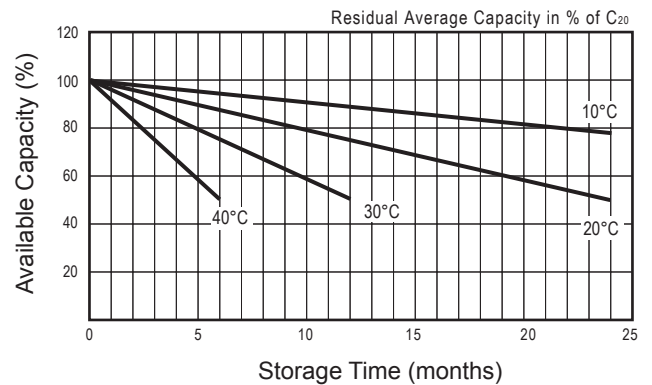
Cycle Life in Relation to Depth of Discharge



Temperature Effects in Relation to Battery Capacity



General Relation of Capacity vs. Storage Time



Charging

Cycle Applications: Limit initial current to 15A. Charge until battery voltage (under charge) reaches 13.90 to 14.20 volts at 68°F (20°C). Hold at 13.90 to 14.20 volts until current drops to under 500mA. 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 13.50 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 for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc..

Contact Information

www.power-sonic.com

DOMESTIC SALES

Tel: +1-619-661-2020
Fax: +1-619-661-3650
national-sales@power-sonic.com

CUSTOMER SERVICE

Tel: +1-619-661-2030
Fax: +1-619-661-3648
customer-service@power-sonic.com

TECHNICAL SUPPORT

Tel: +1-619-661-2020
Fax: +1-619-661-3648
support@power-sonic.com

INTERNATIONAL SALES

Tel: +1-650-364-5001
Fax: +1-650-366-3662
international-sales@power-sonic.com