

MILITARY SPECIFICATION SHEET

BATTERY, DRY, BA-421/U

INACTIVE FOR NEW DESIGN AFTER
15 OCTOBER 1998 AND IS NO LONGER USED,
EXCEPT FOR REPLACEMENT PURPOSES.

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein
shall consist of this specification sheet and [MIL-B-18](#).

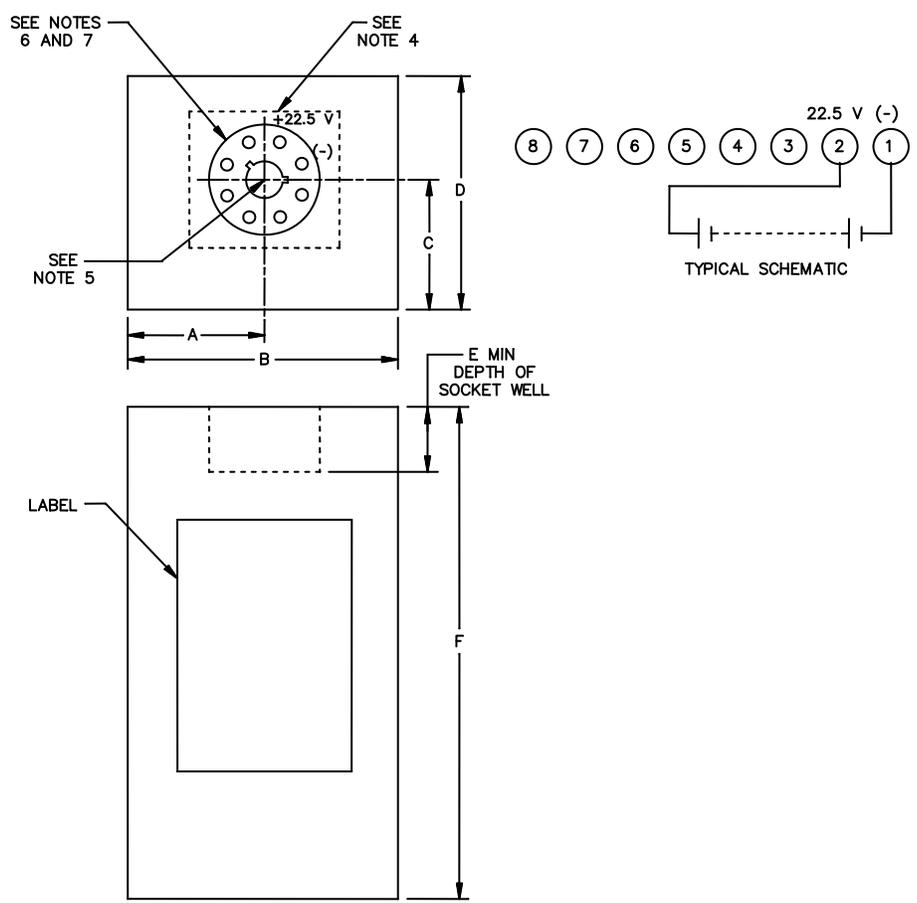


FIGURE 1. Battery dimensions.

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Ltr	Inches		mm	
	Min	Max	Min	Max
A	1.250	1.376	26.65	34.95
B	2.500	2.688	63.50	68.28
C	1.187	1.313	30.15	33.27
D	1.870	2.625	47.50	66.68
E	.562	.688	14.27	17.48
F	4.562	4.875	115.87	123.83

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ± 0.063 inch (1.600 mm).
4. Size of insulating plate at base of socket is optional.
5. Pin-circle center.
6. The jacket opening shall be 1.063 inch (27.00 mm) minimum diameter, and shall be positioned so that its center is within a .063 inch (1.600 mm) diameter circle whose center coincides with the pin-circle center.
7. Socket type B is required. (See [MIL-B-18](#) for details.)
8. Marking to be in accordance with [MIL-B-18](#).

FIGURE 1. Battery dimensions - Continued.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Nominal voltage: 22.5 volts.

Usual number and type of cells: 15 "B" cells.

Usual cell connection: Series.

Terminals: 8-hole socket.

Weight (maximum): 1 pounds, 10 ounce.

Capacity tests: When the battery is tested in accordance with the methods of examination and test of this specification, the minimum capacity-test requirements shall be not less than the minimum time specified for SLD or SLT.

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First article inspection in accordance with MIL-B-18:

- Visual and mechanical (external).
- Battery voltage.
- Vibration test.
- Mechanical-shock test in accordance with MIL-STD-202, method 213, test condition I.
- Insulation resistance test in accordance with MIL-STD-202, method 302, test condition B, tolerance ± 20 volts.
- Capacity, D (without storage).
- Jacket integrity test.

Conformance inspection in accordance with MIL-B-18:

- Visual and mechanical (external).
- Battery voltage.
- Insulation resistance test in accordance with MIL-STD-202, method 302, test condition B, tolerance ± 20 volts.
- Vibration test.
- Mechanical-shock test in accordance with MIL-STD-202, method 213, test condition I.
- Jacket integrity test.
- Electrode leakage.
- Capacity, D and T.

Method of examination and test:

Capacity tests: See requirements for capacity specified herein.

Storage:	Test	Period
	D	18 months
	T	90 days

Discharge: The battery shall be discharged through 300 ohms for 2 minutes, then through 700 ohms for 18 minutes for a period of 4 hours, then on open circuit for 20 hours. This cycle shall be repeated 5 days per week continuously to a test-end voltage of 16.5 volts.

Closed circuit voltage: Use TS-183 ()/U test per special marking or, with minimum permissible voltage as specified for TS-183 ()/U, use a load resistance value of 298.2 ohms.

Special marking on each unit package:

TO TEST THIS BATTERY WITH TS-183 ()/U:	
USE JACK NO.	MINIMUM PERMISSIBLE VOLTAGE
12	21.0
Unless expressly authorized, this test information shall apply to Army and Air Force applications only.	

Part or Identifying Number (PIN): BA-421/U, see 1.2 of MIL-B-18.

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Reference documents. In addition to [MIL-B-18](#), this document references the following:

[MIL-STD-202](#)

| The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - MI

Navy - SH

DLA - CC

Preparing activity:

Army - CC

(Project 6135-2010-062)

Review activities:

Navy - MC

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil>.