

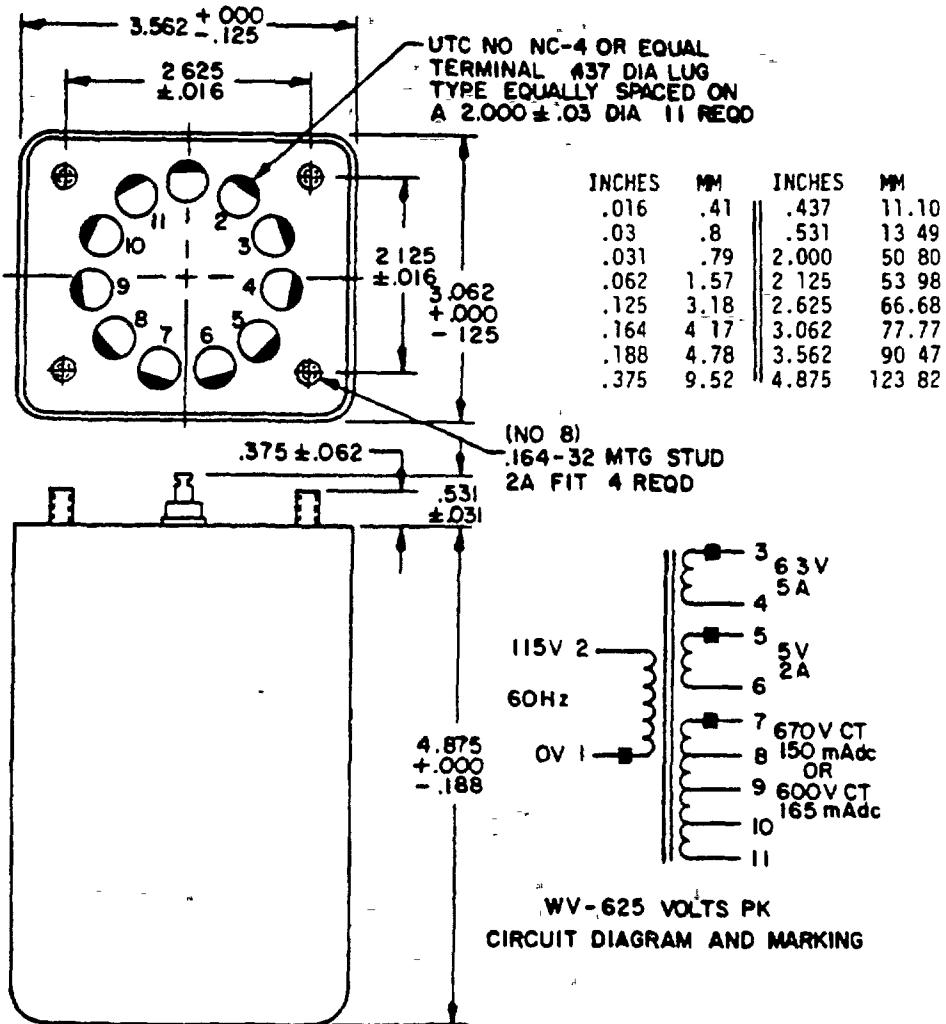
MIL-T-27/183B
 18 July 1978
 SUPERSEDING
 MIL-T-27/183A
 13 December 1977

MILITARY SPECIFICATION SHEET

TRANSFORMER, POWER, STEP-DOWN AND STEP-UP, TF4S03JA

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

The complete requirements for procuring the transformer described herein shall consist of this document and the latest issue of Specification MIL-T-27.



NOTES

- 1 Dimensions are in inches
- 2 Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm
- 3 Tolerance on terminal position dimensions is ±.015 (.38 mm).
- 4 Marking shall be on the side of the case

FIGURE 1 Dimensions and configuration.

(B) denotes change

REQUIREMENTS (When number in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings:

Primary voltage (1-2): 115 volts, 60 hertz.

Secondary voltage:

(3-4): 6.3 volts, 5 amperes rms.

(5-6): 5.0 volts, 2 amperes rms.

(7-11): 670 volts ct, 150 milliamperes dc or 600 volts ct, 165 milliamperes dc.

Working voltage 625 volts peak.

Volt ampere rating 142 volt amperes.

Design and construction

Dimensions and configuration See figure 1.

Duty cycle. Continuous.

Case. Metal.

Material. Steel.

Terminals Solder lug.

Terminal height .531 ± .031 inch.

Weight. 7 pounds maximum

Operating temperature range -55°C to +130°C.

Terminal strength MIL-STD-202, method 211, test condition A, 5 pounds.

Dielectric withstand voltage (at sea level): 1,750 volts rms.

Electrical characteristics

No load: With 115 volts, 60 hertz across (1-2), current in (1-2) shall not exceed 450 milliamperes and the power in (1-2) shall not exceed 5 watts.

Voltage across (3-4) 6.76 volts ± 3 percent; voltage across (5-6): 5.28 volts ± 3 percent; voltage across (7-11): 706 volts ± 3 percent; and

voltage across (8-10): 630 volts ± 3 percent.

(B) Rated load: With 115 volts, 60 hertz across (1-2), the voltage across (3-4) shall be 6.3 volts ± 5 percent, across (5-6) shall be 5 volts ± 5 percent; across (7-11) shall be 670 volts ± 5 percent.

DC resistance:

(1-2) 3.0 ohms maximum.

(3-4) .05 ohm maximum

(5-6) .09 ohm maximum

(7-11) 210 ohms maximum

(8-10) 190 ohms maximum

Polarity Additive, with terminals 2 and 3, 4 and 5, and 6 and 7 connected.

Temperature rise: 40°C with 115 volts rms, 60 hertz across (1-2) at an ambient temperature of 90°C.

Marking location See figure 1.

Part number M27/183-01

Custodian:
Army - EL
Navy - EC
Air Force - 85

Review activities:

Army - MI
Navy - SH, OS
Air Force - 11, 17, 99
DLA - ES

User activities:

Army - AR, WC, ME
Navy - MC, AS
Air Force - 19

Preparing activity:
Army - EL

Agent:
DLA - ES

(Project 5950-0556-9)