

MILITARY SPECIFICATION SHEET

TRANSFORMERS, POWER, STEP-DOWN, TF5S03ZZ

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 the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-T-27.

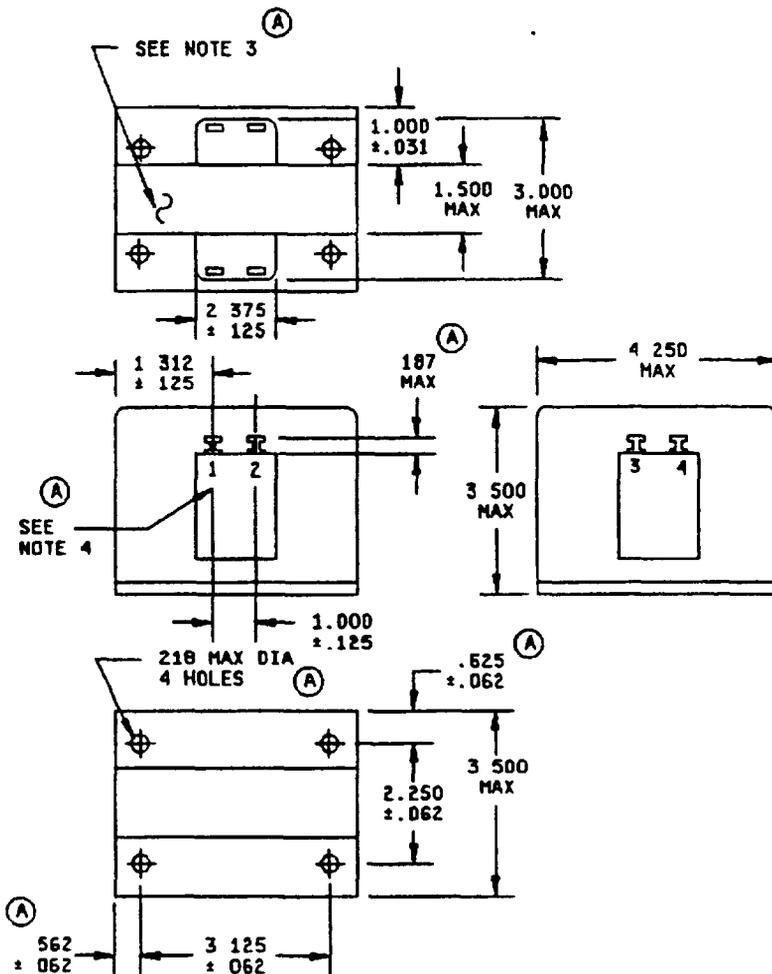
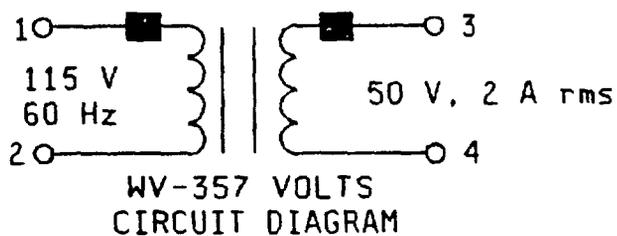


FIGURE 1. Dimensions and configuration.

(A) denotes changes



Inches	mm
.031	.79
.062	1.57
.125	3.18
.218	5.54
.562	14.27
.625	15.88
1.000	25.40
1.312	33.32
1.500	38.10
2.250	57.15
2.375	60.32
3.000	76.20
3.125	79.38
3.500	88.90
4.250	107.95

NOTES:

1. Dimensions are in inches
2. Metric equivalents are given for general information only
3. Marking shall be on the top of the core
4. Mark terminals as shown (4 places).

FIGURE 1. Dimensions and configuration - Continued

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

Electrical ratings

Volt ampere. 100

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

Ⓐ Secondary voltage: (3-4) 50 volts, ± 2 volts, 2 amperes rms.

DC resistance:

(1-2): 3.5 ohms maximum

(3-4). 0.75 ohms maximum.

Working voltage (1-2) (3-4) 357 volts maximum.

Design and construction:

Dimensions and configuration See figure 1.

Duty cycle Continuous.

Case: Encapsulated.

Material. Epoxy.

Ⓐ Terminals: Solder lug type, brass, tin plated.

Terminal height: 0.187.

Ⓐ Weight: 4.65 pounds maximum.

Operating temperature range: -55°C to $+130^{\circ}\text{C}$.

Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds.

Dielectric withstanding voltage (at sea level): 1,500 volts rms.

Electrical characteristics:

Ⓐ No load: With 115 volts, 60 Hz across (1-2), current in (1-2) shall not exceed 0.250 ampere and the power in (1-2) shall not exceed 4.5 watts; voltage across (3-4) shall be 52.57 volts ± 2 percent.

Ⓐ Rated load: With 115 volts, 60 Hz across (1-2), the voltage across (3-4) shall be 50 volts ± 4 percent at 2 amperes rms.

Polarity: Additive with terminals 2 and 3 connected.

Ⓐ Temperature rise: 45°C maximum with 115 volt rms, 60 Hz across (1-2), at an ambient temperature of 85°C maximum at 2 amperes rms on (3-4)

Marking location: See figure 1.

Ⓐ Part or Identifying number (PIN): M27/141-01

MIL-T-27/141A

CONCLUDING MATERIAL

Custodians:

Army - ER
Navy - EC
Air Force - 85

Review activities:

Army - MI
Navy - SH, DS
Air Force - 17, 99

User activities:

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

Preparing activity:

Army - ER

Agent:

DLA - ES

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