

NOTE: The document identifier and heading have been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

INCH-POUND

MIL-PRF-27/327C
 19 January 1989
 SUPERSEDING
 MIL-T-27/327B
 2 April 1984

PERFORMANCE SPECIFICATION SHEET

TRANSFORMERS, POWER, 15 VA, 60 HZ, TF4S03FA

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

The requirements for acquiring the transformer described herein shall consist of this specification 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.

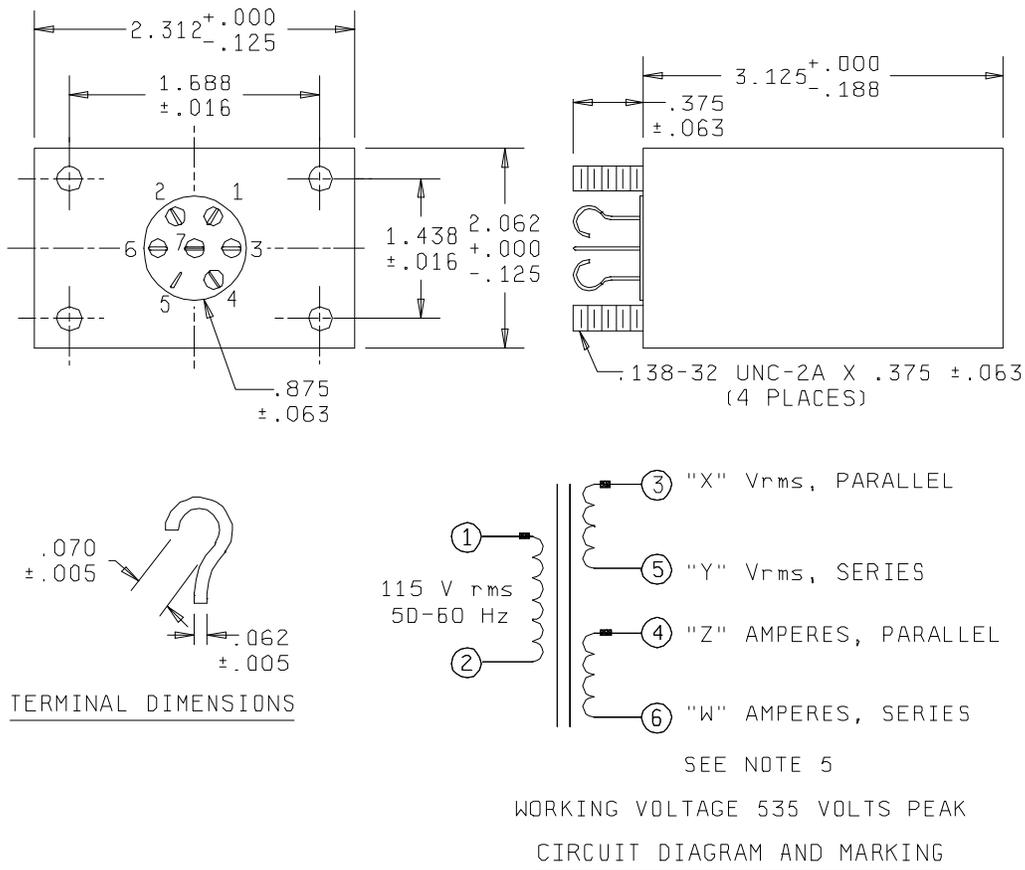


FIGURE 1. Dimensions and configurations.

ⓐ denotes changes

Inches	mm
.005	0.13
.016	0.45
.062	1.57
.063	1.60
.070	1.78
.125	3.18
.138	3.51
.188	4.78
.375	9.53
.875	22.23
1.483	37.67
1.688	42.88
2.062	52.37
2.312	58.72
3.125	79.38

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be on the sides of the case. Terminal identification shall be as shown on the figure.
4. Electrical values shall be marked as specified in table I.
5. For series output connect terminals 4 and 5 together. For parallel output connect pins 3 to 4 and 5 to 6.

FIGURE 1. Dimensions and configurations - Continued.

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

Electrical ratings:

Primary (1-2): 115 V rms, 50 to 65 Hz.

Primary dc resistance: 22.1 ohms \pm 25 percent.

Secondary: See table I.

Volt ampere: 15 VA.

Working voltage: 535 volts pk.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Metal enclosed.

Material: Steel.

Terminals: Solderable hook terminals.

Height: .375 \pm .063 inch.

Diameter: .062 \pm .005 inch.

Weight: 2.2 pounds, maximum.

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

Altitude: 10,000 feet.

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

Dielectric withstanding voltage (each winding, secondary winding shall be connected in parallel):

At sea level: 1500 V rms.

Electrical characteristics:

Rated load: With 115 V rms and 60 Hz in (1-2), and rated current in secondary, secondary voltage shall be as specified in table I within \pm 3 percent.

Regulation: $\frac{\text{Voltage (no load)} - \text{Voltage (rated load)}}{\text{Voltage (rated load)}} \times 100$
shall not exceed 10 percent

Polarity: Additive with terminals 2 and 3 connected and 5 and 4 connected.

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

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/327-(dash number from table I).

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TABLE I. Electrical ratings.

Dash number	Secondary voltage (series) volts rms (3-6)	Secondary current (series) amperes (3-6)	Secondary voltage (parallel) volts rms (3-5)	Secondary current (parallel) amperes (3-5)	Secondary dc resistance each winding ohms $\pm 25\%$
01	10.0	1.50	5.0	3.00	0.116
02	12.6	1.19	6.3	2.38	0.167
03	16.0	0.93	8.0	1.86	0.252
04	20.0	0.75	10.0	1.50	0.48
05	24.0	0.60	12.0	1.20	0.58
06	34.0	0.44	17.0	0.88	1.06
07	40.0	0.36	20.0	0.72	1.57
08	56.0	0.27	28.0	0.54	3.5
09	88.0	0.15	44.0	0.30	8.78
10	120.0	0.12	60.0	0.24	14.8

QUALITY ASSURANCE PROVISIONS:

Extent of qualification:

Qualification testing and approval to M27/326-10 and M27/331-08 shall be sufficient to grant qualification approval to MIL-T-27/326 through MIL-T-/331 inclusive, all parts.

Qualification testing and approval to M27/327-10 shall be sufficient to grant qualification approval to M27/327-01 through M27/327-10.

CONCLUDING MATERIAL

Custodians:

Army - ER
Navy - EC
Air Force - 85

Review activities:

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

User activities:

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

Preparing activity:

Army - ER

Agent:

DLA - ES

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