

MILITARY SPECIFICATION SHEET

TRANSFORMERS AND INDUCTORS  
 (AUDIO, POWER, AND HIGH-POWER PULSE)  
 TRANSFORMER, POWER, STEP-DOWN, TF5S0322

(A) Inactive for new design after the date of this specification

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

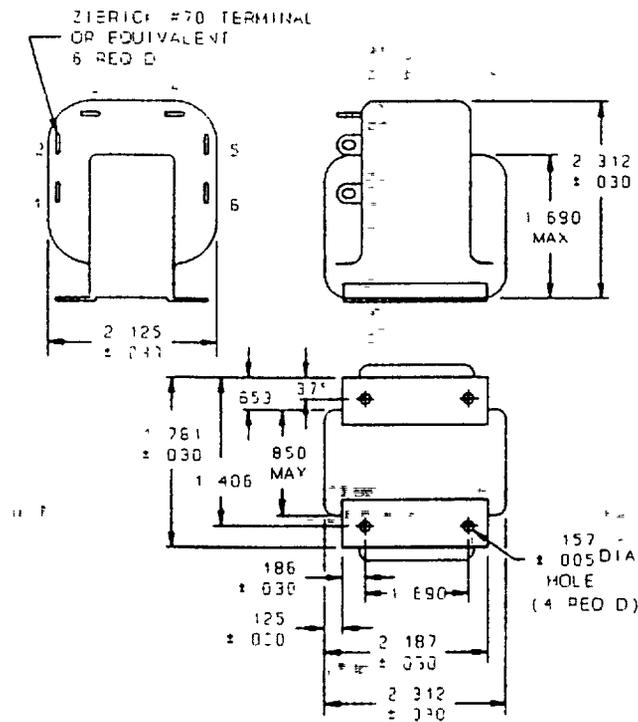
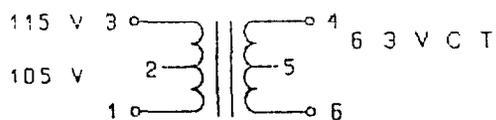


FIGURE 1 Dimensions and configurations

(A) denotes changes



WORKING VOLTAGE (PEAK)

(1 - 3) = 535 V  
(4 - 6) = 1070 V

CIRCUIT DIAGRAM AND MARKING

Inches	mm
005	0 13
030	0 76
125	3 18
157	3.99
186	4 72
375	9 52
653	16 59
850	21 59
1 406	35 71
1.690	42 93
1.781	45 24
2 125	53 98
2 187	55 55
2 312	58 72

NOTES

- 1 Dimensions are in inches
- 2 Metric equivalents are given for general information only
- 3 Unless otherwise specified, tolerance on case dimensions is  $\pm 0.16$  inch (4.1 mm)
- 4 Marking shall be on the side of the case

FIGURE 1 Dimensions and configurations - Continued

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

Electrical ratings

Primary voltage (1-2-3) 105/115 volts, 380 Hz to 1,000 Hz

Primary current (1-3) 0.6 ampere rms, maximum

Voltamperes 63

Secondary voltage (4-6) 6.3 volts ct

Secondary current (4-6) 10 amperes rms, maximum

Working voltage (peak)

(1-3) 535 volts

(4-6) 1,070 volts

Design and construction

Dimensions and configuration See figure 1

Duty cycle Continuous

Case Encapsulated

Material Epoxy

Terminals Solder terminal, Zierick #70 or equivalent

Terminal height .188 inch  $\pm$  0.016

Weight 256 grams, maximum

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

Terminal strength MIL-STD-202, method 211, test condition A, 5 pounds and test condition D, 40 ounce-inches.

Dielectric withstanding voltage (at sea level)

(1-3) 1,500 volts rms

(4-6) 2,500 volts rms

Electrical characteristics

No load With 115 volts, 400 Hz across (1-3), current in (1-3) shall not exceed 300 mA and the power in (1-3) shall not exceed 6 watts. Voltage across (4-6) 6.51 volts ct,  $\pm 3$  percent

Rated load With 115 volts, 400 Hz across (1-3), the voltage across (4-6) shall be 6.3 volts ct,  $\pm 3$  percent

DC resistance

(1-3) 3.0 ohms, maximum

(4-6) 0.085 ohm, maximum

Polarity Additive, with terminals 3 and 6 connected

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Temperature rise 55°C with 115 volts rms, 400 Hz across (1-3) at an ambient temperature of 75°C

Ⓐ Quality assurance provisions

Qualification inspection Not applicable for this specification sheet

Quality conformance inspection Groups A and B tests of MIL-T-27 shall be applicable

Marking location See figure 1

Part or Identifying Number (PIN) M27/158-01

CONCLUDING MATERIAL

Custodians

Army - ER

Navy - EC

Air Force - 85

Review activities

Army - MI

Navy - OS, SH

Air Force - 17, 99

DLA - ES

User activities

Army - NE

Navy - AS, MC

Air Force - 19

Preparing activity

Army - ER

Agent

DLA - ES

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