INCH-POUND

MIL-T-27/202B
4 May 2012
SUPERSEDING
MIL-T-27/202A
20 April 1993

MILITARY SPECIFICATION SHEET

TRANSFORMERS, POWER, STEP-DOWN

Inactive for new design after 20 April 1993.

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-PRF-27.

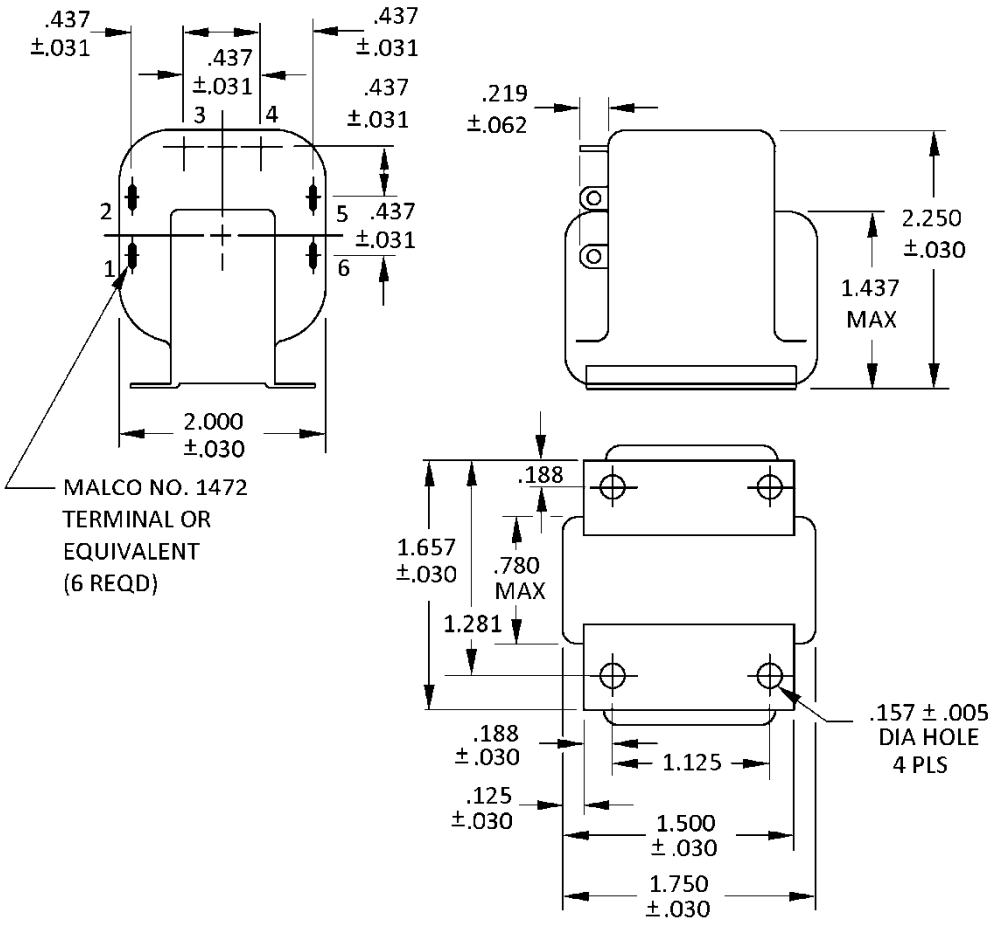
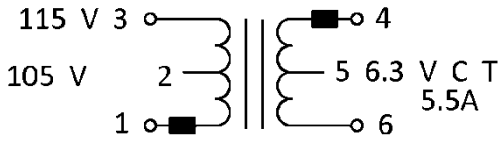


FIGURE 1. Dimensions and cinfigurations.



WORKING VOLTAGE (PEAK)

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

CIRCUIT DIAGRAM AND MARKING

Inches	mm	Inches	mm
.005	0.13	.780	19.81
.030	0.76	1.125	28.58
.031	0.79	1.281	32.54
.062	1.57	1.437	36.50
.125	3.18	1.500	37.10
.157	3.99	1.657	42.09
.188	4.78	1.750	44.45
.219	5.56	2.000	50.80
.437	11.10	2.250	57.15

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance on case dimensions is ±.016 inch (0.41 mm).
4. Marking shall be on the sides 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): 0.3 ampere rms, maximum.

Voltampere rating: 34.7 voltamperes.

Secondary voltage (4-6): 6.3 volts ct.

Secondary current (4-6): 5.5 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, Malco no. 1472 or equivalent.

Terminal height: .219 ±.062 inch.

Weight: 260 grams, maximum.

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

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

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 100 milliamperes and the power in (1-3) shall not exceed 2 watts. Voltage across (4-6): 6.74 volts ct, ±5 percent.

Rated load: With 115 volts, 400 Hz across (1-3), the voltage across (4-6) shall be 6.3 volts ct, ±5 percent.

DC resistance:

(1-3): 8.4 ohms, ±20 percent.
(4-6): 0.047 ohm, ±20 percent.

Polarity: Additive, with terminals 3 and 4 connected.

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

Vibration, high frequency: MIL-STD-202, method 204.

VERIFICATION:

Qualification inspection: Not applicable.

Conformance inspection: Groups A and B tests of MIL-PRF-27 shall be applicable.

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/202-01.

Changes from previous issue. 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.

Referenced documents. In addition to MIL-PRF-27, this document references no other documents.

MIL-STD-202

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA – CC

Preparing activity:
DLA - CC

(Project 5950-2009-082)

Review Activities:
Army – AR, CR4, MI
Navy – AS, MC, OS, SH
Air Force – 19, 99

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.