

INCH-POUND

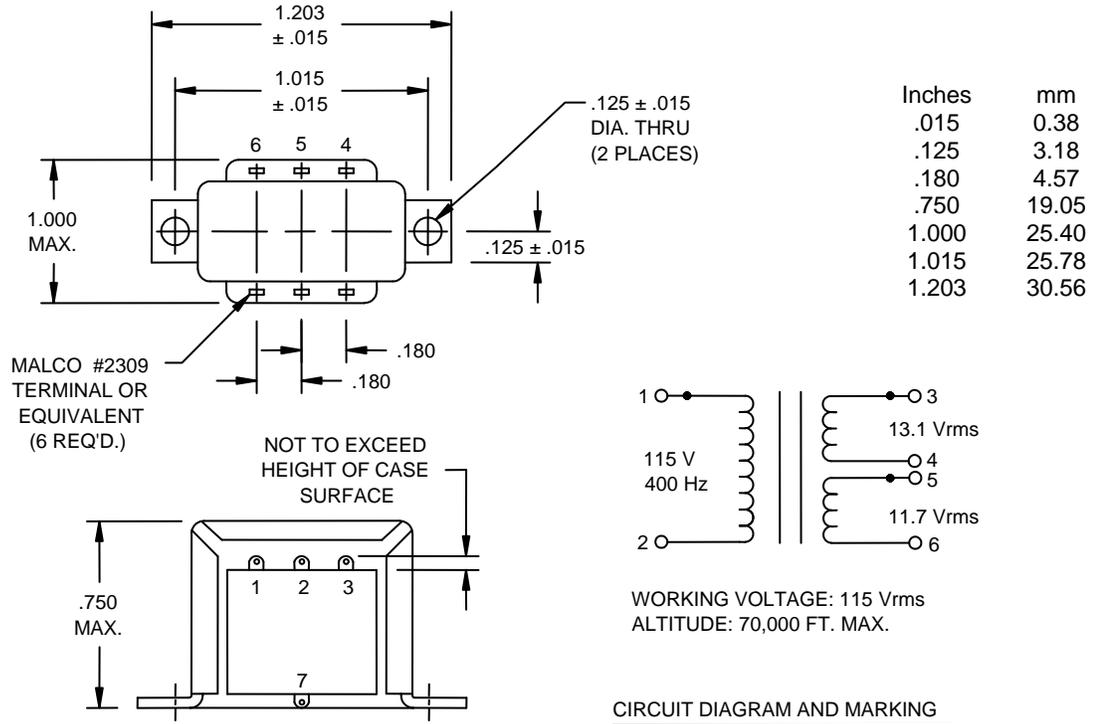
MIL-T-27/227A
29 September 2009
SUPERSEDING
MIL-T-27/227
19 May 1978

MILITARY SPECIFICATION SHEET
TRANSFORMER, POWER, STEP-DOWN

Inactive for new design
after 25 August 1998

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 sheet and MIL-PRF-27.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be on the side of the case.

FIGURE 1. Dimensions and configurations

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REQUIREMENTS: (When numbers in parentheses, such as (1-3) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings: See table I.

Primary voltage (1-2): 115 volts rms, 400 hertz ± 20 .

Primary current (1-2): 0.02 amperes.

Volt-ampere rating: 1.9 volt-amperes.

Secondary voltage:

(3-4): 13.1 volts rms.

(5-6): 11.7 volts rms.

Secondary current:

(3-4): 0.1 ampere.

(5-6): 0.050 ampere.

Working voltage: 115 volts rms.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Terminals: Solder terminal, Malco No 2309 or equivalent.

Terminal height: Not to exceed height of case surface.

Altitude: 70,000 feet, maximum.

Weight: 0.8 ounces, maximum.

Terminal strength: [MIL-STD-202](#), method 211, test condition A, 5.0 pounds.

Dielectric withstanding voltage:

At sea level: 1,500 volts rms.

At reduced barometric pressure: 300 volts rms.

Electrical characteristics:

No load: With 115 volts rms, 400 hertz across (1-2), the current in (1-2) shall not exceed 4 milliamperes and the power in (1-2) shall not exceed 4-7 watts.

Voltage across (3-4): 13.1 volts rms ± 10 percent.

Voltage across (5-6): 11.7 volts rms ± 10 percent.

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Rated load: With 115 volts ac, 400 hertz across (1-2),

Voltage across (3-4): 13.1 volts rms \pm 10 percent.

Voltage across (5-6): 11.7 volts rms \pm 10 percent.

DC resistance:

(1-2): 370 ohms, maximum.

(3-4): 7.88 ohms, maximum.

(5-6): 8.08 ohms, maximum.

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

Temperature rise: +99°C with 115 volts rms, 400 hertz across (1-2) at an ambient temperature of +71°C.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/227-01.

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 the following:

[MIL-STD-202](#)

Custodians:

Army - CR

Navy - EC

Air Force - 85

DLA - CC

Preparing activity:

DLA - CC

(Project 5950-2009-014)

Review activities:

Army - AR, CR4

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 <http://assist.daps.dla.mil>.