

MIL-T-27/160B
9 November 2009
SUPERSEDING
MIL-T-27/160A
4 April 1980

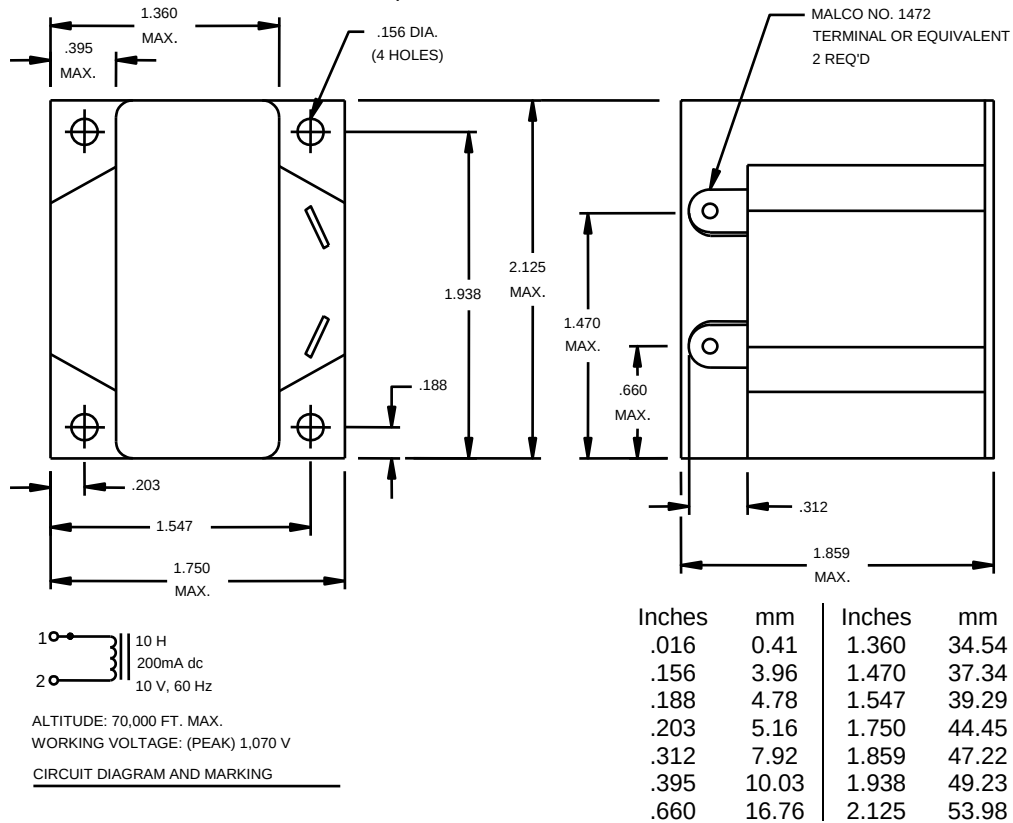
MILITARY SPECIFICATION SHEET

TRANSFORMER AND INDUCTORS
(AUDIO, POWER AND HIGH-POWER PULSE),
INDUCTION, POWER

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. Unless otherwise specified, tolerance on overall case dimensions is ± 0.016 inch (0.41 mm).
 4. 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 (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings: See table I.

Inductance (1-2): 1.0 H, minimum.

Voltage (1-2): 10 volts, 60 Hz.

Current (1-2): 200 mA dc.

DC resistance (1-2): 69 ohms, maximum.

Working voltage (Peak): 1,070 volts.

Power: 2.2 watts

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy.

Terminals: Solder terminal, Malco No 1472 or equivalent.

Height: .312 ±.016 inch (7.92 ±0.41 mm).

Weight: 408 grams, maximum.

Altitude: 70,000 feet, maximum.

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

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

Vibration (high frequency): [MIL-STD-202](#), method 204.

Dielectric withstanding voltage:

At sea level: 2,500 volts rms.

At barometric pressure: 1,337.5 volts rms.

Electrical characteristics:

Inductance: With 10 volts, 60 Hz across (1-2), and 200 mA dc applied to (1-2) the inductance shall be 1.0 H minimum.

Temperature rise: 45°C with 10 volts, 60 Hz, 200 mA dc applied to (1-2) at an ambient temperature of 85°C.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/160-01.

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 5950-2009-010)

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>.