

MIL-T-27/159C
15 July 2013
SUPERSEDING
MIL-T-27/159B
4 May 2012

MILITARY SPECIFICATION SHEET

TRANSFORMERS AND INDUCTORS
(AUDIO, POWER AND HIGH-POWER PULSE),
INDUCTOR, POWER

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 requirements for procuring the transformer described herein shall consist of this document and the latest issue of specification MIL-PRF-27.

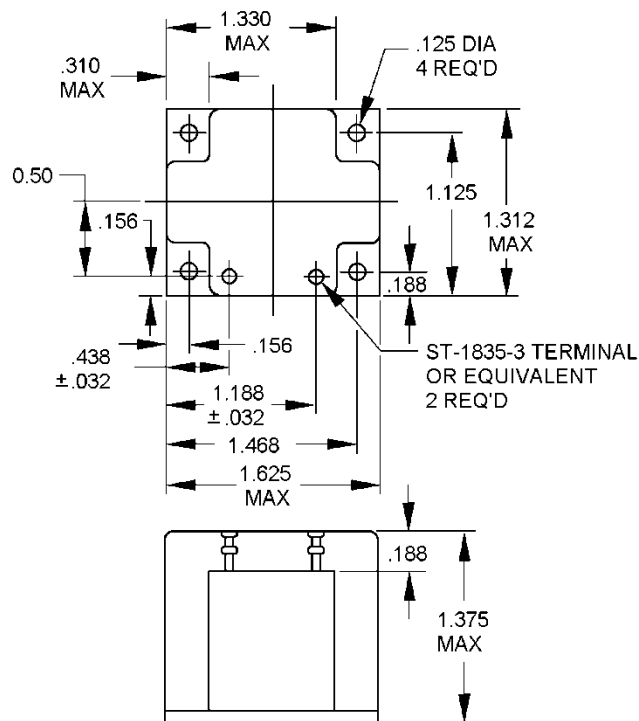
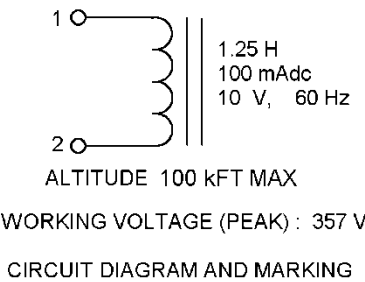


FIGURE 1. Dimensions and configurations.



Inches	mm
.016	0.41
.032	0.81
.125	3.18
.156	3.96
.188	4.78
.310	7.87
.438	11.13
.50	12.7
1.125	28.58
1.188	30.18
1.312	33.32
1.330	33.78
1.375	34.92
1.468	37.29
1.625	41.28

- NOTES:
1. Dimensions are in inches.
 2. Metric equivalents are given for general information only.
 3. Unless otherwise specified, tolerance for 3 place decimals is $\pm .032$ inch (0.41 mm) and tolerance for 2 place decimals is $\pm .03$ (0.762 mm).
 4. Marking shall be on the side of the case.

FIGURE 1. Dimensions and configurations - Continued

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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): 1.25 H, minimum.

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

Current (1-2): 100 mA dc.

DC resistance (1-2): 120 ohms, maximum.

Working voltage (Peak): 357 volts.

Power: 1.1 watts

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy.

Weight: 136 grams, maximum.

Terminals: Solder terminal, ST-1835-3 or equivalent.

Height: $.188 \pm .016$ inch (4.78 ± 0.41 mm).

Altitude: 100,000 feet, maximum.

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

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

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

Dielectric withstanding voltage:

At sea level: 1,000 V rms.

At barometric pressure: 447 V rms.

Electrical characteristics:

Inductance: With 10 volts, 60 Hz across (1-2), and 100 mA dc applied to (1-2) the inductance shall be 1.25 H minimum.

Temperature rise: 45°C with 10 volts, 60 Hz, 100 mA dc applied to (1-2) at an ambient temperature of 85°C.

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 Identification Number (PIN): M27/159-01.

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 5950-2013-030)

Review activities:

Army - 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.dla.mil>.