

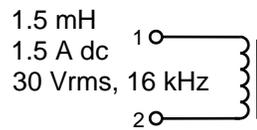
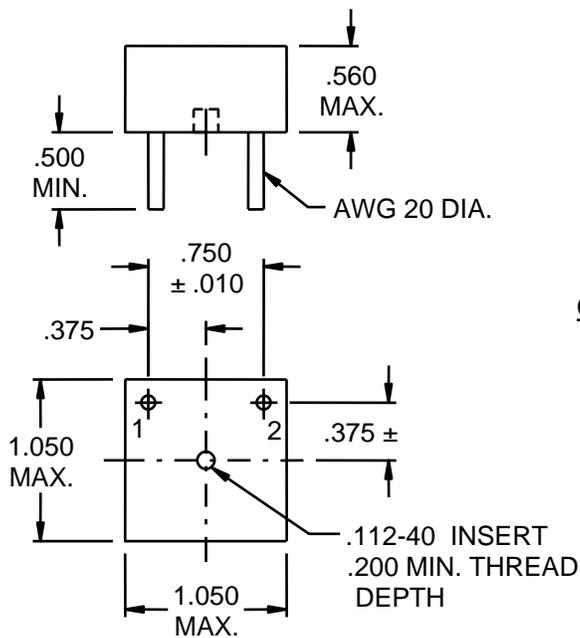
MIL-T-27/189B
 9 November 2009
 SUPERSEDING
 MIL-T-27/189A
 7 May 1985

MILITARY SPECIFICATION SHEET
 TRANSFORMERS AND INDUCTORS
 (AUDIO, POWER AND HIGH POWER PULSE),
 INDUCTOR, 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.



ALTITUDE 70,000 FT.
 WORKING VOLTAGE: 225 V

CIRCUIT DIAGRAM AND MARKING

Inches	mm
.010	0.25
.112	2.84
.200	5.08
.375	9.52
.500	12.70
.560	14.22
.750	19.05
1.050	26.67

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 (1-2) are used, they indicate the winding and the extreme terminals of the winding)

Electrical ratings:

Inductance (1-2): 1.5 millihenries, minimum.

Voltage (1-2): 30 volts rms, 16 kHz.

Current (1-2): 1.5 amperes, dc.

DC resistance (1-2): 1.6 ohms, maximum.

Working voltage: 225 volts, maximum to ground.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy.

Terminals: Pin type, tinned copper.

Height: .500 inch (12.70 mm), minimum.

Diameter: 20 AWG (.32 inch (8.13 mm)).

Weight: 1.5 ounces, maximum.

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

Altitude: 70,000 feet, maximum.

Terminal strength: MIL-STD-202, method 211, test condition A, 2.0 pounds.

Shock (specified pulse): MIL-STD-202, method 213, test condition A.

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

Dielectric withstanding voltage: MIL-STD-202, method 301.

At sea level: 1,000 Vrms.

At reduced barometric pressure: 300 Vrms.

Electrical characteristics:

Inductance: With 30 volts rms, 16 kHz, and 1.5 amperes dc applied to (1-2), the inductance shall be 1.5 millihenries, minimum.

Temperature rise: 30°C with 30 volts rms, 16 kHz, 1.5 amperes dc applied to (1-2) at an ambient temperature of 125°C, maximum.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/189-01.

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 5950-2009-009)

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>.