

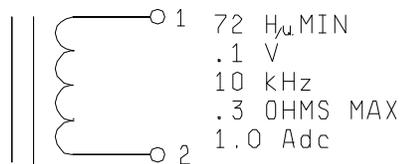
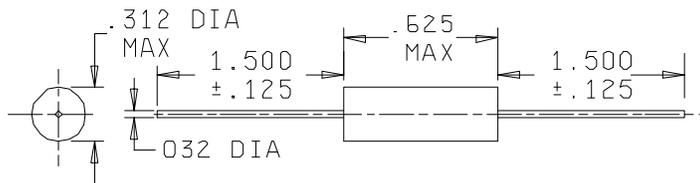
NOTE: The document identifier and heading have been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

MIL-PRF-27/88
 22 April 1976

PERFORMANCE SPECIFICATION SHEET
 TRANSFORMERS AND INDUCTORS
 (AUDIO, POWER AND HIGH-POWER PULSE),
 INDUCTOR, POWER, TYPE TF5S04ZZ905

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the inductor described herein shall consist of this document and the latest issue of Specification MIL-T-27.



INCHES	MM
.032	0.81
.125	3.18
.312	7.92
.625	15.88
1.500	38.10

WV: 50 VOLTS MAX
 ALTITUDE: 70,000 FT MAX

CIRCUIT DIAGRAM AND MARKING

NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Marking shall be on the side of the case.

REQUIREMENTS: (When numbers in parentheses, i.e., (1-2) are used, they indicate the extreme terminals of the winding.)

Electrical ratings:

Inductance (1-2): 72 μ H minimum.
Voltage (1-2): 0.1 Vrms, 10 kHz.
Power: 0.3 watt.
Current (1-2): 1 ampere dc.
DC resistance (1-2): 0.3 ohm dc maximum.
Working voltage: 50 V maximum.

Design and construction:

Dimensions and configuration: See figure.
Duty cycle: Continuous.
Case: Encapsulated.
Material: Epoxy.
Altitude: 70,000 feet maximum.
Terminals: Solid wire lead type, tinned soft copper.
Weight: 3.2 grams.
Operating temperature range: -55° to 130°C.

Terminal strength: MIL-STD-202, method 211, condition A, 2 pounds.

Dielectric withstanding voltage:

At sea level: 100 Vrms.
At barometric pressure: 50 Vrms.

Electrical characteristics:

Inductance: With 0.1 Vrms, 10 kHz across, and 1 ampere dc applied to (1-2) the inductance shall be 72 μ H minimum.
DC resistance at 25°C: 0.3 ohm across (1-2) maximum.
Self resonant frequency: 2.5 MHz minimum.

Temperature rise: 30°C maximum, with 0.1 Vrms, 10 kHz, 1 ampere dc applied to (1-2) at an ambient temperature of 100°C.

Marking location: See figure.

Part number: M27/88-01.

Custodians:

Army - EL
Navy - EC
Air Force - 85

Preparing activity:

Army - EL

Agent:

DSA - ES

Review activities:

Army - EL, MI, SG
Navy - EC, SH, OS
Air Force - 11, 17, 80
DSA - ES

(Project 5950-0506-8)

User activities:

Army - MU, WC, ME
Navy - MC, AS, SH, OS
Air Force - 19