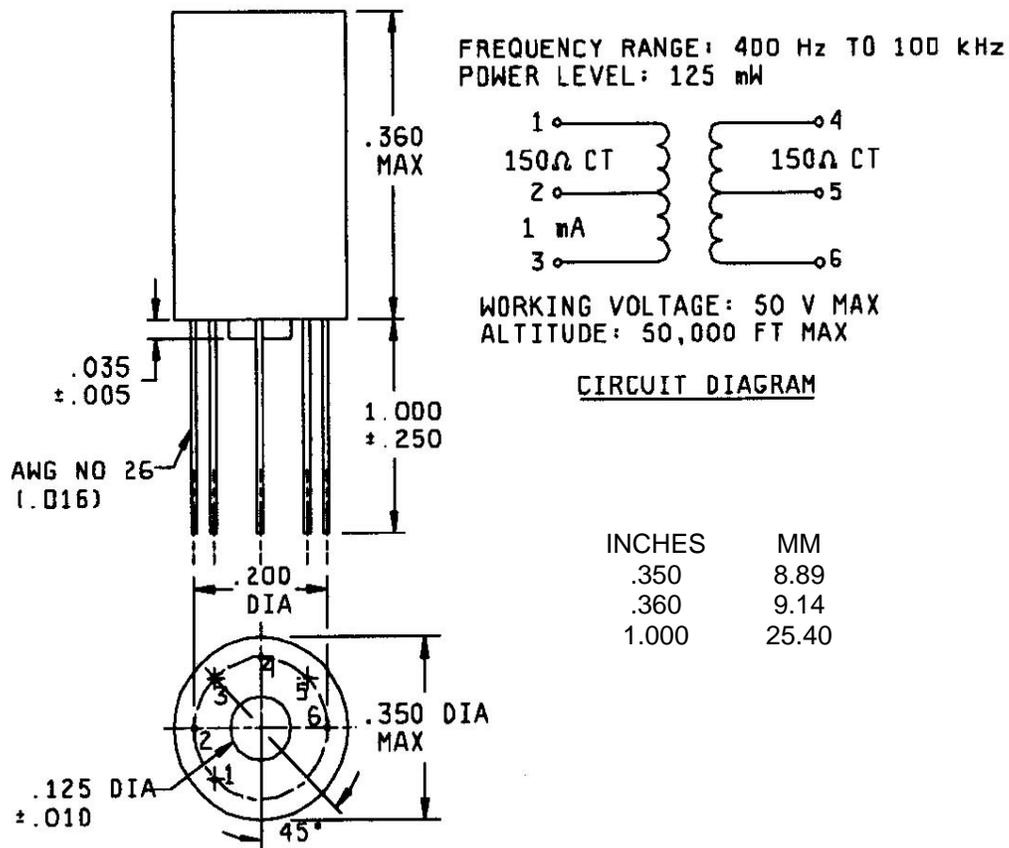


PERFORMANCE SPECIFICATION SHEET

TRANSFORMER, AUDIO FREQUENCY, SUB-MINIATURE

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

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



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. The number of terminals shall be as shown in circuit diagram.
4. Terminals are spaced the same as "TO-76" transistors and micrologic elements.
5. For vibration and shock test the specimen shall be rigidly mounted on a printed circuit board.

FIGURE 1. Dimensions and configurations.

REQUIREMENTS:

Electrical ratings:

Primary power level: 1 mW.
Working voltage: (1-3) 50 Vrms, maximum.
Primary current: 1 mA dc, 2.6 mA ac.
Primary impedance: (1-3) 150 ohms ct.
Secondary load impedance: (4-6) 150 ohms ct.
Secondary current: 2.6 mA ac.

Design and construction:

Dimensions and configuration: See figure 1.
Duty cycle: Continuous.
Terminals: Pin for printed circuit.
Material: Type D per MIL-STD-1276.
Diameter: 0.016 inch.
Length: 1.000 ± 0.250 inch.
Weight: 2.4 grams.
Operating temperature range: -55°C to $+105^{\circ}\text{C}$.
Altitude: 50,000 feet.

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

Dielectric withstanding voltage:

At sea level: 200 Vrms.
At reduce barometric pressure: 100 Vrms.

Electrical characteristics:

Harmonic distortion: Total harmonic content of output 5 percent with .39 volts, 1 kHz and 1 mA dc applied to (1-3), secondary (4-5) + (6-7) loaded with .15 kilohms.
No load (ct voltage balance only): With 1 volt, 1 kHz applied to 1-3, unbalance (4-5) and (5-6) shall be 3 percent, maximum.
Self-resonant frequency: 100 kHz, minimum.
Frequency response: ± 3 dB at 300 Hz to 3 kHz at $E_S = .78$ V and load impedance of $Z_S = 150$ ohms and $Z_L = 150$ ohms, reference frequency shall be 1 kHz.

Polarity: Additive, with terminals 3 and 4 connected.

Vibration, high frequency: MIL-STD-202, method 204, test condition B.

Part or Identification Number (PIN): M27/277-01.

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.

MIL-PRF-27
MIL-STD-202
MIL-STD-1276

Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5950-2008-032)

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>.