

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.

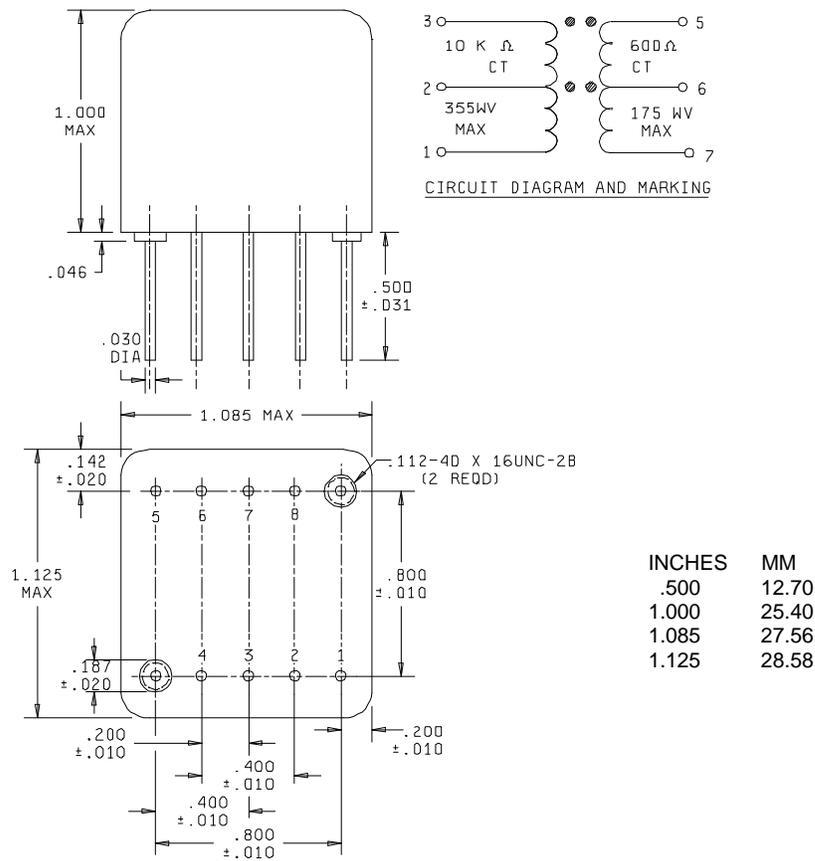
MIL-PRF-27/79
29 August 1975

PERFORMANCE SPECIFICATION SHEET

TRANSFORMER, AUDIO FREQUENCY, TF5S21ZZ896

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-T-27.



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 top of the case.

FIGURE 1. Dimensions and configurations.

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

Electrical ratings:

Source impedance (1-3): 10K ohms ct ± 10 percent.

Load impedance (5-7): 600 ohms ct.

Primary power level: 6 watts maximum (200 Hz to 10 kHz);
.25 watt (60 Hz to 200 Hz).

Primary DC current: 1 mA maximum.

Working voltage:

(1-3): 355 volts maximum.

(5-7): 175 volts maximum.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy glass.

Terminals: Pin type, Dumet, hot tin dipped.

Weight: 2.5 ounces maximum.

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

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

Dielectric withstanding voltage (at sea level):

1000 volts rms (1-3) and 500 volts rms (5-7).

Electrical characteristics:

Harmonic distortion: Not more than ± 10 percent at 6 watts, 200 Hz to 10 kHz
across (5-7).

Primary impedance (1-3): 10K ohms ct ± 10 percent at 1 kHz.

Secondary load impedance (5-7): 600 ohms ct.

Frequency response: 60 Hz to 10 kHz ± 1 dB maximum.

DC resistance:

Primary (1-3): 700 ohms ± 25 percent.

Secondary (5-7): 50 ohms ± 25 percent.

No load (center tap (ct) voltage unbalance only):

With 50 volts, 60 Hz and 0 amp voltage unbalance dc applied to (1-3):

Unbalance (1-2) and (2-3): ± 1 percent maximum.

Unbalance (5-6) and (6-7): ± 1 percent maximum.

Polarity: Additive, with terminals 3 and 5 connected.

Temperature rise: 45°C .

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

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

Marking location: See figure 1.

Part number: M27/79-01.

Custodians:

Army - EL
Navy - EC
Air Force - 85

Review activities:

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

User activities:

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

Preparing activity:

Army - EL

Agent:

DSA - ES

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