INCH-POUND

MIL-T-27/176A
13 March 1991
SUPERSEDING
MIL-T-27/176
24 MAY 1977

MILITARY SPECIFICATION SHEET

TRANSFORMER, AUDIO FREQUENCY, TF5R21ZZ

Ⓐ Inactive for new design after the date of this specification.

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

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation. MIL-T-27.

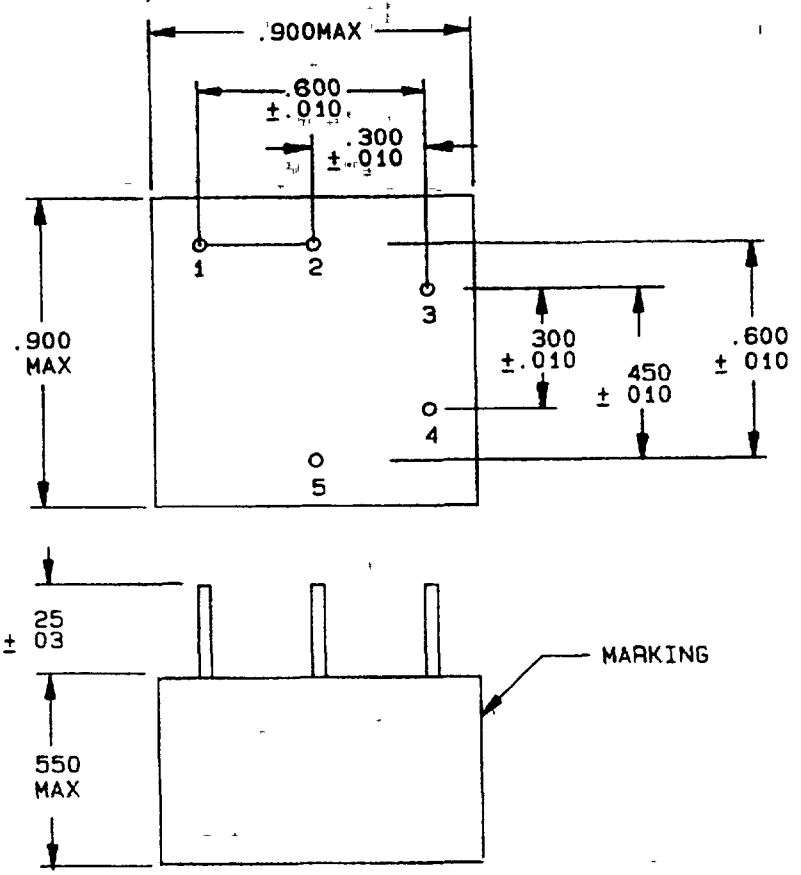
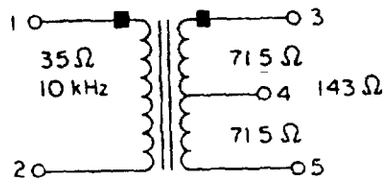


FIGURE 1 Dimensions and configurations

Ⓐ denotes changes



WORKING VOLTAGE 100 V MAX

CIRCUIT DIAGRAM AND MARKING

Inches	mm
.010	0.25
.03	0.8
.25	6.4
.300	7.62
.450	11.43
.550	13.97
.600	15.24
900	22 86

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 - Continued.

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

Electrical ratings.

Source impedance (1-2): 35 ohms, 10 kilohertz.

Load impedance (3-5): 143 ohms ct.

Primary power level: 0.74 watt.

DC resistance:

(1-2): 1.15 ohms ±30 percent.
(3-4): 1.60 ohms ±30 percent.
(4-5): 1.80 ohms ±30 percent.

Working voltage: 100 volts maximum.

Design, configuration, and physical dimensions: See figure 1.

Material: Epoxy.

Weight: 13.61 grams maximum.

Duty cycle. Continuous.

Terminal: Pin type.

Terminal height. .25 ±.03 inch.

Operating temperature range: -55°C to +105°C.

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

Dielectric withstanding voltage: MIL-STD-202, method 301, test voltage, 500 volts, rms.

Electrical characteristics:

Primary impedance (1-2): 35 ohms, 10 kilohertz.

Secondary load impedance (3-5): 143 ohms ct.

No load (center-tap voltage unbalance):

With 4 volts, 10 kilohertz, 0 ampere dc applied to (1-2).

Unbalance (3-4): ±2 percent.

Unbalance (4-5). ±2 percent.

Current in (1-2): 3 5 milliamperes maximum.

Power in (1-2): 0.014 watt maximum.

Voltage across (3-4): 4 volts ±1 percent

Voltage across (4-5). 4 volts ±1 percent.

Rated load:

With 35 ohms, 10 kilohertz across (1-2).

Current in (3-5). 70 milliamperes.

Voltage across (3-5). 10 volts ct.

Polarity Additive with terminals 2 and 3 connected.

Vibration, low frequency. MIL-STD-202, method 201.

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

Ⓐ Quality assurance provisions:

Qualification inspection. Not applicable.

Quality conformance inspection: Groups A and B tests of MIL-T-27 shall be applicable.

Marking location See figure 1.

Part number: M27/176-01.

CONCLUDING MATERIAL

Custodians:
Army - ER
Navy - EC
Air Force - 85

Review activities.
Army - MI
Navy - OS, SH
Air Force - 17, 99
DLA - ES

User activities:
Army - AR, ME
Navy - AS, MC
Air Force - 19

Preparing activity:
Army - ER

Agent:
DLA - ES

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