

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.

INCH-POUND

MIL-PRF-27/365
28 February 1994

PERFORMANCE SPECIFICATION SHEET

TRANSFORMERS, AUDIO FREQUENCY, TF5S21ZZ

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 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.

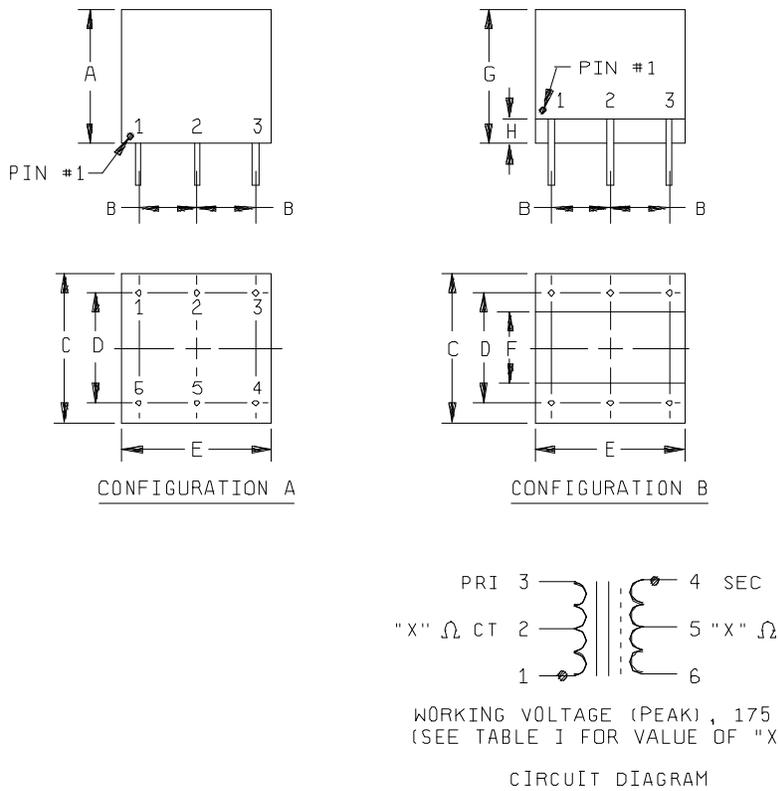


FIGURE 1. Dimensions and configuration.

Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	11.89	13.51	.468	.532
B	5.18	5.94	.204	.234
C	13.46	15.09	.53	.594
D	10.74	11.51	.423	.453
E	13.46	15.09	.53	.594
F	5.97	6.73	.235	.265
G	---	13.21	---	.520
H	0.51	0.76	.020	.030

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. The US Government preferred system of measurement is the metric SI system. However, this item was originally designed using inch-pound units of measurement. In the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.
4. Marking shall be on the top or side of the case.
5. Primary and secondary electrical values shall be marked as specified in table I, as applicable.
6. The number of terminals shall be as shown in the circuit diagram.
7. Terminal numbers for reference only.
8. Copper clad wire, AWG #22, 1 inch minimum.

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 winding.)

Electrical ratings: See table I.

Working voltage (peak): 175 volts.

Frequency range: 200 hertz to 10 kilohertz.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Altitude: 70,000 feet maximum.

Terminals: Steel, copper-clad wire leads.

Material: Tin-lead plated type W4 in accordance with MIL-STD-1276.

Diameter: 0.64 mm (.025 inch).

Weight: 8 grams, maximum.

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

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

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

Dielectric withstanding voltage:

At sea level: 500 V rms.

At reduced barometric pressure: 500 V rms.

Electrical characteristics: See table I.

No load (centertap unbalance only): ±1 percent with 5 volts, 5 kilohertz across the primary.

Harmonic distortion: Total harmonic content of the output shall be a maximum 5 percent at the specified power level and primary dc current (see table I).

Insertion loss: At the specified power level (see table I), the insertion loss shall be a maximum of 3 dB.

Frequency response: ±2 dB at the rated source and load impedances with 15 milliwatt level output and a reference frequency of 1 kilohertz.

Shock (high frequency): MIL-STD-202, method 213, test condition I.

Marking location: See figure 1.

Part or Identifying number (PIN): M27/365- (dash number from table I).

TABLE I. Electrical ratings.

Dash no.	Primary impedance (ohms) (1-3) +15%, -20% 1/	Secondary impedance (ohms) (4-6)	Primary unbalance dc current (mA)	Power level at 200 Hz (max) (watts)	Primary dc resistance ±20% (ohms)	Secondary dc resistance ±20% (ohms)	Fig.
01	600 CT	600 CT	7	.015	50	65	A
02	600 CT	600 CT	7	.015	50	65	B

1/ Primary impedance (terminals 1-3) measured at power level of 15 mW and 0 dc current at frequency range of 300 Hz to 10 kHz.

CONCLUDING MATERIAL

Custodians:

Army - ER
Navy - EC
Air Force - 85

Preparing activity:

Army - ER

Agent:

DLA - ES

(Project 5950-0829)

User activities:

Army - AR, ME, MI
Navy - AS, MC, OS
Air Force - 17, 19, 99