

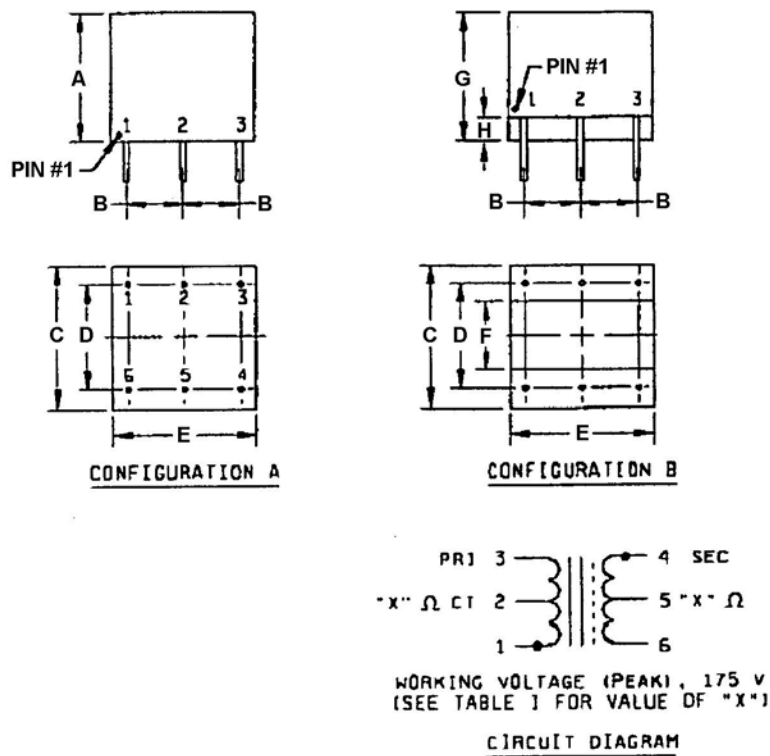
MIL-PRF-27/365A
 21 June 2010
 SUPERSEDING
 MIL-PRF-27/365
 28 February 1994

PERFORMANCE SPECIFICATION SHEET

TRANSFORMERS, AUDIO FREQUENCY

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 latest issue of MIL-PRF-27.



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 inches.
2. Metric equivalents are given for general 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 configuration 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 D4 in accordance with MIL-STD-1276.

Diameter: .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 pounds.

Dielectric withstanding voltage:

At sea level: 500 volts rms.

At reduced barometric pressure: 500 volts rms.

Electrical characteristics: See table I.

No load (centertap unbalanced 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% <u>1/</u>	Secondary impedance (ohms) (4-6)	Primary unbalanced dc current (mA)	Power level at 200 Hz (max) (watts)	Primary dc resistance $\pm 20\%$ (ohms)	Secondary dc resistance $\pm 20\%$ (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.

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. In addition to MIL-PRF-27, this document references the following:

MIL-STD-202

MIL-STD-1276

Custodians:

Army - CR

Navy - EC

Air Force - 85

DLA - CC

Preparing activity:

DLA - CC

(Project 5950-2009-063)

Review activities

Army - AR, CR4, MI

Navy - AS, MC, OS

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 <https://assist.daps.dla.mil>.