

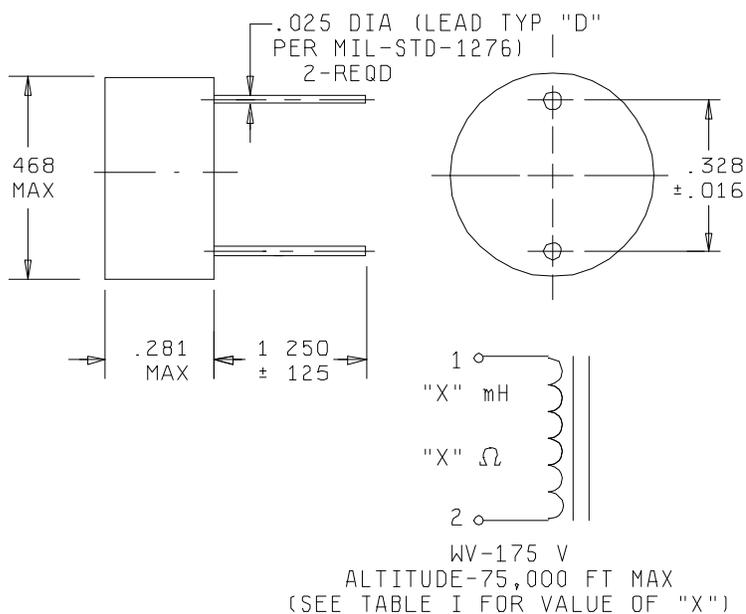
NOTE: The document identifier and heading have been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

MIL-PRF-27/241A
 8 April 1980
 SUPERSEDING
 MIL-T-27/241
 11 September 1978

PERFORMANCE SPECIFICATION SHEET
 TRANSFORMERS AND INDUCTORS
 (AUDIO, POWER AND HIGH-POWER PULSE)
 INDUCTORS, AUDIO FREQUENCY, HIGH Q, TF5R20ZZ

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

The complete requirements for procuring the inductors described herein shall consist of this document and the latest issue of Specification MIL-T-27.



INCHES	MM
.016	0.41
.025	0.64
.125	3.18
.281	7.14
.328	8.33
.468	11.89
1.250	31.75

CIRCUIT DIAGRAM AND MARKING

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Marking shall be on the side of the case.
4. Electrical values shall be marked as specified in table I, as applicable.

FIGURE 1. Dimensions and configurations.

(A) Denotes changes

MIL-T-27/241A

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.

TABLE I. Electrical ratings. 1/

Dash No.	Inductance 2/ mH (1-2) +2%	DC ^{3/} current mA (1-2) max.	DC resistance ohms (max) (1-2)	Quality factor (min)	Temperature stability (-55° to +105°C)	Working voltage (peak) volts	Voltage (1-2)
01	0.6	90	1.9	70 at 100 kHz	+1%	175	0.1 volt at 1 kHz
02	1.5	57	4.9	70 at 100 kHz	+1%	175	0.1 volt at 1 kHz
03	2.5	44	8.2	70 at 100 kHz	+1%	175	0.1 volt at 1 kHz
04	6.0	28	19.0	70 at 100 kHz	+1%	175	0.1 volt at 1 kHz
05	10.0	22	32.0	65 at 50 kHz	+1%	175	0.1 volt at 1 kHz
06	15.0	18	49.0	60 at 50 kHz	+1%	175	0.1 volt at 1 kHz
07	25.0	14	82.0	55 at 50 kHz	+1%	175	0.1 volt at 1 kHz
08	40.0	11	132.0	48 at 50 kHz	+1%	175	0.1 volt at 1 kHz

- 1/ Qualification testing and approval to M27/241-8 shall be sufficient to grant qualification approval to M27/241-1 through M27/241-7.
- 2/ The inductance is measured with 0 Adc applied to (1-2) and at the specified voltage across (1-2).
- 3/ The amount of DC current that will reduce the inductance a maximum of 7%.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Diallyl phthalate.

(A) Terminals: 0.025 tin-lead plated type D4 in accordance with MIL-STD-1276.

Weight: 0.08 ounce maximum.

Altitude: 75,000 feet maximum.

Operating temperature range: -55° to +105°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: 300 volts rms.

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

Marking location: See figure 1.

Part number: M27/241- (dash number from table I).

Custodians:

Army - ER
Navy - EC
Air Force - 85

Review activities:

Army - MI
Navy - SH, OS
Air Force - 11, 17, 99
DLA - ES

User activities:

Army - AR, WC
Navy - MC, AS
Air Force - 19

Preparing activity:

Army - ER

Agent:

DLA - ES

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