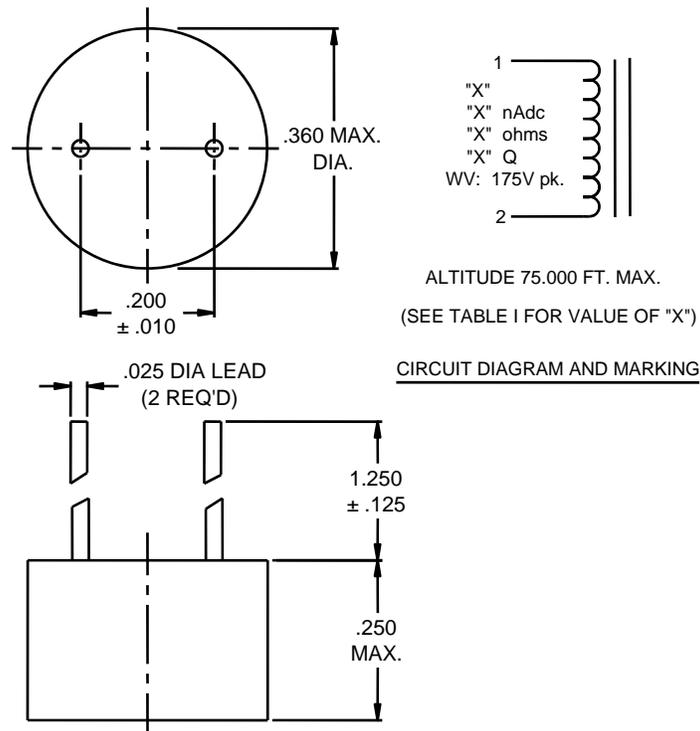


PERFORMANCE SPECIFICATION SHEET  
 TRANSFORMERS AND INDUCTORS  
 (AUDIO, POWER, AND HIGH-POWER PULSE),  
 INDUCTORS, HIGH Q

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 sheet and MIL-PRF-27.



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

MIL-PRF-27/146D

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

Electrical ratings: See table I.

Inductance (1-2): Table I, at 0.1 V rms, 1 kHz, 0 dc.

Working voltage: 175 volts peak.

Design and construction:

Dimensions and configuration: See figure 1.

Case: Epoxy molded.

Material: Diallyl phthalate.

Terminals: Tin-lead plated type D4 in accordance with MIL-STD-1276.

Weight: 1.3 grams, maximum.

Altitude: 75,000 feet, maximum.

Operating temperature range: -55°C 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 V rms.

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

TABLE I Electrical ratings.

Dash Number 1/	(1-2) Inductance (max) mH ±2%	(1-2) DC current (max) mA 2/	(1-2) DC resistance (max) at 25°C Ohms	(1-2) Quality factor		
				Q Min	Voltage (rms)	Frequency (kHz)
01	1	60	1.4	26	1.0	15
02	5	28	7	30	1.0	15
03	10	20	11	32	1.0	15
04	25	13	38	32	1.0	15
05	50	9	75	32	1.0	15
06	100	6	132	32	1.0	15

1/ Qualification testing and approval to M27/146-06 shall be sufficient to grant qualification approval to M27/146-01 through M27/146-06.

2/ The dc current is the amount of current that will reduce the inductance 10 percent maximum.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/146-(dash number from table I).

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 5950-2012-004)

Review Activities:

Army - AR, CR4, MI  
Navy - AS, MC, OS, SH  
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.dla.mil>.