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.

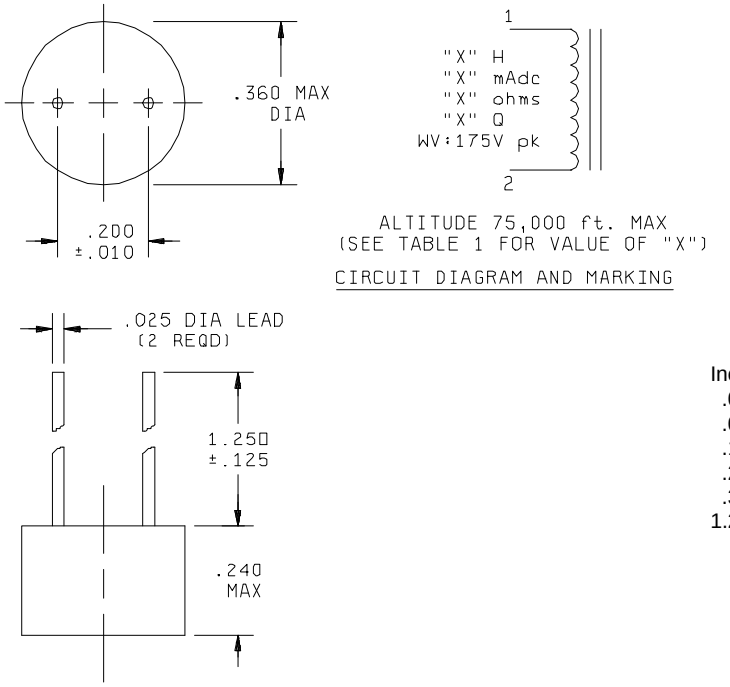
INCH-POUND

MIL-PRF-27/146B
14 February 1995
SUPERSEDING
MIL-T-27/146A
8 April 1980

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

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.



Inches	mm
.010	0.25
.025	0.64
.125	3.18
.240	6.10
.360	9.14
1.250	31.75

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 configuration.

(B) denotes change.

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

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.

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

Altitude: 75,000 feet maximum.

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

Dielectric withstanding voltage:

At sea level: 500 V rms.

At reduced barometric pressure: 300 V rms.

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

(B) 1/ Qualification testing and approval to M27/146-06 shall be sufficient to grant qualification approval to M27/146-01 through M27/146-06, inclusive.
2/ The dc current is the amount of current that will reduce the inductance 10 percent maximum.

Marking location: See figure 1.

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

CONCLUDING MATERIAL

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

Review activities:
Army - AR, ME, MI
Navy - AS, MC, OS, SH
Air Force - 17, 19, 99
DLA - ES

Preparing activity:
Army - ER

Agent:
DLA - ES

(Project 5950-0844)