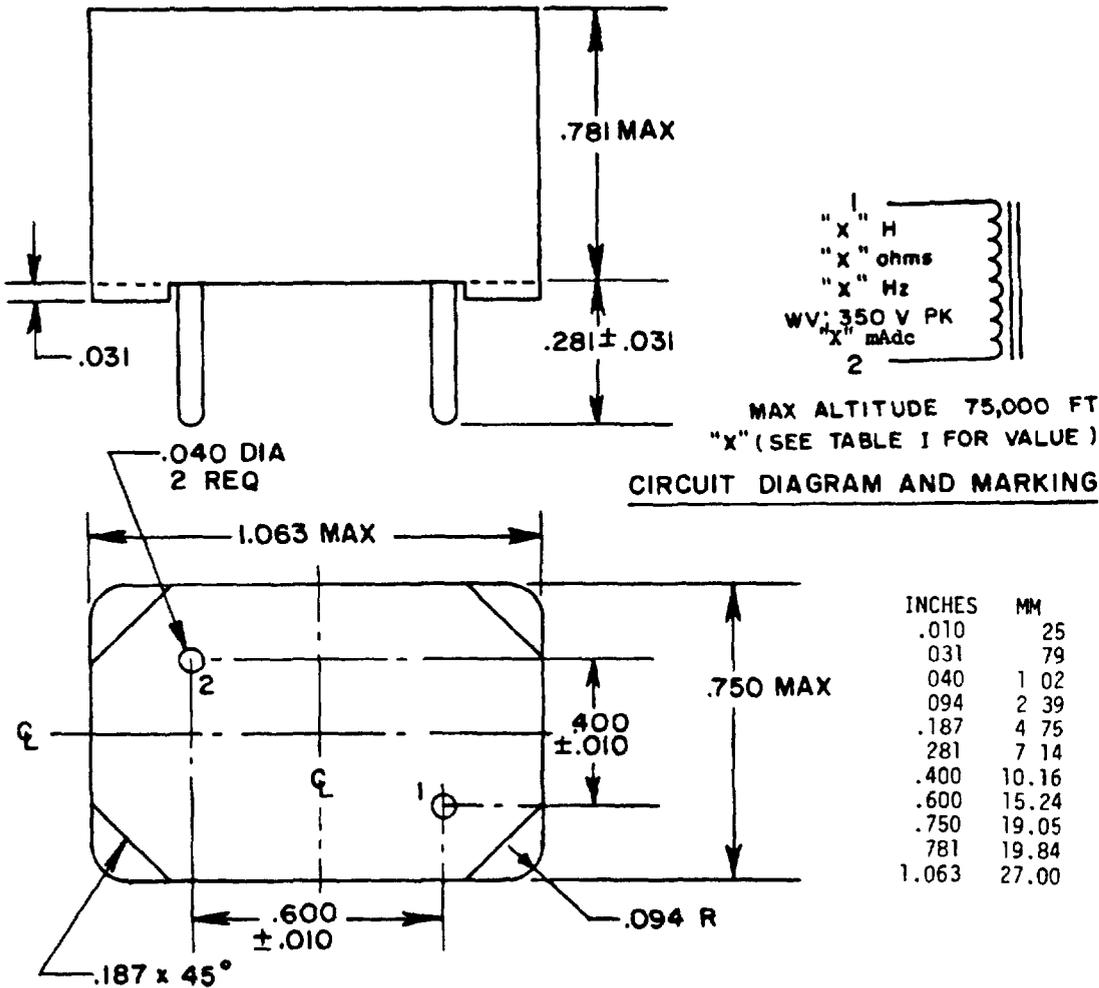


MILITARY SPECIFICATION SHEET
TRANSFORMERS AND INDUCTORS
(AUDIO, POWER AND HIGH-POWER PULSE),
INDUCTORS, HIGH Q, TF5R202Z

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.



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 opposite terminal pins.

FIGURE 1 Dimensions and configuration

MIL-T-27/168

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 350 volts peak

Design and construction

Dimensions and configuration See figure 1.

Case Plastic

Material: Diallyl phthalate

Terminals Pin, type D, per MIL-STD-1276, tinned.

Weight 1.2 ounce maximum.

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

Altitude 75,000 feet maximum

Terminal strength MIL-STD-202, method 211, test condition A, 2 pounds

Dielectric withstanding voltage

At sea level 1,000 Vrms

At reduced barometric pressure 440 Vrms

Vibration MIL-SID-202, method 204, test condition D

Marking location See figure 1.

Part number M27/168- (dash number from table 1)

TABLE I Electrical ratings

Dash no	(1-2) 1/ Inductance at 1 volt		(1-2) 2/ DC current (max) (mA)	(1-2) DC resistance ±20% at 25°C (ohms)	(1-2) Quality factor		
	L ±2% (H)	Frequency (Hz)			Q min	Voltage (Vrms)	Frequency (Hz)
01	10	1,000	55	14	22	1	1,500
02	15	↑	45	22	↑	↑	↑
03	30	↓	28	34	↓		↓
04	50	↓	23	54	↓		↓
05	1 0	1,000	16	130	22		1,500
06	2 0	400	8	130	20		750
07	5 0	↑	5	340	↑		↑
08	7 5	↓	4 5	517	↓		↓
09	20	↓	2 7	1,310	↓		↓
10	50	↓	1 4	3,180	20	↓	↓
11	100	400	1 1	8,550	21	1	750

1/ Inductance is measured at 0 DC

2/ The DC current is that amount that will reduce the inductance approximately 5% (8% maximum)

Custodians

Army - EL
Navy - EC
Air Force - 85

Review activities

Army - M1, SG
Navy - SH, OS
Air Force - 11, 17, 99
DLA - ES

User activities

Army - MU, WC, SG, ME
Navy - MC, AS
Air Force - 19

Preparing activity

Army - F1

Agent

DLA - ES

(Project 5950-0538-27)

SPECIFICATION ANALYSIS SHEET

Form Approved
Budget Bureau No 22-R255

INSTRUCTIONS This sheet is to be filled out by personnel either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.

SPECIFICATION MIL-I-277168 TRANSFORMERS AND INDUCTORS (AUDIO, POWER AND HIGH-POWER PULSE), INDUCTORS, HIGH Q, TF5R20ZZ

ORGANIZATION

CITY AND STATE

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

DIRECT GOVERNMENT CONTRACT SUBCONTRACT

1 HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A GIVE PARAGRAPH NUMBER AND WORDING

B RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2 COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3 IS THE SPECIFICATION RESTRICTIVE?

YES NO (If "yes", in what way?)

4 REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers attach to form and place both in an envelope addressed to preparing activity.)

SUBMITTED BY (Printed or typed name and activity - Optional)

DATE

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