

INCH-POUND

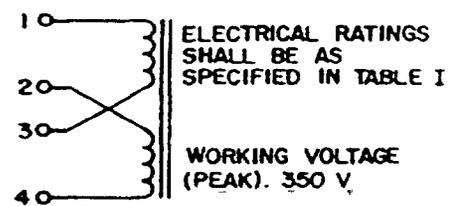
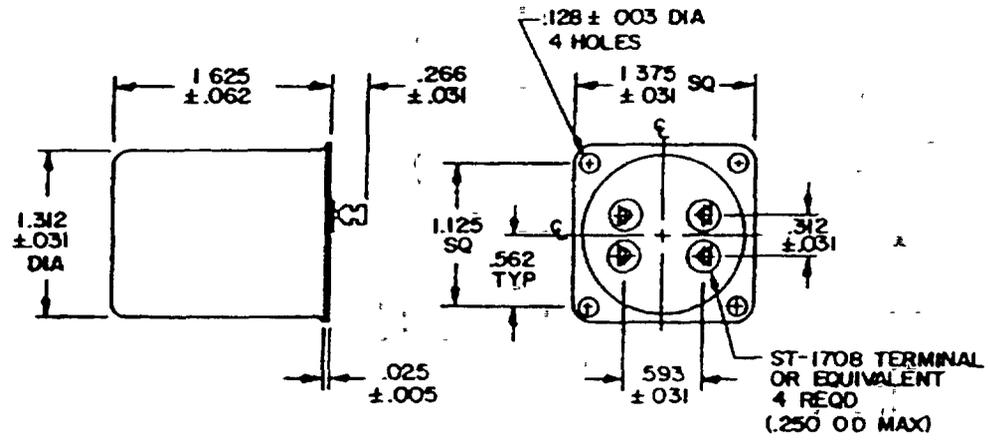
MIL-T-27/162A
 31 March 1992
 SUPERSEDING
 MIL-T-27/162
 21 March 1977

MILITARY SPECIFICATION SHEET

TRANSFORMERS AND INDUCTORS
 (AUDIO, POWER, AND HIGH-POWER PULSE),
 INDUCTORS, AUDIO FREQUENCY, HIGH Q, TF4502YY

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



CIRCUIT DIAGRAM AND MARKING

Inches	mm
.003	0.08
.005	0.13
.025	0.64
.031	0.79
.062	1.57
.128	3.25
.250	6.35
.266	6.76
.312	7.92
.562	14.27
.593	15.06
1.125	28.58
1.312	33.32
1.375	34.92
1.625	41.28

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
4. Tolerances on all dimensions shall be ± .016 inch (0.41 mm), unless otherwise specified

FIGURE 1 Dimensions and configurations

(A) denotes changes

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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) 350 volts

Temperature coefficient (-55°C to +130°C). ±2.0 percent

TABLE I. Electrical ratings 1/

Dash number	Inductance <u>2/</u> H ±2% (1-4)	Voltage <u>2/</u> V (1-4)	DC <u>3/</u> resistance (ohms) ±20% (1-4)	Quality factor at 1 V (min)
01	2 0/0 5	1.0/0.5 at 60 Hz	21	24 at 150 Hz
02	16/4 0	"	143	23 at 150 Hz
03	40/10	"	368	23 at 100 Hz
04	300/75	"	3700	23.5 at 100 Hz
05	600/150	"	5720	23.5 at 100 Hz

1/ Qualification testing and approval to M27/162-05 shall be sufficient to grant qualification approval to M27/162-01 through M27/162-04.

2/ Values correspond to the windings being connected in series/parallel, respectively

3/ DC resistance with 2 and 3 connected

Design and construction

Dimensions and configurations See figure 1

Duty cycle Continuous

Case. Metal encased.

Terminals Solder terminal, ST-1708 or equivalent, glass to metal seal

Height: 0.266 ±0.031 inch.

Diameter 0.0250 inch, maximum

Weight 170 grams, maximum

Terminal strength MIL-STD-202, method 211, test condition A, 5.0 pounds.

Dielectric withstanding voltage (at sea level). 1,000 Volts rms

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Electrical characteristics

Inductance: The inductance in table I is measured with 1.0 volt rms, 60 Hz across (1-4) with (2-3) connected, and 0 A dc applied to (1-4)

(A) NOTE After group III (environmental) and group IV (life) the inductance shall not change more than 15 percent and "Q" shall be 22 minimum.

Marking location: See figure 1

Part or Identifying Number (PIN) M27/162-(dash number from table I)

CONCLUDING MATERIAL

Custodians

Army - ER
Navy - EC
Air Force - 85

Review activities

Army - MI
Navy - OS, SH
Air Force - 17, 99

User activities:

Army - ME
Navy - AS, MC,
Air Force - 19

Preparing activity
Army - ER

Agent
DLA - ES

(Project 5950-0785)