

MILITARY SPECIFICATION SHEET

TRANSFORMERS AND INDUCTORS  
(AUDIO, POWER AND HIGH-POWER PULSE)  
INDUCTORS, VARIABLE, HIGH Q, TF4R20Y

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

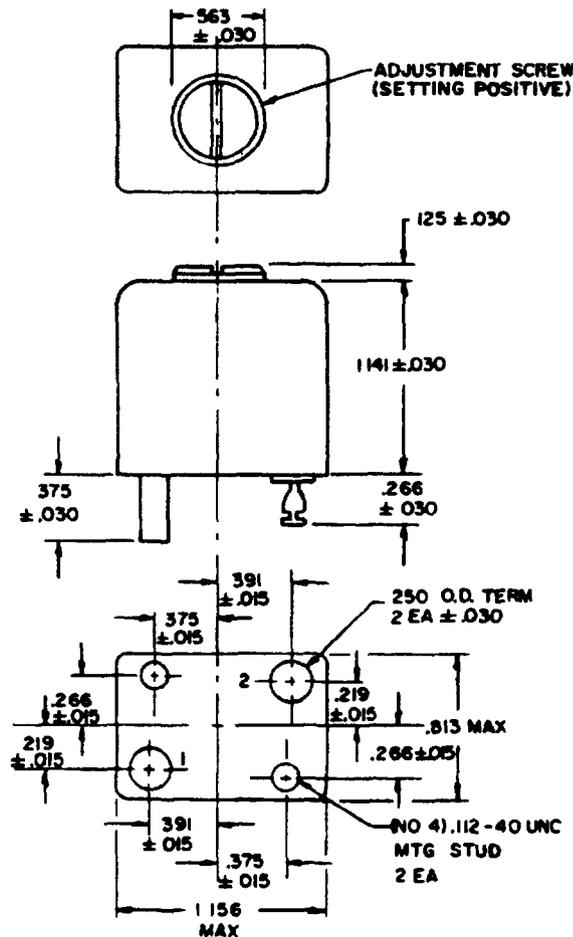
The complete requirements for procuring the inductors described herein shall consist of this document and the latest issue of Specification MIL-T-27.

"X" TO "X" H  
"X" V  
"X" Hz  
"X" OHMS  
W V 175 Vpk



CIRCUIT DIAGRAM AND MARKING  
(SEE TABLE I FOR VALUE OF "X")

INCHES	MM
.813	20.65
1.141	28.98
1.156	29.36



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 side of case

FIGURE 1 Dimensions and configuration

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: 175 volts peak.  
 Temperature stability at mean inductance:  $\pm 1.5\%$ , at  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .

Design and construction:  
 Dimensions and configuration: See figure 1.  
 Case: Metal.  
 Material: CRS.  
 Terminals: Solder lug, glass to metal seal.  
 Weight: 2 ounces.  
 Operating temperature range  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .

Terminal strength: MIL-STD-202, method 211, test condition A, 5 pounds.

Dielectric withstanding voltage (at sea level): 500 Vrms.

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

TABLE I. Electrical ratings.

Dash No.	(1-2) Inductance range			(1-2) Voltage (Vrms)	(1-2) Frequency (Hz)	(1-2) <sup>1/</sup> DC current (mA)	DCR $\pm 20\%$ (ohms)
	(min)	(mean)	(max)				
01	0.002	0.006	0.02	0.5	1 K	100	0.5
02	0.005	0.015	0.05	0.5	1 K	60	1.4
03	0.011	0.040	0.11	0.5	1 K	40	3.6
04	0.03	0.10	0.3	1	1 K	30	8.6
05	0.07	0.25	0.7	1	1 K	20	22
06	0.2	0.6	2	1	1 K	15	55
07	0.5	1.5	5	5	1 K	10	141
08	1.1	4	11	7	60	7	360
09	3	10	30	7	60	5	950
10	7	25	70	10	60	3.5	2220
11	20	60	200	10	60	2	5550
12	50	150	500	10	60	1.5	15.6 K

<sup>1/</sup> DC current is applicable in the mean to minimum inductance range only.

Marking location: See figure 1.

Part number M27/145 - (dash number from table I).

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

Review activities:  
 Army - MI, SG  
 Navy - SH, OS  
 Air Force - 11, 17, 99  
 DLA - ES

User activities:  
 Army - MJ, WC, ME  
 Navy - MC, AS  
 Air Force - 19

Preparing activity:  
 Army - EL

Agent:  
 DLA - ES

(Project 5950-0538-4)

**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** MLL-T-27/145 TRANSFORMERS AND INDUCTORS (AUDIO, POWER AND HIGH POWER PULSE) INDUCTOR, VARIABLE, HIGH Q, TFLR2OYY

**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**

**DD FORM 1426**  
1 JAN 64

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED

**ESC-PM 1068-68**

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