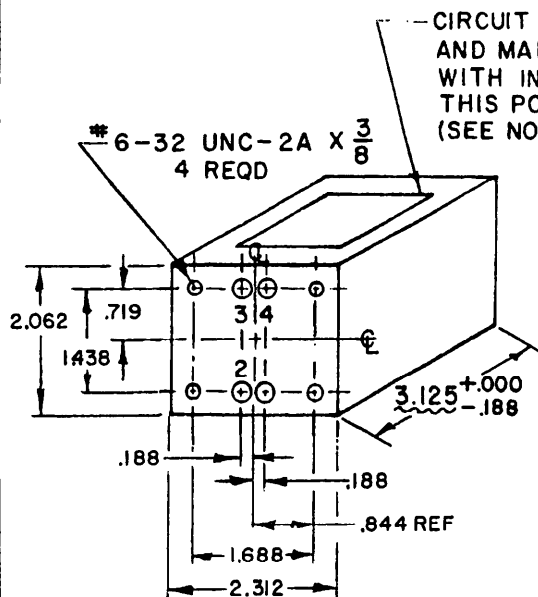


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AF 11, 85, 17 @ 19, 14 Army H EL, AR Navy H WP, SH @ MC

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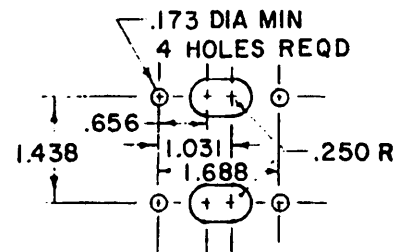
# CASE, MOUNTING, TERMINAL ARRANGEMENT, AND MARKING

FED. SUP CLASS  
5950



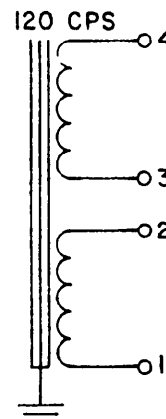
CIRCUIT DIAGRAM  
AND MARKING READABLE  
WITH INDUCTOR IN  
THIS POSITION.  
(SEE NOTE 6)

## MINIMUM CHASSIS CUTOUT



## GRAM AND MARKING

MAX WORKING  
VOLTAGE 1,000V



SERIES - 16H  
250 V RMS  
.080 AMP DC  
645 OHMS

PARALLEL - 4H  
125 V RMS  
.160 AMP DC  
160 OHMS

MAX ALTITUDE - 10,000 FT

INCHES	MM
.173	4.39
.188	
.250	
.65	
.719	
.844	.44
1.031	26.19
1.438	36.53
1.688	42.88
2.062	52.37
2.312	58.72
3.125	79.38
3/8	9.53

THIS MILITARY STANDARD INACTIVE FOR DESIGN  
AFTER 28 DECEMBER 1977. USE MIL-T-27/209.

## NOTES:

- All dimensions in inches.
- Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
- Unless otherwise specified, tolerance on case dimensions is  $\pm .000$  (.00 mm),  $-.125$  (3.18 mm).
- Tolerance on mounting dimensions is  $\pm .016$  (.41 mm). Mounting studs are symmetrically located.
- Tolerance on terminal positioning dimensions is  $\pm .125$  (3.18 mm). Terminals fit within minimum chassis cutout.
- Type designation, MS part no. and manufacturer's name or symbol to be marked on side opposite terminals.
- Referenced document shall be of the issue in effect on date of invitation for bids.
- This standard takes precedence over document referenced herein.

ⓑ DENOTES CHANGES

MS PART NO. MS90009-2

P.A. Army - EL Other Cust Navy - EC Air Force - 85	TITLE ⓑ INDUCTOR, POWER, TYPE TF4R04FA	MILITARY STANDARD MS90009
Procurement Specification MIL-T-27	SUPERSEDES:	PAGE 1 OF 2

FED. SUP CLASS  
5950

## ELECTRICAL RATING

Inductance:  
 (1-4) ..... 16 h min  
 (1-3) and (2-4) ..... 4 h min  
 Current:  
 (1-4) ..... .080 amp dc  
 (1-3) and (2-4) ..... .160 amp dc  
 Voltage:  
 (1-4) ..... 250 v rms  
 (1-3) and (2-4) ..... 125 v rms  
 Frequency ..... 120 cps,  $\pm 10\%$

DC resistance:  
 (1-2) ..... 295 ohms,  $\pm 10\%$   
 (3-4) ..... 350 ohms,  $\pm 10\%$   
 Duty cycle ..... Continuous  
 Life expectancy ..... 10,000 hr min  
 Max working voltage:  
 (1-4) ..... 1,000 v  
 (1-3) and (2-4) ..... 1,000 v  
 Altitude ..... 10,000 ft max  
 Operating temperature ..... 105° C max

Note: When numbers in parentheses, eg (1-2), are used, they indicate the winding and the extreme terminals of the winding. When the extreme terminals of both windings are used, eg (1-4), the windings are connected in series, ie, terminals 2 and 3 are connected. When the extreme terminal of one winding and the extreme terminal of another winding are used, eg (1-3) and (2-4), the windings are connected in parallel.

## PHYSICAL CHARACTERISTICS

Case size ..... FA  
 Weight ..... 2 lb max  
 Terminals ..... Solder lug, No. 18 AWG  
 Terminal height ..... .563 (14.30 mm)  $^{+.000}_{-.188}$  (4.78 mm)  
 Shock ..... Method I, test condition C (50 G)

TEST	ELECTRICAL PROPERTIES				LIMITS
Dielectric withstanding voltage: At sea level	Windings	(1-4)	(1-3)	(2-4)	---
	Volts rms	2,400	2,400	2,400	
DC resistance and resistive unbalance	(1-2): 295 ohms (3-4): 350 ohms Resistive unbalance not applicable				$\pm 10\%$ $\pm 10\%$
Inductance and inductive unbalance	With 50 v, 120 cps, and .080 amp dc applied to (1-4): 16 h With 50 v, 120 cps, and .160 amp dc applied to (1-3) and (2-4): 4 h Inductive unbalance not applicable				Min Min
Polarity	Additive, with terminals 2 and 3 connected				---
Temperature rise	40° C with 250 v, 108 cps, and .080 amp dc applied to (1-4) at an ambient temperature of 65° C				Max

P.A. Army - EL  
 Other Cust Navy - EC  
 Air Force - 85

TITLE  
 (B) INDUCTOR, POWER,  
 TYPE TF4R04FA

MILITARY STANDARD

MS90009

Procurement Specification  
 MIL-T-27

SUPERSEDES:

PAGE 2 OF 2

APPROVED 9 JUNE 1958 REVISE (B) FOR CHANGES SEE PAGE 1

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 AF II, 85, 17 @ 19, 14 Navy YWP, SH @ MC  
 Army EL, AR

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DD FORM 672  
25 OCT 63

(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.