

INCH-POUND

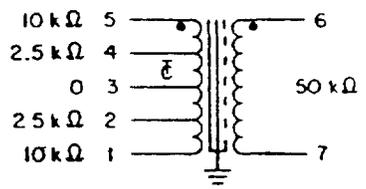
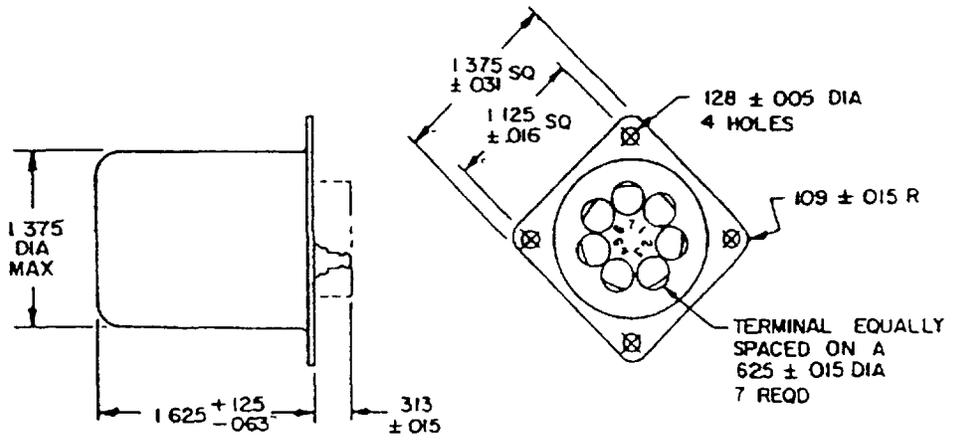
MIL-T-27/185A
 8 April 1992
 SUPERSEDING
 MIL-T-27/185
 5 October 1977

MILITARY SPECIFICATION SHEET

TRANSFORMER (CHOPPER INPUT), TF4R21Y

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



1.6 MW 60 Hz 60 MW 400 Hz
 WV 175 PK
 ALTITUDE 50,000 FT MAX

CIRCUIT DIAGRAM AND MARKING

Inches	mm
005	0 13
015	0 38
016	0 41
031	0 79
063	1 60
.109	2 77
.125	3 18
.128	3 25
.313	7 95
.625	15 88
1 125	28 58
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

FIGURE 1 Dimensions and configurations

(A) denotes changes

AMSC N/A

FSC 5950

MIL-I-27/185A

REQUIREMENTS (When numbers in parentheses, i.e., (1-3) are used, they indicate the winding and the extreme terminals of the windings.)

Electrical ratings

- (A) Primary inductance 200/50 Henrys ct, minimum at 1 volt, 60 hertz
Primary level 60 milliwatts at 400 hertz and 1.6 milliwatts at 60 hertz
- (A) Primary impedance
 - (1-2-3) 10 kilohms ct
 - (3-4-5) 10 kilohms ct
 - (2-3-5) 10 kilohms ctSecondary impedance (6-7) 50 kilohms
- (A) Primary resistance 1,300/650 ct ohms ± 25 percent
- (A) Secondary resistance 1,900 ohms ± 25 percent
Working voltage 175 volts peak (1-5)
Frequency range 60 to 400 hertz

Design and construction.

- Dimensions and configurations See figure 1
- Duty cycle Continuous
- Case Metal encased, hermetically sealed
 - Material Cold-rolled steel
 - Terminals Solder lug, glass-to-metal seal
 - Terminal height 313 ± 015 inch
- Weight 4 ounces
- Altitude 50,000 feet maximum
- Operating temperature range -55°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 volts rms
 - At reduced barometric pressure 300 volts rms

Electrical characteristics

No load (centertap voltage unbalance only) With 10 volts, 60 hertz and 0 amperes dc applied to (1-5), unbalance (3-5) and (3-1) 1 percent maximum

Polarity Additive, with terminals 5 and 7 connected

Electrostatic shielding Voltage ratio 5:1 at 20 kHz

Marking location See figure 1

Part or Identifying Number (PIN) M27/185-01

CONCLUDING MATERIAL

Custodians

Army - ER
Navy - EC
Air Force - 85

Review activities

Army - MI
Navy - OS
Air Force - 17, 99
DLA - ES

User activities

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

Preparing activity
Army - ER

Agent
DLA - ES

(Project 5950-0791)