

INCH-POUND

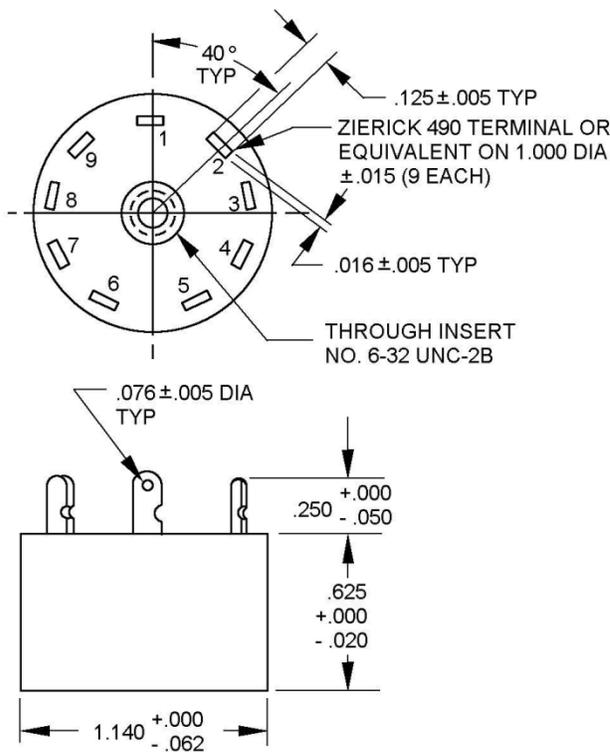
MIL-T-27/99C
 4 May 2012
 SUPERSEDING
 MIL-T-27/99B
 13 March 1991

MILITARY SPECIFICATION SHEET
 TRANSFORMER, POWER, STEP-DOWN

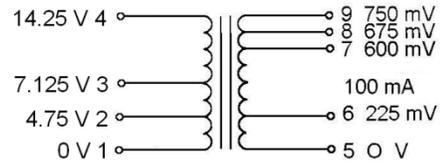
Inactive for new design after
 13 March 1991

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

The requirements for acquiring the products described herein shall consist of this specification and MIL-PRF-27.



CIRCUIT DIAGRAM AND MARKING



VA: .075 V
 WORKING VOLTAGE: 30 V MAX

Inches	mm	Inches	mm
.000	0.00	.062	1.57
.005	0.13	.076	1.93
.015	0.38	.125	3.18
.016	0.41	.250	6.35
.020	0.51	.625	15.88
.050	1.27	1.140	28.96

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Tolerance on terminal angular position is ±0.5°.
4. Marking shall be on the side of the case.

FIGURE 1. Dimensions and configuration.

REQUIREMENTS: (When numbers in parentheses, such as (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings:

Primary voltage (1-2-3-4): 4.75/7.125/14.25 volts pk, 3 kHz square wave.

Primary current:

(1-2): 16 mA.

(1-4): 8 mA.

Secondary voltage (5-6-7-8-9): 225/600/675/750 mV pk.

Secondary current (5-9): 100 mA.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy.

Terminals: Brass, solder type.

Terminal height: 0.250 +.000, -.050 inch (6.35 +0.00, -1.27 mm).

Weight: 34.02 grams.

Operating temperature range: -40°C to +130°C.

Terminal strength: MIL-STD-202, method 211, test condition A, 2.0 pounds.

Dielectric withstanding voltage (at sea level): 500 V rms.

Electrical characteristics:

No load: With 14.25 volts pk, 3 kHz across (1-4), the voltage across (5-6) shall be 0.25 volts pk ± 3.0 percent, voltage across (5-7) shall be 0.617 volts pk ± 3 percent, voltage across (5-8) shall be 0.695 volts pk ± 3.0 percent, and voltage across (5-9) shall be 0.77 volts pk ± 3.0 percent.

Rated load: With 14.25 volts pk, 3 kHz across (1-4), the voltage across (5-9) shall be 750 mV pk ± 10 percent.

DC resistance:

(1-4): 7.9 to 10.7 ohms.

(5-9): .040 to .060 ohm.

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

Shock (specified pulse): MIL-STD-202, method 213, test condition H.

VERIFICATION

Qualification inspection: Not applicable.

Conformance inspection: Groups A and B tests of MIL-PRF-27 shall be applicable.

Marking location: See figure 1.

Part or Identification Number (PIN): M27/99-01.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Referenced documents. In addition to MIL-PRF-27, this document references the following:

MIL-STD-202

Custodians:

Army – CR
Navy – EC
Air Force – 85
DLA - CC

Preparing activity:
DLA – CC

(Project 5950-2009-074)

Review activities:

Army – AR, CR4, MI
Navy – AS, MC, OS, SH
Air Force – 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of this information above using the ASSIST Online database at <https://assist.daps.dla.mil>.