

INCH-POUND

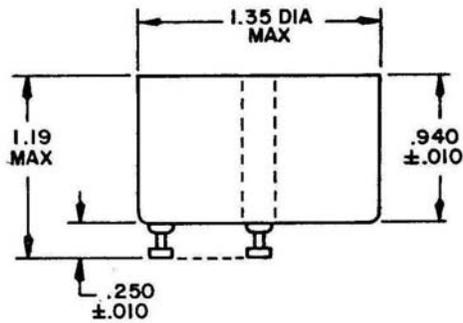
MIL-T-27/89B
28 April 2008
SUPERSEDING
MIL-T-27/89A
2 May 1977

DETAIL SPECIFICATION SHEET
TRANSFORMERS AND INDUCTORS
(AUDIO, POWER, AND HIGH-POWER PULSE),
INDUCTOR, POWER

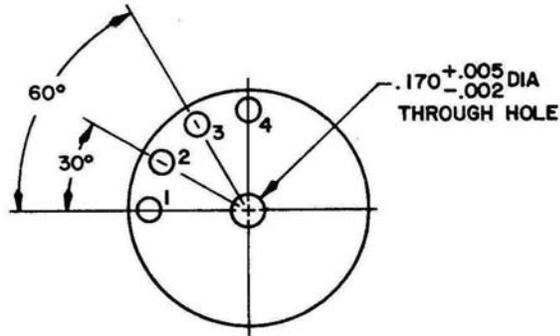
Inactive for New Design
after 14 February 1997

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

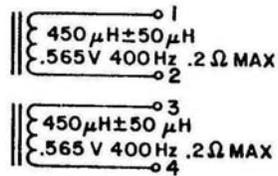
The requirements for acquiring the products described herein shall consist of this specification and MIL-PRF-27.



INCHES	MM
.002	.05
.005	.13
.010	.25
.170	4.32
.250	6.35
.940	23.88
1.19	30.2
1.35	34.3



CIRCUIT DIAGRAM
AND MARKING



WV: 178 VOLTS MAX

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Tolerance on terminal angular position dimensions is ±5°.
4. Marking shall be on the side of the case.

FIGURE 1. Dimensions and configuration.

MIL-T-27/89B

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

Electrical ratings:

Inductance:

(1-2): 450 \pm 50 μ H.

(3-4): 450 \pm 50 μ H.

Voltage:

(1-2): 0.565 volt rms, 400 hertz.

(3-4): 0.565 volt rms, 400 hertz.

Current:

(1-2): 0.5 ampere rms.

(3-4): 0.5 ampere rms.

DC resistance:

(1-2): 0.2 ohm maximum.

(3-4): 0.2 ohm maximum.

Working voltage: 178 volts maximum.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy.

Terminals: Solder, turret type, USEC part number 2011A-5.5 or equal.

Terminal length: 0.250 \pm 0.010 inch.

Weight: 75 grams maximum.

Operating temperature range: -55°C to +155°C.

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

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

Electrical characteristics:

Inductance: With 0.565 volt rms, 400 Hz across applied to (1-2) or (3-4) the inductance shall be 450 \pm 50 μ H.

DC resistance at 20°C: 0.2 ohm across (1-2) or (3-4).

Self resonant frequency: 700 kHz minimum.

MIL-T-27/89B

VERIFICATION:

Qualification inspection: Not applicable for this specification sheet.

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

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/89-01.

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 – 11
DLA - CC

Preparing activity:

DLA – CC

(Project 5950-2008-017)

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 <http://assist.daps.dla.mil>.