

INCH-POUND

MIL-T-27/303B
2 June 2003
SUPERSEDING
MIL-T-27/303A
13 March 1991

MILITARY SPECIFICATION SHEET

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

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.

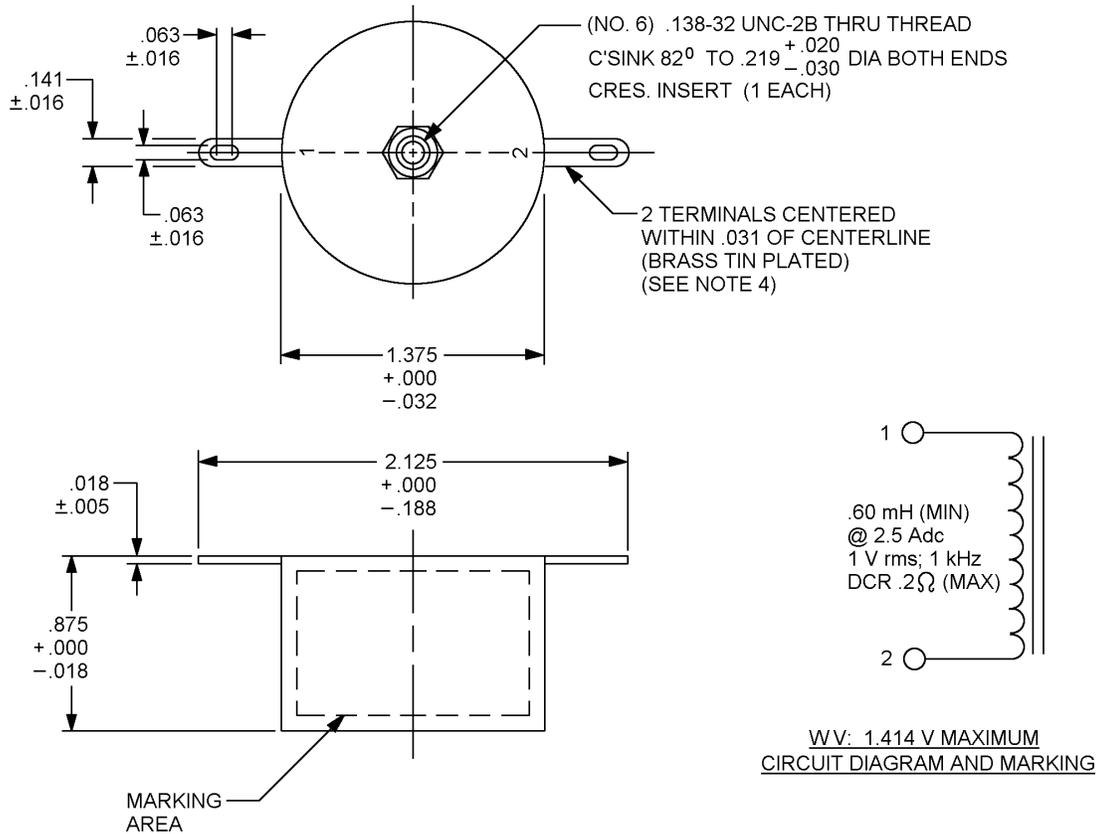


FIGURE 1. Dimensions and configuration.

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Inches	mm	Inches	mm
.005	0.13	.138	3.51
.016	0.41	.141	3.88
.018	0.46	.188	4.78
.020	0.51	.219	5.56
.030	0.76	.875	22.22
.032	0.81	2.135	53.98
.063	1.60		

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.
4. Terminals shall be brass, 70 percent Cu, 30 percent Zn in accordance with ASTM-B36 and ASTM B121.

FIGURE 1. Dimensions and configurations – Continued.

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REQUIREMENTS: (When designations in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings:

Inductance (1-2): 0.60 millihenry, minimum.

Voltage (1-2): 1.0 volts rms, 1 kilohertz.

Current (1-2): 2.5 amperes dc.

Working voltage (1-2): 1.414 volts, maximum.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy.

Terminals: Solder type, brass, tin plated.

Terminal length: .391 inch, maximum.

Weight: 85.05 grams, maximum.

Operating temperature range: -55°C to +130°C.

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

Dielectric withstanding voltage (at sea level): 100 volts rms.

Electrical characteristics:

Inductance: With 1.0 volt rms, 1 kilohertz, and 2.5 amperes dc applied to (1-2); the inductance shall be 0.60 millihenry, minimum.

DC resistance (1-2): 0.2 ohm, maximum.

Temperature rise: 50°C with 1.0 volt rms, 1 kilohertz, 2.5 amperes dc applied to (1-2) at an ambient temperature of 80°C, maximum.

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

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

Quality assurance provisions:

Qualification inspection: Not applicable.

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): M27/303-01.

Custodians:

Army – CR
Navy – EC
Air Force – 11

Preparing activity:
DLA – CC

(Project 5950-1146)

Review activities:

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