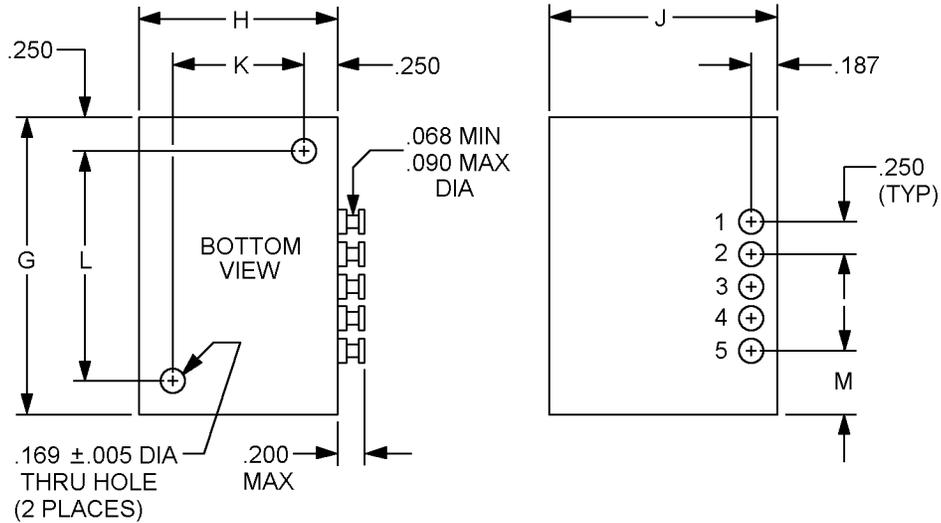


MIL-PRF-27/342F



DASH NUMBERS 04 THROUGH 32

Ltr	Dimensions		Inches	mm
	Inches	mm		
G	$2.31 \pm .015$	58.7 ± 0.38	.068	1.73
H	$1.52 \pm .015$	38.6 ± 0.38	.090	2.29
J	$1.75 \pm .015$	44.5 ± 0.38	.115	2.92
K	$1.02 \pm .015$	25.9 ± 0.38	.169	4.29
L	$1.81 \pm .015$	46.0 ± 0.38	.187	4.75
M	$.500 \pm .031$	12.70 ± 0.79	.200	6.08
N	$.750 \pm .031$	19.05 ± 0.79	.250	6.35
			.380	8.89

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be on the top and sides of the case.
4. Dimensional tolerance shall be $\pm .031$ (0.79 mm) unless otherwise specified.
5. Dimensions G and H to be measured at top of transformer.

FIGURE 1. Dimensions and configurations - Continued.

MIL-PRF-27/342F

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

Electrical ratings:

Primary voltage (1-2): 115 volts rms, 400 \pm 20 hertz.

Secondary voltage and current (3-5): See table I.

Volt-ampere: 80 voltamperes.

Working voltage (1-2): 535 volts peak.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle. Continuous.

Case: Encapsulated.

Material: Epoxy fiberglass or diallyl phthalate.

Terminals: Turret type.

Height: See figure 1.

Weight: 0.80 pound, maximum.

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

Altitude: 70,000 feet.

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

Dielectric withstanding voltage (each winding):

At sea level: 1500 volts rms.

At reduced barometric pressure: 1.25 times the peak working voltage specified.

Electrical characteristics:

Rated load: With 115 volts rms and 400 Hz in (1-2), and rated current in secondary, the voltage across (3-5) shall be as specified in table I.

DC resistance:

(1-2): 2.0 ohms \pm 25 percent.

(3-5): See table I.

MIL-PRF-27/342F

Temperature rise: 45°C with 115 volts rms, 400 hertz across (1-2) at an ambient temperature of 85°C, full load terminals (3-5).

Regulation: $\frac{\text{Voltage (no load)} - \text{Voltage (rated load)}}{\text{Voltage (rated load)}} \times 100$

Shall not exceed 10 percent.

Polarity: Additive with terminals 2 and 3 connected.

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/342-(dash number from table I).

TABLE I. Electrical ratings.

Dash number M27/342-	Secondary voltage (3-5) (V rms) ±5% (CT)	Secondary current (3-5) (amperes)	Secondary DCR (3-5) (ohms) ±25%
01	5.0	16.0	.009
02	6.3	12.8	.016
03	8.0	10.0	.017
04	10.0	8.0	.030
05	12.6	6.35	.030
06	14.0	5.6	.040
07	16.0	5.0	.050
08	18.0	4.45	.080
09	20.0	4.0	.090
10	22.0	3.63	.120
11	25.0	3.2	.130
12	28.0	2.85	.140
13	31.0	2.47	.180
14	35.0	2.28	.280
15	39.0	2.05	.320
16	43.0	1.86	.350
17	48.0	1.66	.400
18	55.0	1.45	.670
19	63.0	1.27	.710
20	70.0	1.14	.800
21	80.0	1.0	.920
22	90.0	.89	1.08
23	100.0	.80	1.64
24	110.0	.728	2.03

MIL-PRF-27/342F

TABLE I. Electrical ratings – Continued.

Dash number M27/342-	Secondary voltage (3-5) (V rms) ±5% (CT)	Secondary current (3-5) (amperes)	Secondary DCR (3-5) (ohms) ±25%
25	123.0	.65	2.35
26	138.0	.58	3.17
27	157.0	.508	3.60
28	175.0	.455	5.50
29	200.0	.400	5.60
30	220.0	.364	8.10
31	26.0	3.080	0.14
32	115.0	.696	2.12

VERIFICATION:

Extent of qualification:

Qualification testing and approval to M27/338-26 and M27/343-30 shall be sufficient to grant qualification approval to MIL-PRF-27/338 through MIL-PRF-27/343 inclusive, all parts.

Qualification testing and approval to M27/342-30 shall be sufficient to grant qualification approval to M27/342-01 through M27/342-32.

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.

MIL-PRF-27
MIL-STD-202

Custodians:

Army - CR
Navy - EC
Air force - 11

Preparing activity:

DLA - CC

Review activities:

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

(Project 5950-2006-001)

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 the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.