

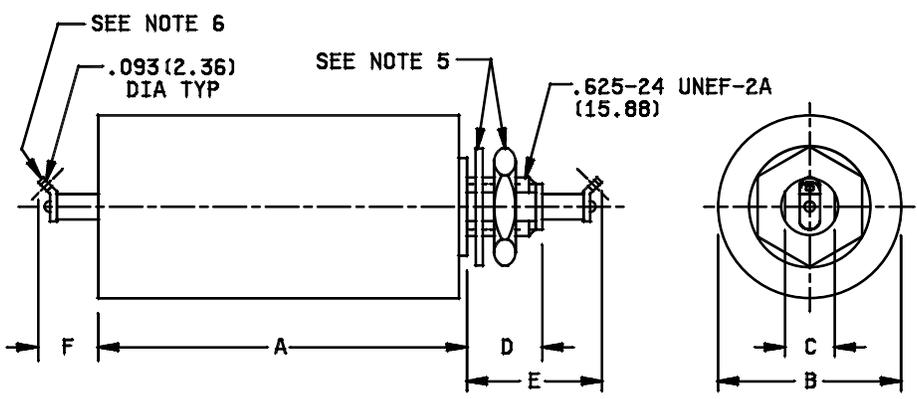
INCH-POUND

MIL-PRF-15733/55E
31 March 2003
SUPERSEDING
MIL-PRF-15733/55D
22 October 1983

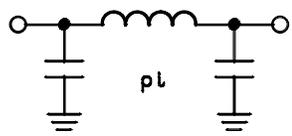
PERFORMANCE SPECIFICATION SHEET
FILTERS, RADIO INTERFERENCE, HERMETICALLY SEALED
STYLE FL85

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

The complete requirements for acquiring the filters described herein shall consist of this specification sheet and the latest issue of MIL-PRF-15733.



DASH NUMBER 0001, 0002, AND 0003



CIRCUIT CONFIGURATION

NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents are in parentheses.
- 3. Metric equivalents are given for general information only.
- 4. Circuit diagram is for information only.
- 5. Mounting hardware (internal-tooth lockwasher and hex nut) shall be supplied with filter.
- 6. Terminal shape and angular orientation optional.

FIGURE 1. Case dimensions and circuit configurations.

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TABLE I. Filter dimensions.

Dash number	A		B		C	
	Min	Max	Min	Max	Min	Max
0001	2.907 (73.84)	3.093 (78.56)	1.063 (27.00)	1.187 (30.15)	.526 (13.36)	.536 (13.61)
0002	2.907 (73.84)	3.093 (78.56)	1.063 (27.00)	1.187 (30.15)	---	.531 (13.49)
0003	2.31 (58.7)	2.43 (61.7)	1.235 (31.37)	1.265 (32.13)	.365 (9.27)	.385 (9.78)

Dash number	D		E		F	
	Min	Max	Min	Max	Min	Max
0001	.359 (9.12)	.391 (9.93)	.625 (15.88)	.781 (19.84)	.282 (7.16)	.406 (10.31)
0002	.359 (9.12)	.391 (9.93)	.625 (15.88)	.781 (19.84)	.282 (7.16)	.406 (10.31)
0003	.47 (11.9)	.53 (13.5)	---	1.43 (36.32)	---	.50 (12.70)

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Weight: 5.0 ounces, maximum (0001, 0002).

Case: Metallic, hermetically sealed.

Case and hardware finish: In accordance with MIL-PRF-15733. Pure tin finish is prohibited.

Terminals: Solderable (see figure 1).

Operating temperature range: -55°C to +85°C

Rated voltage: 400 V dc or 125 V ac at 400 Hz.

Rated current:

Amperes dc or ac (rms)	Dash nos.
5	0001
10	0002
2	0003

DC resistance: 0.072 ohm, maximum.

Insertion loss: See table II.

Seal: In accordance with MIL-PRF-15733.

Capacitance to ground: In accordance with MIL-PRF-15733.

Measured capacitance: Between 0.72 and 1.44 μ F (0001 only).

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Temperature rise: 25°C, maximum.

Dielectric withstanding voltage: In accordance with MIL-PRF-15733. The following details and exceptions shall apply:

Test voltage - shall be 2 times rated dc voltage applied between either terminal and case. The test voltage shall be applied and discharged through a resistance of at least 1 ohm per volt (0001 and 0002 only).

Barometric pressure (reduced): In accordance with MIL-PRF-15733. The following exception shall apply:

Test altitude: 80,000 feet (0.83 inch of mercury) for -0001 and -0002.

Insulation resistance: In accordance with MIL-PRF-15733. Insulation resistance shall be at least 550 megohms for -0001 and -0002 and shall be 1,000 megohm-microfarads minimum for the -0003.

Voltage drop: 1.0 V rms, maximum (-0001 and -0002) and .5 V dc, Max (-0003).

Insertion loss: In accordance with MIL-PRF-15733 and tables II and III.

Terminal strength: In accordance with MIL-PRF-15733 and Method 211, MIL-STD-202; test condition A (pull). The following details shall apply:

Applied force: 5 pounds. The force shall be applied in a direction parallel to the longitudinal axis of the filter. Slight deformation at the solder tab shall be allowable, provided no cracks, fractures or other damage to the terminal result from this test.

Flashpoint of impregnant or potting compound: In accordance with MIL-F-15733.

Minimum allowable flashpoint shall be +145°C.

Salt atmosphere (corrosion): In accordance with MIL-PRF-15733 and Method 101, MIL-STD-202, test condition A, (-0001 and -0002); test condition B (-0003).

Shock (specified pulse): In accordance with MIL-PRF-15733 and Method 213, MIL-STD-202; test condition I. The following details and exceptions shall apply:

Mounting: Filters shall be rigidly mounted by the body.

Insertion loss test: Not applicable.

Vibration, high frequency: In accordance with MIL-PRF-15733 and Method 204, MIL-STD-202; test condition B. The following exception shall apply:

Electrical current load shall not be applied to filters during the vibration test.

Life: In accordance with MIL-PRF-15733 and Method 108, MIL-STD-202; test condition B. The following exception shall apply:

Test current: 5 amperes, rms (0001 and 0002) and 2 amperes (0003) at 400 Hz.

Part or Identifying number (PIN): M15733/55- (dash number from table I).

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TABLE II. Insertion-loss (dB) (full load) versus frequency (MHz).

Dash number	Minimum insertion loss full load in accordance with MIL-STD-220 at +25°C					
	0.15 MHz	0.3 MHz	0.6 MHz	1 MHz	10 MHz	20 MHz
0001	40	58	76	80	80	80
0003	.15 MHz to 10 GHz					
	60					

TABLE III. Insertion-loss (dB) (no load) versus frequency (MHz).

Dash number	Minimum insertion loss no load in accordance with MIL-STD-220 at +25°C									
	0.15 MHz	0.3 MHz	0.5 MHz	1 MHz	10 MHz	20 MHz	40-500 MHz	100 MHz	400 MHz	1000 MHz
0001	54	73	85	94	84	84	67	N/A	N/A	64
0002	54	N/A	85	94	84	N/A	N/A	80	80	N/A

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:
 Army - CR
 Navy - EC
 Air Force - 11
 DLA - CC

Preparing activity:
 DLA - CC
 (Project 5915-0426)

Review activities:
 Navy - SH
 Air Force - 99