

INCH-POUND

MIL-PRF-15733/54G
w/AMENDMENT 2
04 April 2019
SUPERSEDING
MIL-PRF-15733/54G
w/AMENDMENT 1
02 June 2009

PERFORMANCE SPECIFICATION SHEET

FILTERS, RADIO FREQUENCY INTERFERENCE, HERMETICALLY SEALED, STYLE FL94

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

The requirements for acquiring the filters described herein shall consist of this specification sheet and [MIL-PRF-15733](#).

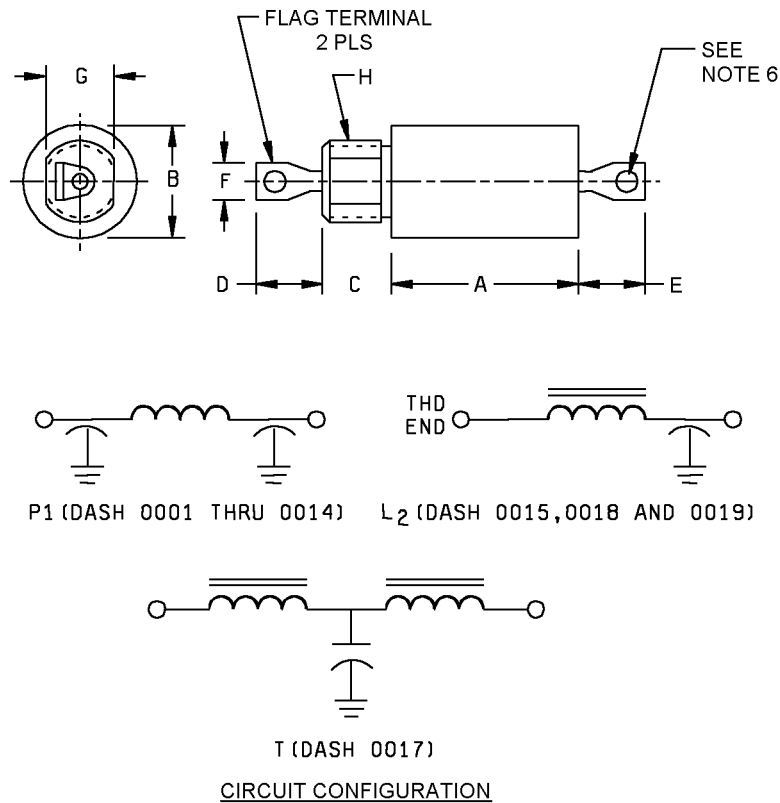
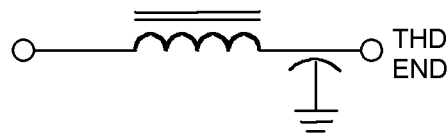
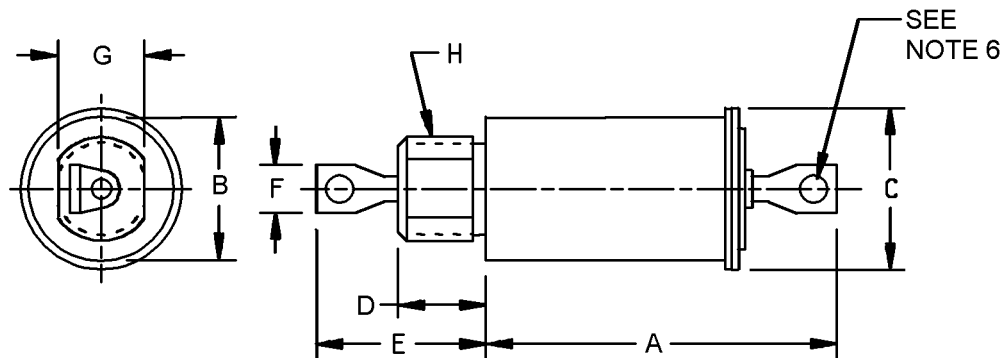


FIGURE 1. Case dimensions and circuit configurations.



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L₁ (DASH 0016)

CIRCUIT CONFIGURATION

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are in parentheses and are given for general information only.
3. Circuit diagram is for information only.
4. All filters shall be supplied with mounting hardware.
5. Use of style FL94 with or without shoulder is optional.
6. Wire hole diameter .060 (1.52 mm) (REF) or slot .050 (1.27) ± .010(.25) x .070 (1.78) ± .010(.25) for -0001 through -0016, -0018 and -0019, and .062 x .125 (1.57 X 3.18 mm) (REF) for -0017 (2 places).

FIGURE 1. Case dimensions and circuit configurations - Continued.

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Dash number	A		B		C	D		E	F	G		H
	Min	Max	Min	Max	±.015	Min	Max	Max	Ref	Min	Max	Mounting thread
0001	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.187 (4.75)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0002	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.187 (4.75)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0003	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.187 (4.75)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0004	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.187 (4.75)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0005	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.187 (4.75)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0006	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.187 (4.75)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0007	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.187 (4.75)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0008	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0009	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0010	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0011	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0012	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0013	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0014	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0015	.680 (17.27)	.700 (17.78)	.344 (8.74)	.406 (10.31)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0016	1.149 (29.18)	1.179 (29.95)	.375 Typ. (9.52)	---	.410 (10.41)	.180 (4.57)	.200 (5.08)	.350 (8.89)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0017	---	.892 (22.66)	---	.680 (17.27)	.291 (7.39)	---	.285 (7.24) REF	.285 (7.24) REF	.125 (3.18) REF	.240 (6.10)	.260 (6.60)	.312-24 UNF-2A
0018	.530 (13.46)	.550 (13.97)	.365 (9.27)	.385 (9.78)	Max .197 (5.00) Min .177 (4.50)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A
0019	.509 (12.93)	.571 (14.50)	.365 (9.27)	.385 (9.78)	.312 (7.92)	---	.150 (3.81)	.190 (4.83)	.115 (2.92)	.190 (4.83)	.210 (5.33)	.250-28 UNF-2A

FIGURE 1. Case dimensions and circuit configurations - Continued.

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REQUIREMENTS:

Dimensions and configuration: See figure 1.

Case: Metal.

Case and hardware finish: In accordance with [MIL-PRF-15733](#). Pure tin is prohibited as specified in [MIL-PRF-15733](#).

Terminals: Solderable. Pure tin finish is prohibited.

Operating temperature range: -55°C to +125°C.

Rated voltage: See table I.

Rated current: See table I.

DC resistance: See table I.

Seal: In accordance with [MIL-PRF-15733](#).

Temperature rise: 25°C, maximum.

Dielectric withstanding voltage: In accordance with [MIL-PRF-15733](#). The following exception shall apply:

Test voltage: 2.0 times rated dc voltage, applied between each terminal and ground, for a period of 1 to 5 seconds.

| Barometric pressure (reduced): In accordance with [MIL-PRF-15733](#) and [MIL-STD-202-105](#) test condition C (70,000 ft) for -0001 thru -0018 and test condition B (50,000 ft) for -0019.

Insulation resistance: In accordance with [MIL-PRF-15733](#). The following detail and exception shall apply:

Test potential: Rated dc voltage.

Insulation resistance at +25°C shall not be less than 100 megohms for -0001 thru -0016, -0018, and -0019 and not less than 1000 megohms for -0017.

Insertion loss: In accordance with [MIL-PRF-15733](#) and table I.

Overload: In accordance with [MIL-PRF-15733](#). The following exception shall apply:

Insulation resistance only shall be measured at +25°C and shall meet initial requirements.

| Terminal strength: In accordance with [MIL-PRF-15733](#) and [MIL-STD-202-211](#), test condition A (pull).

Applied Force: 5 pounds.

| Salt atmosphere (corrosion): In accordance with [MIL-PRF-15733](#) and [MIL-STD-202-101](#); test condition A.

| Shock (specified pulse): In accordance with [MIL-PRF-15733](#) and [MIL-STD-202-213](#). The following detail applies:

Test condition A - -0001 thru -0017

Test condition I - -0018 and -0019.

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TABLE I. Electrical characteristics.

Dash no.	Circuit configuration	Maximum rated current (amperes)	Rated DC voltage (volts)	Rated AC voltage (volts) 0-400 Hz	Maximum DC resistance at 25°C (ohms)	Minimum full-load insertion loss (dB) in accordance with MIL-STD-220 at +25°C							
						.03 MHz	.05 MHz	.15 MHz	.3 MHz	.5 MHz	1 MHz	10 MHz	1 GHz
0001	Pi	10.0	300	115	0.003	--	--	14	20	--	30	70	70
0002	Pi	0.1	300	115	10	21	--	60	70	--	70	70	70
0003	Pi	0.25	300	115	4	8	--	50	66	--	70	70	70
0004	Pi	0.5	300	115	1	--	--	40	56	--	70	70	70
0005	Pi	1.0	300	115	0.25	--	--	23	43	--	70	70	70
0006	Pi	2.0	300	115	0.063	--	--	18	33	--	63	70	70
0007	Pi	3.0	300	115	0.027	--	--	14	25	--	54	70	70
0008	Pi	10.0	300	115	0.003	--	--	14	20	--	30	70	70
0009	Pi	0.1	300	115	10	21	--	60	70	--	70	70	70
0010	Pi	0.25	300	115	4	8	--	50	66	--	70	70	70
0011	Pi	0.5	300	115	1	--	--	40	56	--	70	70	70
0012	Pi	1.0	300	115	0.25	--	--	23	43	--	70	70	70
0013	Pi	2.0	300	115	0.063	--	--	18	33	--	63	70	70
0014	Pi	3.0	300	115	0.027	--	--	14	25	--	54	70	70
0015	L ₂	1.0	200	115	0.25	2	5	18	26	--	46	70	70
0016	L ₁	1.75	250	115	0.09	--	--	5	13	--	30	62	70
0017	T	10.0	300	115	0.006	5	--	20	23	27	35	60	60
0018	L ₂	1.0	300	115	0.25	--	--	10	21	--	41	70	70
0019	L ₂	10.0	300	115	0.003	--	--	8	14	--	25	45	70

Vibration, high frequency: In accordance with MIL-PRF-15733 and MIL-STD-202-204. The following details shall apply:

Test condition D (20 G) -0001 thru -0014, -0016, -0017, and -0019.

Test condition B (15 G) -0015 and -0018.

Temperature conditioning (applicable to -0001 thru -0014 and -0016 only): Prior to vibration, filters shall be heated in an oven to +125°C plus one-half the temperature rise. Vibration in each plane shall begin within 5 minutes after removal of filters from the oven.

Moisture resistance: In accordance with MIL-PRF-15733. The following exceptions shall apply:

Polarization voltage: 50 V dc.

Measurements after 24-hour drying period:

Insulation resistance shall be not less than 50 megohms.

Life: In accordance with MIL-PRF-15733 and MIL-STD-202-108. The following details shall apply:

For Qualification inspection: Test condition D (1000 hours) for -0001 thru -0016, -0018, and -0019

Test condition B (250 hours) for -0017.

For Group C inspection: Test condition B (250 hours).

Part or Identifying Number (PIN): M15733/54 - (dash number from table I).

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Referenced documents. In addition to [MIL-PRF-15733](#), this specification sheet references the following:

MIL-STD-202-101
MIL-STD-202-105
MIL-STD-202-108
MIL-STD-202-204
MIL-STD-202-211
MIL-STD-202-213
MIL-STD-220

Amendment notations. The margins of this specification sheet are marked with vertical lines to indicate modifications generated by this amendment. 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.

Custodians:

Army - CR
Navy - EC
Air Force - 85

Preparing activity:
DLA - CC

(Project 5915-2019-006)

Review activities:

Army - AT, AV, MI
Navy - AS, MC, OS
Air Force - 19

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