RFI/EMI/EMC FILTERS

RFI SPECIALTY COMPONENTS PROGRAMS

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EMS | Ultra ELECTRONICS

TUBULAR FILTER OFFERING

The RFI SPECIALTY COMPONENTS program brings together from one source a full range Tubular, or Cylindrical, filters for different applications:

Filters qualified to Mil-PRF-15733 are available from Ultra EMS, which offers the greatest number of qualifications for the most popular filter mil spec. Catalog sheets reference the appropriate qualified mil spec numbers for easy cross-reference. Upon request EMS can also propose a non-QPL option.

For applications requiring Higher Reliability, the RF6900 Series was designed and developed according to Mil-PRF-28861. These filters are available in many circuit configurations and are certified to meet all the applicable requirements.

A third type, the Sprague cylindrical filter, remains a popular option for engineers seeking an excellent military-grade catalog filter. These have been the filter of choice on many defense platforms and continue to be selected by today's design engineers.

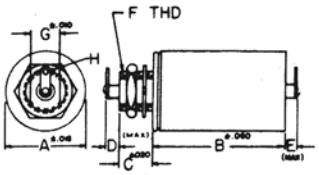
Notes:

1. Tubular filters for EMP and Transient Voltage applications are available
2. The various types of Tubular filters are not interchangeable

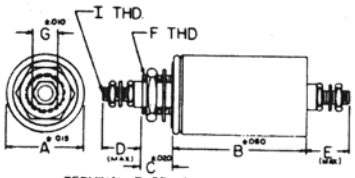
CYLINDRICAL FILTERS PI CIRCUIT TYPES

40 db MINIMUM AT 0.15 MHz AT FULL RATED LOAD

M15733/72, /73, /74



TERMINAL TYPE 1



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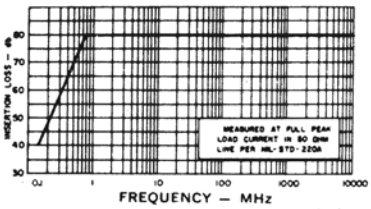
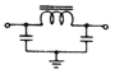




SCHEMATIC DIAGRAM

1. Operating Temperature: –55°C to +125°C.
2. Maximum Voltage Drop: 1% of rated voltage.
3. Conforms to applicable requirements of MIL-F-15733.

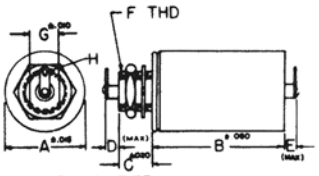
RATING		M15733/	PART NO.	A	B	C	D	E	F	G	H	I	Terminal Type
100 VDC	0.5A.	/72-0033	RF700	.67	1.94	.25	.19	.19	1/4 - 28	.201	1/16		1
	1A.	/72-0036	RF701	.67	1.94	.25	.19	.19	1/4 - 28	.201	1/16		1
	3A.	/72-0039	RF702	.75	2.38	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*
	5A.	/72-0042	RF703	1.13	2.25	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	10A.	/72-0045	RF704	1.25	2.56	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	20A.	/72-0048	RF705	1.25	3.25	.50	.69	.69	5/8 - 24	.530		8-32	2
	30A.	/72-0050	RF706	2.25	4.00	.56	.81	.81	1-1/8 - 18	1.065		10-32	2
	50A.	/72-0052	RF707	2.25	4.00	.56	.88	.88	1-1/8 - 18	1.065		1/4-20	2
115 VAC 0-400 CPS 400 VDC	0.5A.	/73-0033	RF708	.67	2.32	.25	.19	.19	1/4 - 28	.201	1/16		1
	1A.	/73-0036	RF709	.67	2.32	.25	.19	.19	1/4 - 28	.201	1/16		1
	3A.	/73-0039	RF710	1.00	2.56	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	5A.	/73-0042	RF711	1.13	2.88	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	10A.	/73-0045	RF712	1.25	3.25	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	20A.	/73-0048	RF713	1.50	3.63	.50	.69	.69	3/4 - 20	.656		8-32	2
	30A.	/73-0050	RF714	2.25	4.00	.56	.81	.81	1-1/8 - 18	1.065		10-32	2
	50A.	/73-0052	RF715	2.25	4.00	.56	.88	.88	1-1/8 - 18	1.065		1/4-20	2
250 VAC 0-400 CPS 600 VDC	0.5A	/74-0029	RF716	.75	2.38	.28	.32	.32	5/16 - 24	.250	1/16 x 1/8		1*
	1A.	/74-0032	RF717	.75	2.88	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*
	3A.	/74-0035	RF718	1.00	3.19	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	5A.	/74-0038	RF719	1.25	3.63	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	10A.	/74-0041	RF720	1.25	4.25	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	20A.	/74-0044	RF721	1.50	4.50	.50	.69	.69	3/4 - 20	.656		8-32	2
	30A.	/74-0046	RF722	2.25	5.00	.56	.81	.81	1-1/8 - 18	1.065		10-32	2
	50A.	/74-0047	RF723	2.25	5.38	.56	.88	.88	1-1/8 - 18	1.065		1/4-20	2

*45° Lug

CYLINDRICAL FILTERS PI CIRCUIT TYPES

60 db MINIMUM AT 0.15 MHz AT FULL RATED LOAD

M15733/72, /73, /74



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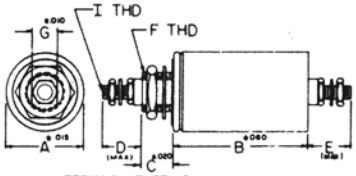

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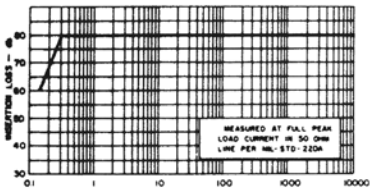
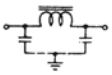


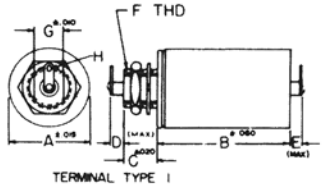


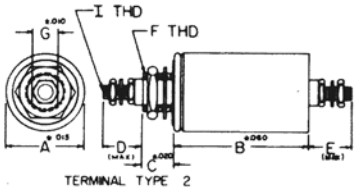
SCHEMATIC DIAGRAM

1. Operating Temperature: –55°C to +125°C.
2. Maximum Voltage Drop: 1% of rated voltage.
3. Conforms to applicable requirements of MIL-F-15733.

RATING		M15733/	PART NO.	A	B	C	D	E	F	G	H	I	Terminal Type
100 VDC	0.5A	/72-0034	RF724	.75	2.13	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*
	1A.	/72-0037	RF725	.75	2.32	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*
	3A.	/72-0040	RF726	1.13	2.38	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	5A.	/72-0043	RF727	1.13	2.63	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	10A.	/72-0046	RF728	1.50	3.50	.50	.69	.69	3/4 - 20	.656		8-32	2
	20A.	/72-0049	RF729	1.50	3.89	.50	.69	.69	3/4 - 20	.656		8-32	2
	30A.	/72-0051	RF730	2.25	4.00	.56	.81	.81	1-1/8 - 18	1.065		10-32	2
	50A.	/72-0053	RF731	2.25	4.50	.56	.88	.88	1-1/8 - 18	1.065		1/4-20	2
115 VAC 0-400 CPS 400 VDC	0.5A.	/73-0034	RF732	.75	2.75	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*
	1A.	/73-0037	RF733	1.00	2.38	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	3A.	/73-0040	RF734	1.13	3.00	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	5A.	/73-0043	RF735	1.25	4.13	.44	.25	.25	7/16 X 20	.370	3/32 X 3/16		1
	10A.	/73-0046	RF736	1.50	4.19	.50	.69	.69	3/4 - 20	.656		8-32	2
	20A.	/73-0049	RF737	1.75	5.00	.50	.69	.69	3/4 - 20	.656		8-32	2
	30A.	/73-0051	RF738	2.25	4.89	.56	.81	.81	1-1/8 - 18	1.065		10-32	2
	50A.	/73-0053	RF739	2.25	5.75	.56	.88	.88	1-1/8 - 18	1.065		1/4-20	2
250 VAC 0-400 CPS 600 VDC	0.5A.	/74-0030	RF740	1.00	2.75	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	1A.	/74-0033	RF741	1.00	3.19	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	3A.	/74-0036	RF742	1.25	3.75	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	5A.	/74-0039	RF743	1.50	4.00	.50	.69	.69	3/4 - 20	.656		8-32	2
	10A.	/74-0042	RF744	1.50	5.13	.50	.69	.69	3/4 - 20	.656		8-32	2
	20A.	/74-0045	RF745	2.25	5.00	.56	.69	.69	1-1/8 - 18	1.065		8-32	2

*45° Lug

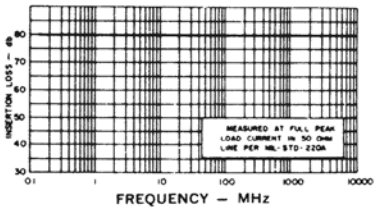


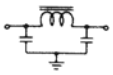


CYLINDRICAL FILTERS PI CIRCUIT TYPES

80 db MINIMUM AT 0.15 MHz AT FULL RATED LOAD

M15733/72, /73, /74

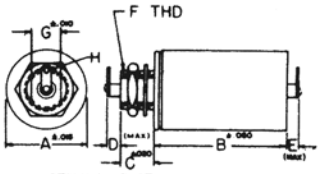


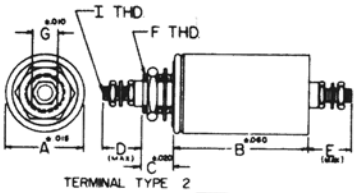


SCHEMATIC DIAGRAM

1. Operating Temperature: –55°C to +125°C.
2. Maximum Voltage Drop: 1% of rated voltage.
3. Conforms to applicable requirements of MIL-F-15733

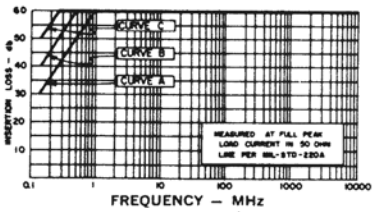
RATING		M15733/	PART NO.	A	B	C	D	E	F	G	H	I	Terminal Type
100 VDC	0.5A.	/72-0035	RF746	1.00	2.25	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	1A.	/72-0038	RF747	1.00	2.50	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	3A.	/72-0041	RF748	1.25	4.19	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	5A.	/72-0044	RF749	1.50	3.88	.50	.69	.69	3/4 - 20	.656		8-32	2
	10A.	/72-0047	RF750	2.25	3.88	.56	.69	.69	1-1/8 - 18	1.065		8-32	2
115 VAC 0-400 CPS 400 VDC	0.5A	/73-0035	RF751	1.00	3.00	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	1A.	/73-0038	RF752	1.13	3.32	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	3A.	/73-0041	RF753	1.50	3.75	.50	.69	.69	3/4 - 20	.656		8-32	2
	5A.	/73-0044	RF754	1.50	4.38	.50	.69	.69	3/4 - 20	.656		8-32	2
	10A.	/73-0047	RF755	2.25	5.25	.56	.69	.69	1-1/8 - 18	1.065		8-32	2
250 VAC 0-400 CPS 600 VDC	0.5A	/74-0031	RF756	1.13	3.56	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	1A.	/74-0034	RF757	1.25	4.25	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1
	3A.	/74-0037	RF758	1.75	4.50	.50	.69	.69	3/4 - 20	.656		8-32	2
	5A.	/74-0040	RF759	1.75	5.75	.50	.69	.69	3/4 - 20	.656		8-32	2
	10A.	/74-0043	RF760	2.25	6.50	.56	.69	.69	1-1/8 - 18	1.065		8-32	2

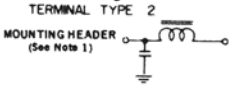




CYLINDRICAL FILTERS L CIRCUIT TYPES

M15733/72, /73, /74





SCHEMATIC DIAGRAM

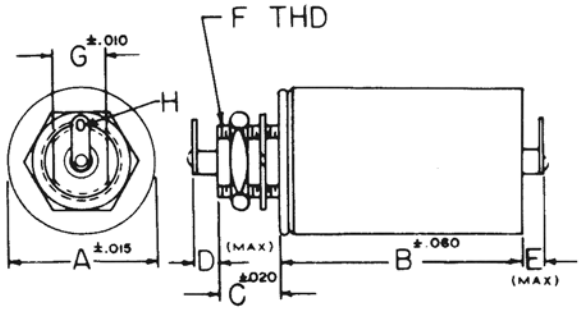
1. For coil input to mounting header, add -R to Part No. (i.e., RF761R).
2. Operating Temperature: –55°C to +125°C.
3. Maximum Voltage Drop: 1% of rated voltage.
4. Conforms to applicable requirements of MIL-F-15733

RATING		Cap input to mtg. M15733/	PART NO.	Coil input to mtg. M15733/	PART NO.	A	B	C	D	E	F	G	H	I	Curve	Terminal Type
100 VDC	0.5A	/72-0001	RF761	/72-0002	RF761R	.67	1.38	.25	.19	.19	1/4 - 28	.201	1/16		A	1
	0.5A	/72-0003	RF762	/72-0004	RF762R	1.00	1.81	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		C	1
	1A.	/72-0005	RF763	/72-0006	RF763R	.67	1.63	.25	.19	.19	1/4 - 28	.201	1/16		A	1
	1A.	/72-0007	RF764	/72-0008	RF764R	1.00	1.69	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		C	1
	3A.	/72-0009	RF765	/72-0010	RF765R	.75	1.94	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		A	1*
	3A.	/72-0011	RF766	/72-0012	RF766R	1.25	2.81	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		B	1
	5A.	/72-0013	RF767	/72-0014	RF767R	1.13	2.06	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		A	1
	5A.	/72-0015	RF768	/72-0016	RF768R	1.50	2.62	.50	.69	.69	3/4 - 20	.656		8-32	B	2
115 VAC 0-400 CPS 400 VDC	0.5A.	/73-0001	RF769	/73-0002	RF769R	.67	1.69	.25	.19	.19	1/4 - 28	.201	1/16		A	1
	0.5A.	/73-0003	RF770	/73-0004	RF770R	1.00	2.00	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		C	1
	1A.	/73-0005	RF771	/73-0006	RF771R	.67	1.94	.25	.19	.19	1/4 - 28	.201	1/16		A	1
	1A.	/73-0007	RF772	/73-0008	RF772R	1.13	2.13	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		C	1
	3A.	/73-0009	RF773	/73-0010	RF773R	1.00	2.19	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		A	1
	3A.	/73-0011	RF774	/73-0012	RF774R	1.50	2.31	.50	.69	.69	3/4 - 20	.656		8-32	B	2
	5A.	/73-0013	RF775	/73-0014	RF775R	1.13	2.69	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		A	1
	5A.	/73-0015	RF776	/73-0016	RF776R	1.50	3.13	.50	.69	.69	3/4 - 20	.656		8-32	B	2
250 VAC 0-400 CPS 600 VDC	0.5A.	/74-0001	RF777	/74-0002	RF777R	.75	1.63	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		A	1*
	0.5A.	/74-0003	RF778	/74-0004	RF778R	1.13	2.25	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		C	1
	1A.	/74-0005	RF779	/74-0006	RF779R	.75	2.50	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		A	1*
	1A.	/74-0007	RF780	/74-0008	RF780R	1.25	2.56	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		C	1
	3A.	/74-0009	RF781	/74-0010	RF781R	1.00	2.81	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		A	1
	3A.	/74-0011	RF782	/74-0012	RF782R	1.75	2.62	.50	.69	.69	3/4 - 20	.656		8-32	B	2
	5A.	/74-0013	RF783	/74-0014	RF783R	1.25	3.44	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		A	1
	5A.	/74-0015	RF784	/74-0016	RF784R	1.75	4.06	.50	.69	.69	3/4 X 20	.656		8-32	B	2

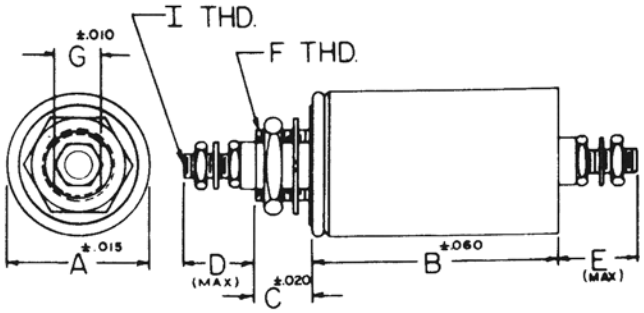
*45° Lug

CYLINDRICAL FILTERS

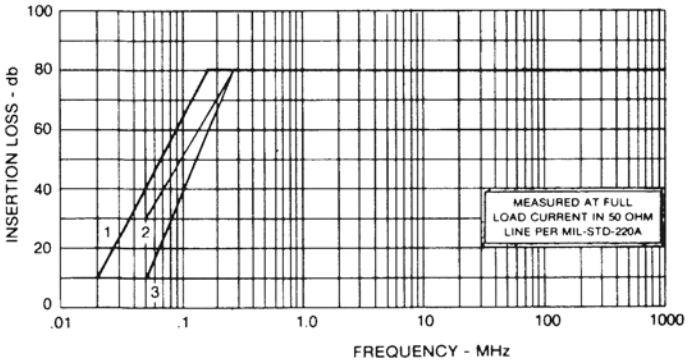
DOUBLE "L" CIRCUIT TYPES
M15733/72, /73, /74

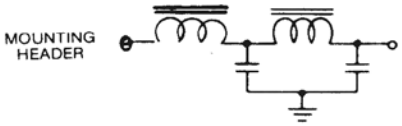


TERMINAL TYPE 1



TERMINAL TYPE 2





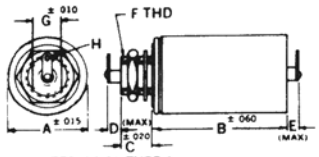
SCHEMATIC DIAGRAM

NOTE: For capacitor at opposite end - add suffix "L" to part no., i.e., RF9710-7L.

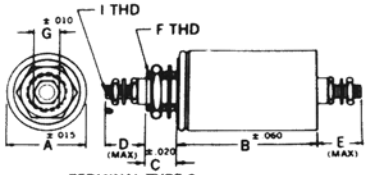
1. Operating Temperature: –55°C to +125°C.
2. Maximum Voltage Drop: 1% of rated voltage.
3. Conforms to applicable requirements of MIL-F-15733.

RATING		CAP INPUT TO MTG. M15733/	PART NO.	COIL INPUT TO MTG. M15733/	PART NO.	A	B	C	D	E	F	G	H	I	TERMINAL TYPE	INSERTION LOSS GRAPH
100 VDC	0.5A	/72-0017	RF9710-1L	/72-0018	RF9710-1	.75	2.50	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*	1
	1A.	/72-0019	RF9710-2L	/72-0020	RF9710-2	.75	2.62	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*	1
	3A.	/72-0021	RF9710-3L	/72-0022	RF9710-3	1.13	2.87	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1	2
	5A.	/72-0023	RF9710-4L	/72-0024	RF9710-4	1.13	3.12	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1	2
	10A	/72-0025	RF9710-5L	/72-0026	RF9710-5	1.50	4.25	.50	.69	.69	3/4 - 20	.656		8-32	2	2
	20A.	/72-0027	RF9710-6L	/72-0028	RF9710-6	1.50	4.87	.50	.69	.69	3/4 - 20	.656		8-32	2	3
	30A.	/72-0029	RF9710-7L	/72-0030	RF9710-7	2.25	5.00	.56	.81	.81	1-1/8 - 18	1.065		10-32	2	3
	50A.	/72-0031	RF9710-8L	/72-0032	RF9710-8	2.25	6.00	.56	.88	.88	1-1/8 - 18	1.065		1/4-20	2	3
115 VAC 0-400 CPS 400 VDC	0.5A.	/73-0017	RF9710-9 L	/73-0018	RF9710-9	.75	3.12	.28	.32	.32	5/16 - 24	.250	1/16 X 1/8		1*	1
	1A.	/73-0019	RF9710-10L	/73-0020	RF9710-10	1.00	3.25	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1	1
	3A.	/73-0021	RF9710-11L	/73-0022	RF9710-11	1.13	3.50	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1	2
	5A.	/73-0023	RF9710-12L	/73-0024	RF9710-12	1.25	4.50	.44	.25	.25	7/16 X 20	.370	3/32 X 3/16		1	2
	10A.	/73-0025	RF9710-13L	/73-0026	RF9710-13	1.50	4.50	.50	.69	.69	3/4 - 20	.656		8-32	2	3
	20A.	/73-0027	RF9710-14L	/73-0028	RF9710-14	1.75	5.50	.50	.69	.69	3/4 - 20	.656		8-32	2	3
	30A.	/73-0029	RF9710-15L	/73-0030	RF9710-15	2.25	5.62	.56	.81	.81	1-1/8 - 18	1.065		10-32	2	3
	50A.	/73-0031	RF9710-16L	/73-0032	RF9710-16	2.25	6.50	.56	.88	.88	1-1/8 - 18	1.065		1/4-20	2	3
250 VAC 0-400 CPS 600 VDC	0.5A.	/74-0017	RF9710-17L	/74-0018	RF9710-17	1.00	3.12	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1	1
	1A.	/74-0019	RF9710-18L	/74-0020	RF9710-18	1.00	3.62	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1	1
	3A.	/74-0021	RF9710-19L	/74-0022	RF9710-19	1.25	4.37	.44	.25	.25	7/16 - 20	.370	3/32 X 3/16		1	2
	5A.	/74-0023	RF9710-20L	/74-0024	RF9710-20	1.50	4.37	.50	.69	.69	3/4 - 20	.656		8-32	2	2
	10A.	/74-0025	RF9710-21L	/74-0026	RF9710-21	1.50	5.75	.50	.69	.69	3/4 - 20	.656		8-32	2	2
	20A.	/74-0027	RF9710-22L	/74-0028	RF9710-22	2.25	6.50	.56	.69	.69	1-1/8 - 18	1.065		8-32	2	3

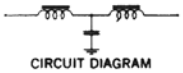
*45° Lug



TERMINAL TYPE 1



TERMINAL TYPE 2



CIRCUIT DIAGRAM

SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125C.

MAXIMUM VOLTAGE DROP: 1% OF RATED VOLTAGE.

CONFORMS TO APPLICABLE REQUIREMENTS OF MIL-F-15733

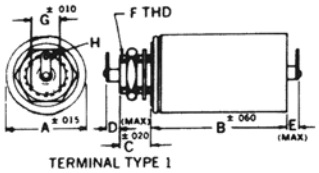
CYLINDRICAL FILTERS T CIRCUIT TYPES

25 db MINIMUM AT 0.15 MHz AT FULL RATED LOAD

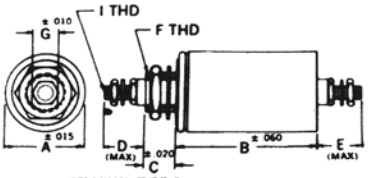
M15733/72, /73, /74

RATING		M15733/	PART NO.	A	B	C	D	E	F	G	H	I	TERMINAL TYPE	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) .15 MHz	.30 MHz	.6 MHz	1.0 MHz	10 MHz	1 GHz
100VDC	0.5A	/72-0054	RF6100	.67	1.94	.25	.19	.19	¼-28	.201	1/16		1	45	60	70	70	70	70
	1A	/72-0056	RF6101	.67	1.94	.25	.19	.19	¼-28	.201	1/16		1	35	50	60	70	70	70
	3A	/72-0058	RF6102	.75	2.38	.28	.32	.32	5/16-24	.250	1/16 x 1/8		1*	25	35	45	60	70	70
	5A	/72-0060	RF6103	1.13	2.25	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	35	45	60	70	70
	10A	/72-0062	RF6104	1.25	2.75	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	35	45	50	70	70
	20A	/72-0064	RF6105	1.25	3.25	.50	.69	.69	⅝-24	.530		8-32	2	25	35	45	50	70	70
	30A	/72-0066	RF6106	2.25	4.50	.56	.81	.81	1⅛-18	1.065		10-32	2	25	35	45	50	70	70
	50A	/72-0068	RF6107	2.25	4.50	.56	.88	.88	1⅛-18	1.065		¼-20	2	25	35	45	50	70	70
115VAC 0-400 Hz 400VDC	0.5A	/73-0054	RF6108	.67	2.32	.25	.19	.19	¼-28	.201	1/16		1	60	70	70	70	70	70
	1A	/73-0056	RF6109	.67	2.32	.25	.19	.19	¼-28	.201	1/16		1	35	50	60	70	70	70
	3A	/73-0058	RF6110	1.00	2.56	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	40	50	60	70	70
	5A	/73-0060	RF6111	1.13	2.88	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	35	45	60	70	70
	10A	/73-0062	RF6112	1.25	3.25	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	35	45	50	70	70
	20A	/73-0064	RF6113	1.50	3.63	.50	.69	.69	¾-20	.656		8-32	2	25	35	45	50	70	70
	30A	/73-0066	RF6114	2.25	4.50	.56	.81	.81	1⅛-18	1.065		10-32	2	25	35	45	50	70	70
	50A	/73-0068	RF6115	2.25	4.75	.56	.88	.88	1⅛-18	1.065		¼-20	2	25	35	45	50	70	70
250VAC 0-400 Hz 600VDC	0.5A	/74-0048	RF6116	.75	2.38	.28	.32	.32	5/16-24	.250	1/16 x 1/8		1*	50	65	70	70	70	70
	1A	/74-0050	RF6117	.75	2.88	.28	.32	.32	5/16-24	.250	1/16 x 1/8		1*	30	50	60	70	70	70
	3A	/74-0052	RF6118	1.00	3.19	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	40	60	70	70	70
	5A	/74-0054	RF6119	1.25	3.63	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	35	50	60	70	70
	10A	/74-0056	RF6120	1.25	4.25	.44	.25	.25	7/16-20	.370	3/32 x 3/16		1	25	35	45	50	70	70
	20A	/74-0058	RF6121	1.50	4.50	.50	.69	.69	¾-20	.656		8-32	2	25	35	45	50	70	70
	30A	/74-0060	RF6122	2.25	5.50	.56	.81	.81	1⅛-18	1.065		10-32	2	25	35	45	50	70	70
	50A	/74-0061	RF6123	2.25	5.75	.56	.88	.88	1⅛-18	1.065		¼-20	2	25	35	45	50	70	70

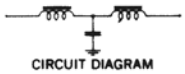
*45°LUG



TERMINAL TYPE 1



TERMINAL TYPE 2



CIRCUIT DIAGRAM

SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125°C.

MAXIMUM VOLTAGE DROP: 1% OF RATED VOLTAGE.

CONFORMS TO APPLICABLE REQUIREMENTS OF MIL-F-15733

CYLINDRICAL FILTERS T CIRCUIT TYPES

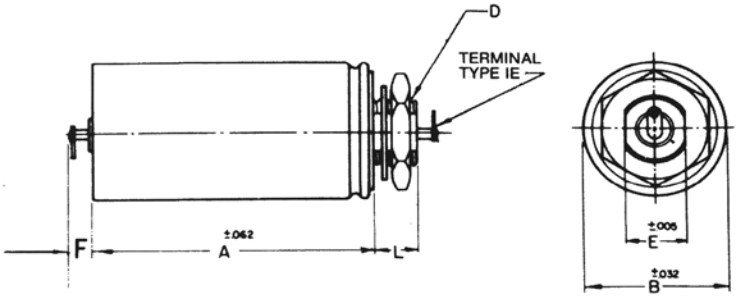
15 db MINIMUM AT 14 KHz AT FULL RATED LOAD

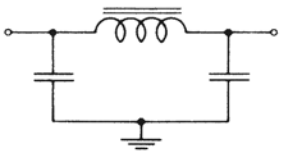
M15733/72, /73, /74

RATING		M15733/	PART NO.	A	B	C	D	E	F	G	H	I	TERMINAL TYPE	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 14 KHz	50 KHz	.15 MHz	0.6 MHz	1.0 MHz	10 MHz	1 GHz
100VDC	0.5A	/72-0055	RF6124	1.00	2.25	.44	.25	.25	7/16-20	.370	3/32x3/16		1	20	50	60	60	60	70	70
	1A	/72-0057	RF6125	1.00	2.87	.44	.25	.25	7/16-20	.370	3/32x3/16		1	20	50	60	60	60	70	70
	3A	/72-0059	RF6126	1.25	4.19	.44	.25	.25	7/16-20	.370	3/32x3/16		1	20	45	60	60	60	70	70
	5A	/72-0061	RF6127	1.50	3.88	.50	.69	.69	¾-20	.656		8-32	2	20	45	60	60	60	70	70
	10A	/72-0063	RF6128A	1.75	3.88	.50	.69	.69	¾-20	.656		8-32	2	15	28	37	53	58	70	70
	20A	/72-0065	RF6129	1.50	4.00	.50	.69	.69	¾-20	.656		8-32	2	15	28	37	53	58	70	70
	30A	/72-0067	RF6130	2.25	4.75	.56	.81	.81	1⅛-18	1.065		10-32	2	15	28	37	53	58	70	70
	50A	/72-0069	RF6131	2.25	5.50	.56	.88	.88	1⅛-18	1.065		¼-20	2	15	28	37	50	58	70	70
115VAC 0-400 Hz 400VDC	0.5A	/73-0055	RF6132	1.00	3.00	.44	.25	.25	7/16-20	.370	3/32x3/16		1	20	50	60	60	60	70	70
	1A	/73-0057	RF6133	1.13	3.87	.44	.25	.25	7/16-20	.370	3/32x3/16		1	20	50	60	60	60	70	70
	3A	/73-0059	RF6134	1.50	3.75	.50	.69	.69	¾-20	.656		8-32	2	20	45	60	60	60	70	70
	5A	/73-0061	RF6135	1.50	4.38	.50	.69	.69	¾-20	.656		8-32	2	15	40	50	60	60	70	70
	10A	/73-0063	RF6136A	1.75	5.00	.50	.69	.69	¾-20	.656		8-32	2	15	28	37	53	58	70	70
	20A	/73-0065	RF6137	1.75	5.00	.50	.69	.69	¾-20	.656		8-32	2	15	28	37	53	58	70	70
	30A	/73-0067	RF6138	2.25	5.50	.56	.81	.81	1⅛-18	1.065		10-32	2	15	28	37	53	58	70	70
	50A	/73-0069	RF6139	2.25	6.50	.56	.88	.88	1⅛-18	1.065		¼-20	2	15	28	37	50	58	70	70
250VAC 0-400 Hz 600VDC	0.5A	/74-0049	RF6140	1.13	3.56	.44	.25	.25	7/16-20	.370	3/32x3/16		1	20	50	60	60	60	70	70
	1A	/74-0051	RF6141	1.25	4.25	.44	.25	.25	7/16-20	.370	3/32x3/16		1	20	50	60	60	60	70	70
	3A	/74-0053	RF6142	1.75	4.50	.50	.69	.69	¾-20	.656		8-32	2	20	40	60	68	68	70	70
	5A	/74-0055	RF6143	1.75	5.75	.50	.69	.69	¾-20	.656		8-32	2	15	28	37	53	58	70	70
	10A	/74-0057	RF6144	2.25	5.50	.56	.69	.69	1⅛-18	1.065		8-32	2	15	28	37	53	58	70	70
	20A	/74-0059	RF6145	2.25	5.50	.56	.69	.69	1⅛-18	1.065		8-32	2	15	28	37	50	58	70	70

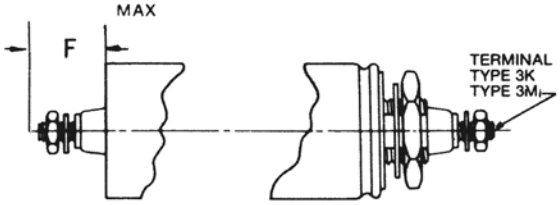
CYLINDRICAL FILTERS

STYLES FL22 AND FL24
M15733/1 AND M15733/2

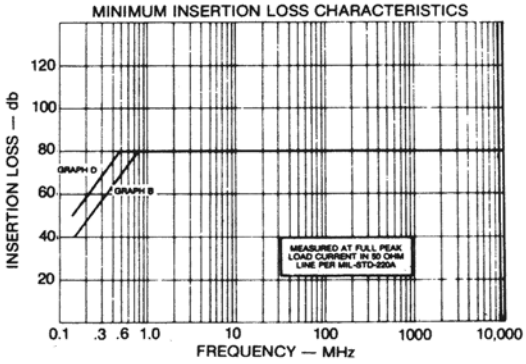




CIRCUIT DIAGRAM



TERMINAL TYPE	THREAD SIZE	THREAD LENGTH
3K	10-32-UNF-2A	.312
3M	¼-28-UNF-2A	.438



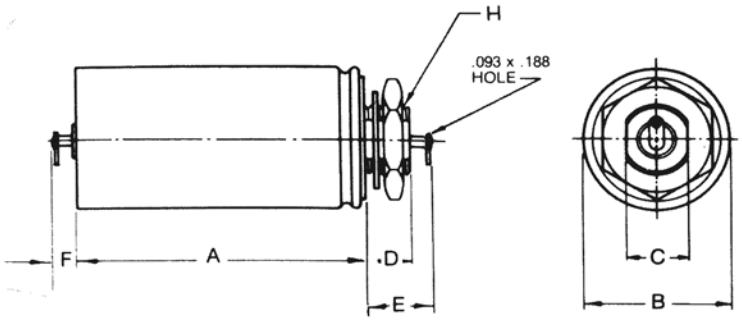
FL22

M15733/1 DASH NO.	RFI PART NO.	RATING	DIMENSIONS A	B	D	E	F	L	INSERTION LOSS GRAPH	TERMINAL TYPE	APPROX. WEIGHT
0001	RF1700E	1A 100VDC	2.094	.750	5/16-24 UNEF-2A	.250	.25	.265–.286	D	1E	1.4 ozs.
0002	RF1701E	5A 100VDC	2.375	1.000	½-28 UNEF-2A	.440	.25	.359–.380	B	1E	3.2 ozs.
0003	RF1702E	5A 100VDC	2.750	1.000	½-28 UNEF-2A	.440	.25	.359–.380	D	1E	3.7 ozs.
0004	RF1703E	10A 100VDC	2.750	1.125	7/16-20 UNEF-2A	.370	.25	.370–.380	B	1E	4.2 ozs.
0005	RF1704E	10A 100VDC	2.500	1.250	⅝-24 NEF-2A	.530	.25	.370–.380	D	1E	5 ozs.
0006	RF1705K	20A 100VDC	3.000	1.375	⅝-24 NEF-2A	.530	.62	.370–.380	D	3K	7.5 ozs.
0007	RF1706K	30A 100VDC	3.250	1.500	¾-20 UNEF-2A	.655	.62	.370–.380	D	3K	10 ozs.

FL24

M15733/2 DASH NO.	RFI PART NO.	RATING	DIMENSIONS A	B	D	E	F	L	INSERTION LOSS GRAPH	TERMINAL TYPE	APPROX. WEIGHT
0001	RF1707E	1A 125VAC 0-400 Hz, 400VDC	2.562	.875	½-28 UNEF-2A	.440	.25	.360–.390	D	1E	2.5 ozs.
0002	RF1708E	5A 125VAC 0-400 Hz, 400VDC	3.875	1.125	⅝-24 UNEF-2A	.530	.25	.360–.390	D	1E	6 ozs.
0003	RF1709E	10A 125VAC 0-400 Hz, 400VDC	3.875	1.250	¾-20 UNEF-2A	.655	.25	.360–.390	D	1E	7.8 ozs.
0004	RF1710K	15A 125VAC 0-400 Hz, 400VDC	4.125	1.375	¾-20 UNEF-2A	.655	.62	.360–.390	D	3K	9.5 ozs.
0005	RF1711K	20A 125VAC 0-400 Hz, 400VDC	4.156	1.500	¾-20 UNEF-2A	.655	.62	.360–.390	D	3K	12 ozs.
0006	RF1712M	55A 125VAC 0-400 Hz, 400VDC	4.125	2.25	1⅛-18 NEF-2A	1.055	.81	.495–.505	D	3M	29 ozs.

This series of RFI filters conforms fully with all of the requirements of Style FL22 and Style FL24 as specified in MIL-F-15733.
Operating temperature range: -55°C to +85°C.

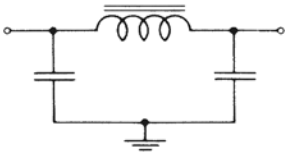


DASH NO. 0001 AND 0004 THRU 0006

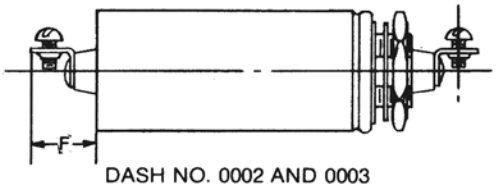
CYLINDRICAL FILTERS

STYLE FL84

M15733/41



CIRCUIT DIAGRAM



DASH NO. 0002 AND 0003

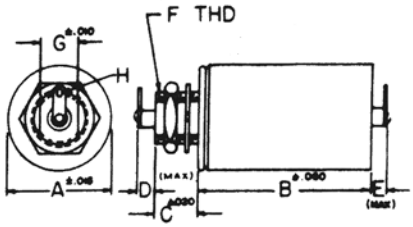
SPECIFICATIONS

OPERATING TEMPERATURE: –55°C TO +125°C
DIELECTRIC TEST: 2.0 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 550 MEGOHMS MIN. FOR DASH NUMBERS 0001, 0002, 0003, 0005, 500 MEGOHMS FOR DASH NUMBER 0006; 300 MEGOHMS FOR DASH NUMBER 0004 @ 25°C @ RATED VOLTAGE. CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

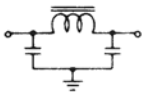
DIMENSIONS

M15733/41 DASH NO.	RFI PART NO.	A MAX	B MAX	C MAX	D MAX	E MAX	F MAX	H
0001	RF7553-1	2.655	1.187	.380	.454	.781	.250	7/16-20
0002	RF7553-2	4.562	1.395	.661	.390	1.046	.781	3/4-20
0003	RF7553-3	3.937	1.270	.661	.390	1.046	.781	3/4-20
0004	RF7553-4	3.031	1.312	.536	.391	.843	.406	5/8-24
0005	RF7553-5	3.120	1.032	.385	.457	.737	.218	7/16-20
0006	RF7553-6	3.499	1.312	.531	.391	.781	.406	5/8-24

M15733/41 DASH NO.	RFI PART NO.	AMP	DC VOLTS	AC VOLTS	MAX VOLT DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220 A (FULL LOAD) 150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF7553-1	10	400	125	.5	24	46	79	88	70
0002	RF7553-2	20	400	125	.16	55	75	90	90	90
0003	RF7553-3	15	400	125	.5	38	58	80	80	80
0004	RF7553-4	20	125	—	1.25	58	—	90	90	—
0005	RF7553-5	1	400	125	1.25	60	75	80	80	80
0006	RF7553-6	10	400	125	.22	60	—	100	85	—



TERMINAL TYPE I



CIRCUIT DIAGRAM

SERIES 9707 CYLINDRICAL FILTERS PI CIRCUIT TYPES

HIGH INSERTION LOSS

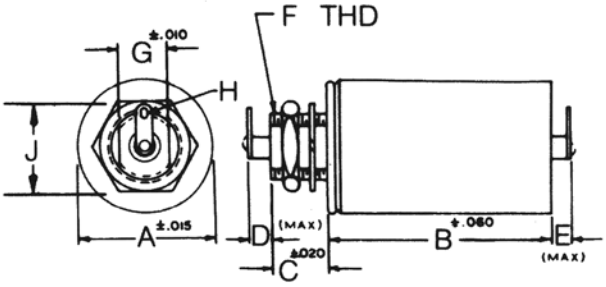
SPECIFICATIONS

1. Operating Temperature: –55°C to +125°C.
2. Maximum Voltage Drop: 1% of rated voltage.
3. Dielectric Test: 2X rated voltage.
4. Conforms to applicable requirements of MIL-F-15733.

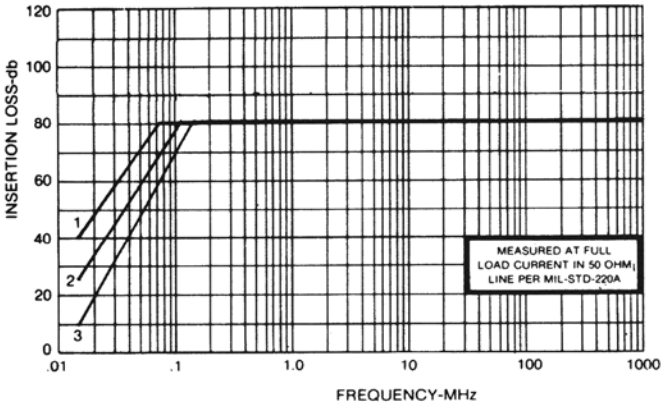
RATING		RFI PART NO.	A	B	C	D	E	F	G	H	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 14 KHz	20 KHz	50 KHz	100 KHz	200 KHz-1 GHz
100 VDC	1A	RF9707-1	1.50	5.50	.50	.25	.25	3/4-20	.656	.093	65	80	100	100	100
	3A	RF9707-2	1.75	5.50	.50	.25	.25	3/4-20	.656	.093	65	80	100	100	100
	6A	RF9707-3	2.25	4.75	.56	.25	.25	1 1/8-18	1.065	.093	40	50	75	85	100
	10A	RF9707-4	2.25	5.25	.56	.25	.25	1 1/8-18	1.065	.093	40	50	75	85	100
125 VAC 0-400 Hz	1A	RF9707-5	1.50	5.75	.50	.25	.25	3/4-20	.656	.093	65	80	100	100	100
	3A	RF9707-6	2.25	5.75	.56	.25	.25	1 1/8-18	1.065	.093	65	80	100	100	100
	6A	RF9707-7	2.25	5.25	.56	.25	.25	1 1/8-18	1.065	.093	40	50	75	85	100
	10A	RF9707-8	2.25	6.50	.56	.25	.25	1 1/8-18	1.065	.093	40	50	75	85	100

SERIES 1100 MINIATURE FILTERS

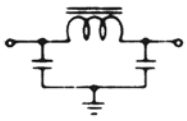
14 KHz to 1000 MHz
50 VDC



TERMINAL TYPE I



TYPE	CURVE
-1A	1
-2A	2
-3A	2
-4A	3
-5A	3



CIRCUIT DIAGRAM

TYPE	RATING	A	B	C	D	E	F	G	J	H
RF1100-1A	0.5A 50 VDC	.48	2.50	.25	.19	.19	1/4 - 28	.201	7/16	1/16
RF1100-2A	1A 50 VDC	.48	2.50	.25	.19	.19	1/4 - 28	.201	7/16	1/16
RF1100-3A	2A 50 VDC	.67	2.62	.25	.19	.19	1/4 - 28	.201	7/16	1/16
RF1100-4A	3A 50 VDC	.75	2.62	.28	*.32	*.32	5/16 - 24	.252	7/16	1/16 x 1/8
RF1100-5A	5A 50 VDC	1.00	2.62	.28	*.32	*.32	5/16 - 24	.252	7/16	1/16 x 1/8

*45 Lug

ELECTRICAL AND ENVIRONMENTAL CHARACTERISTICS:

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

Dielectric Test: 2 times rated voltage.

Life-Filters are capable of withstanding a 1000 hour life test at 85° C at maximum rated voltage.

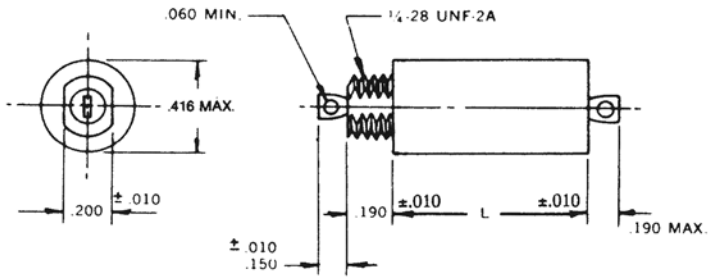
Low Frequency Vibration — per MIL-F-15733.

High Frequency Vibration — 10 to 2000 cps at 15 g.

Moisture Resistance — per MIL-F-15733 except polarizing voltage not applicable. After completion of test, filters shall meet insertion loss "check" test and surge voltage test.

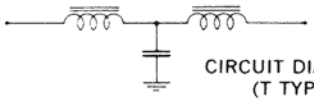
Temperature and Immersion Cycling — per MIL-F-15733. After completion of test parts shall meet insertion loss "check" test and surge voltage test.

Seal Test — per MIL-F-15733.

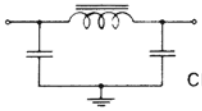


SUBMINIATURE FILTERS

"PI" and "T" TYPE 50 VDC



CIRCUIT DIAGRAM
(T TYPE)



CIRCUIT DIAGRAM
(PI TYPE)

TYPE	CURRENT RATING	MAXIMUM RESISTANCE	CIRCUIT	INSERTION LOSS CHARACTERISTIC	LENGTH L
RF2500-1	0.25A	1.2 Ohms	PI	G	.550
RF2500-2	1.0A	0.32 Ohms	PI	H	.550
RF2500-33	3.0A	0.06 Ohms	PI	J	.550
RF2500-36	5.0A	0.04 Ohms	PI	K	.550
RF2500-3	2.0A	0.18 Ohms	T	L	.975
RF2500-4	5.0A	0.04 Ohms	T	M	1.140

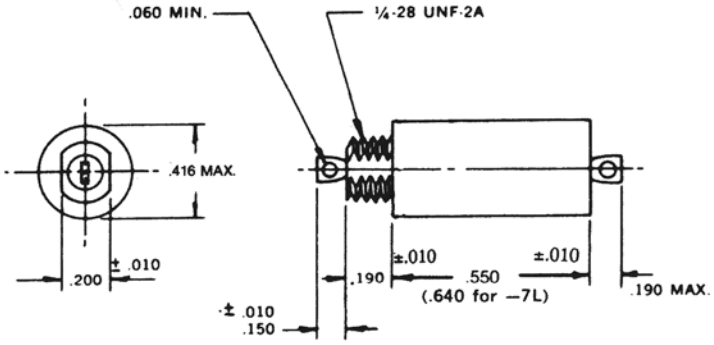
MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD)

CHARACTERISTIC	30 KHz	50 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1000 MHz
G	15	30	55	75	80	80	80
H	5	15	40	60	80	80	80
J	—	—	15	40	75	80	80
K	—	—	2	25	65	80	80
L	9	12	20	30	42	80	80
M	9	12	20	30	42	80	80

SPECIFICATIONS for "PI", "T" and "L" TYPES

VOLTAGE RATING: 50VDC
OPERATING TEMPERATURE: -55°C TO 125°C
DIELECTRIC TEST: 125 VDC @ 25°C (50 Ma MAX. CHARGE CURRENT)

INSULATION RESISTANCE: 100 MEGOHMS MIN. @ 25°C @ 50 VDC
(50 MEGOHMS MIN. AFTER LIFE TEST)
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP



SUBMINIATURE FILTERS

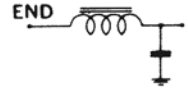
"L" TYPE 50 VDC

TYPE	CURRENT RATING	MAXIMUM RESISTANCE	INSERTION LOSS CHARACTERISTIC
RF2500-7	60 MA	70 Ohms	A
RF2500-13	150 MA	12 Ohms	B
RF2500-5	250 MA	4 Ohms	C
RF2500-12	300 MA	2.3 Ohms	D
RF2500-6	450 MA	1.2 Ohms	E
RF2500-9	10 A	.01 Ohms	F

MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220 (NO LOAD)

CHARACTERISTIC	30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1000 MHz
A	44	70	70	70	70	70
B	24	52	64	70	70	70
C	18	42	56	70	70	70
D	16	35	44	62	70	70
E	15	31	37	55	70	70
F	15	28	33	44	56	70

MOUNTING HEADER END

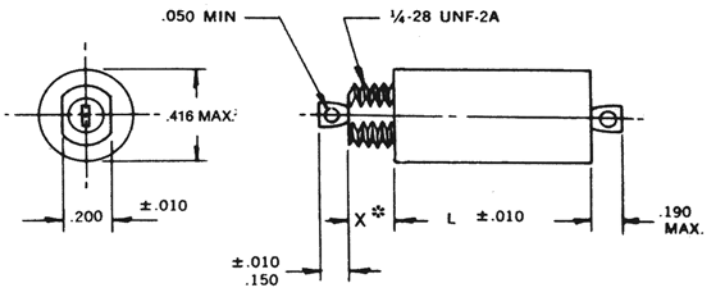


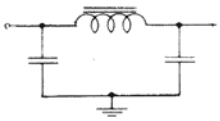
CIRCUIT DIAGRAM

NOTE—FOR CAPACITOR AT OPPOSITE END—ADD SUFFIX "L" TO PART NO., i.e. RF2500-7L

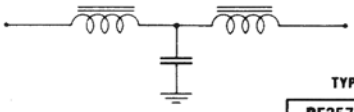
SUBMINIATURE FILTERS

"PI" and "T" TYPE
100 VDC





CIRCUIT DIAGRAM (PI TYPE)



CIRCUIT DIAGRAM (T TYPE)

*THREAD LENGTH X
STANDARD PART THREAD LENGTH .190
DESIGNATE .312 THREAD
LENGTH BY ADDING SUFFIX A TO
PART NO i.e. RF2575-10A

TYPE	CURRENT RATING	MAXIMUM RESISTANCE	CIRCUIT	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 30 KHz	50 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1000 MHz	LENGTH L
RF2575-10	0.5A	.5 ohms	PI	13	33	65	80	80	80	80	.59
RF2575-11	1.0A	.25 ohms	PI	5	26	56	73	80	80	80	.59
RF2575-12	2.0A	.07 ohms	PI	—	—	45	64	80	80	80	.59
RF2575-13	3.0A	.07 ohms	PI	—	—	35	57	80	80	80	.59
RF2575-14	5.0A	.015 ohms	PI	—	—	—	44	79	80	80	.59
RF2575-15	10.0A	.01 ohms	PI	—	—	—	27	67	80	80	.975
RF2575-16	0.5A	1.0 ohms	T	10	19	42	60	80	80	80	.975
RF2575-17	1.0A	.3 ohms	T	10	15	32	43	71	80	80	.975
RF2575-18	2.0A	.15 ohms	T	5	10	25	34	60	80	80	.975
RF2575-19	3.0A	.15 ohms	T	5	10	24	33	52	80	80	.975
RF2575-20	5.0A	.02 ohms	T	8	12	22	28	42	80	80	.975
RF2575-21	10.0A	.01 ohms	T	—	12	24	30	39	63	80	.975

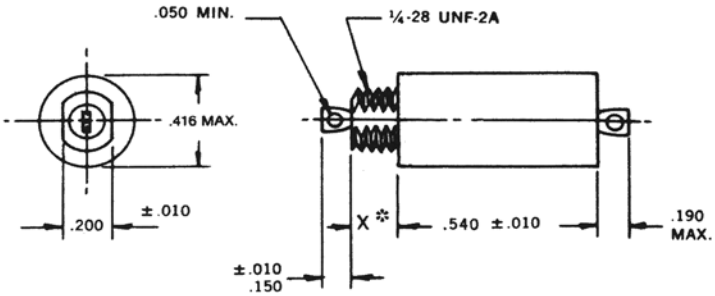
SPECIFICATIONS for "PI", "T" and "L" TYPES

VOLTAGE RATING: 100 VDC
OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 200VDC @ 25°C (50 Ma MAX. CHARGE CURRENT)
INSULATION RESISTANCE: 100 MEGOHMS MIN. @ 25°C @ 50 VDC

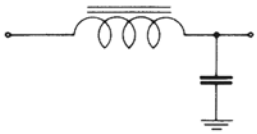
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT-SOLDER DIP

SUBMINIATURE FILTERS

"L" TYPE
100 VDC



MOUNTING HEADER END

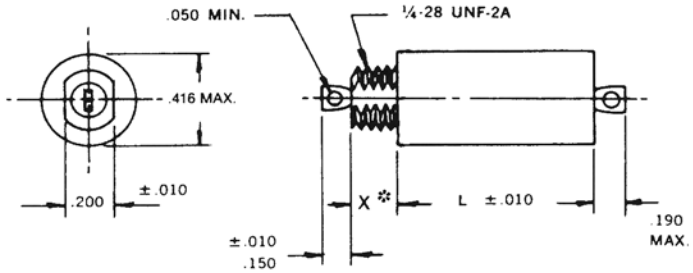


CIRCUIT DIAGRAM (L TYPE)

NOTE—FOR CAPACITOR
AT OPPOSITE END—
ADD SUFFIX L
TO PART NO., i.e.
RF2575-22L

*THREAD LENGTH X
STANDARD PART THREAD LENGTH .190
DESIGNATE .312 THREAD LENGTH BY
ADDING SUFFIX A TO PART NO. i.e. RF2575-22A

TYPE	CURRENT RATING	MAXIMUM RESISTANCE	CIRCUIT	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 30 KHz	50 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1000 MHz
RF2575-22	0.5A	.55 ohms	L	13	18	33	44	64	70	70
RF2575-23	1.0A	.25 ohms	L	10	15	27	36	57	70	70
RF2575-24	2.0A	.07 ohms	L	10	14	24	31	48	70	70
RF2575-25	3.0A	.07 ohms	L	10	14	24	31	44	70	70
RF2575-26	5.0A	.015 ohms	L	6	11.	20	27	38	68	70
RF2575-27	10.0A	.01 ohms	L	10	15	26	29	38	56	70

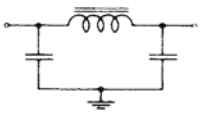


SUBMINIATURE FILTERS

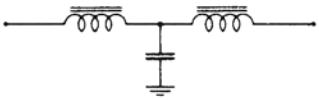
"PI" and "T" TYPE

115 VAC, 0-400 Hz, 200 VDC

TYPE	CURRENT RATING	MAXIMUM RESISTANCE	CIRCUIT	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 50 KHz	150 KHz	300 KHz	500 KHz	1 MHz	10 MHz	1000 MHz	LENGTH L
RF2550-20	0.5A	.5 ohms	PI	13	46	62	76	80	80	80	.870
RF2550-21	1.0A	.25 ohms	PI	3	35	53	66	80	80	80	.870
RF2550-22	2.0A	.07 ohms	PI	—	16	42	56	76	80	80	.870
RF2550-23	3.0A	.07 ohms	PI	—	—	28	47	64	80	80	.870
RF2550-24	5.0A	.015 ohms	PI	—	—	12	40	58	80	80	.870
RF2550-25	10.0A	.01 ohms	PI	—	—	—	19	48	80	80	.975
RF2550-26	0.5A	1.0 ohms	T	20	32	48	60	78	70	70	.975
RF2550-27	1.0A	.3 ohms	T	5	22	34	43	60	70	70	.975
RF2550-28	2.0A	.15 ohms	T	5	13	22	31	42	70	70	.975
RF2550-29	3.0A	.15 ohms	T	5	11	18	25	34	70	70	.975
RF2550-30	5.0A	.02 ohms	T	—	13	19	23	31	70	70	.975
RF2550-31	10.0A	.01 ohms	T	—	15	20	21	30	56	70	.975



CIRCUIT DIAGRAM
(PI TYPE)



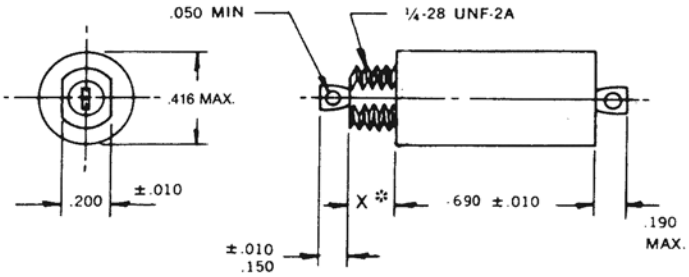
CIRCUIT DIAGRAM
(T TYPE)

*THREAD LENGTH X
STANDARD PART THREAD
LENGTH .190
DESIGNATE .312 THREAD
LENGTH BY ADDING SUFFIX A TO
PART NO. i.e. RF2550-20A

SPECIFICATIONS for "PI", "T" and "L" TYPES

VOLTAGE RATING: 115 VAC, 0-400 Hz, 200 VDC
OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 400 VDC @ 25°C (50 Ma MAX. CHARGE CURRENT)
INSULATION RESISTANCE: 100 MEGOHMS MIN. @ 25°C @ 100 VDC

CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

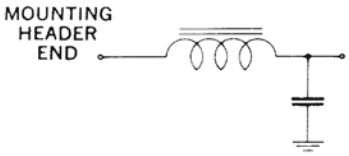


SUBMINIATURE FILTERS

"L" TYPE

115 VAC, 0-400 Hz, 200 VDC

TYPE	CURRENT RATING	MAXIMUM RESISTANCE	CIRCUIT	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 30 KHz	50 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1000 MHz
RF2550-32	0.5A	.55 ohms	L	2	10	23	35	54	70	70
RF2550-33	1.0A	.25 ohms	L	2	5	18	26	46	70	70
RF2550-34	2.0A	.07 ohms	L	2	6	15	22	36	70	70
RF2550-35	3.0A	.07 ohms	L	2	6	15	20	34	67	70
RF2550-36	5.0A	.015 ohms	L	2	5	15	21	32	60	70
RF2550-37	10.0A	.01 ohms	L	2	7	17	21	33	56	70



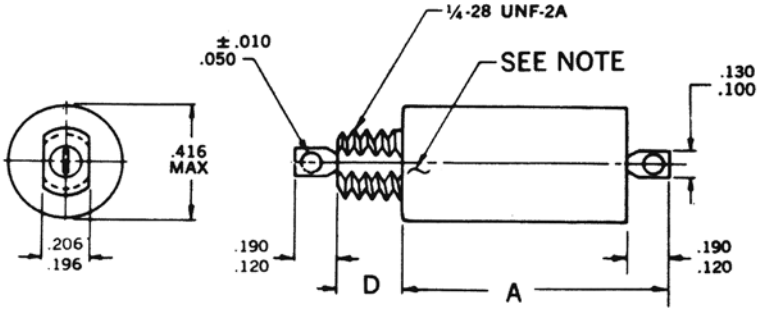
CIRCUIT DIAGRAM

NOTE—FOR CAPACITOR
AT OPPOSITE END—
ADD SUFFIX L
TO PART NO., i.e.
RF2550-32L

*THREAD LENGTH X
STANDARD PART THREAD LENGTH .190
DESIGNATE .312 THREAD LENGTH BY
ADDING SUFFIX A TO PART NO. i.e. RF2550-32A

SUBMINIATURE FILTERS

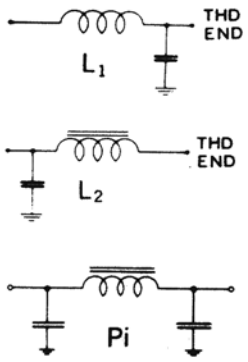
STYLES FL10 AND FL11
M15733/23
50 VDC AND 150 VDC



SPECIFICATIONS

OPERATING TEMPERATURE: −55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @ 25°C @ RATED VOLTAGE
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

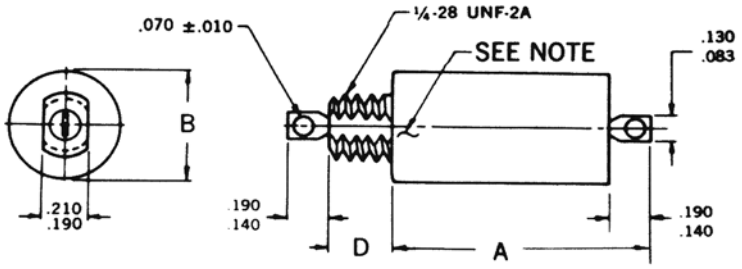
CIRCUIT CONFIGURATIONS



NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_1	C
L_2	L

M15733/23 DASH NO.	RFI PART NO.	CKT	RATING AMP	RATING DC VOLTS	A MAX	D ± .010	MAX VOLT. DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 15 KHz	30 KHz	50 KHz	100 KHz	150 KHz	300 KHz	500 KHz	1 MHz	10 MHz	1 GHz
0001	RF5003-1	L_2	.10	50	.630	.312	.17	9	20	29	41	48	60	69	70	70	70
0002	RF5003-2	L_2	.10	50	.630	.187	.17	9	20	29	41	48	60	69	70	70	70
0003	RF5003-3	L_1	.10	50	.630	.312	.17	9	20	29	41	48	60	69	70	70	70
0004	RF5003-4	L_1	.10	50	.630	.187	.17	9	20	29	41	48	60	69	70	70	70
0005	RF5003-5	P_i	.10	50	.730	.312	.17	15	36	50	69	79	80	80	80	80	80
0006	RF5003-6	P_i	.10	50	.730	.187	.17	15	36	50	69	79	80	80	80	80	80
0007	RF5003-7	L_2	.10	150	.630	.312	.17	2	11	20	32	39	51	60	60	60	60
0008	RF5003-8	L_2	.10	150	.630	.187	.17	2	11	20	32	39	51	60	60	60	60
0009	RF5003-9	L_1	.10	150	.630	.312	.17	2	11	20	32	39	51	60	60	60	60
0010	RF5003-10	L_1	.10	150	.630	.187	.17	2	11	20	32	39	51	60	60	60	60
0011	RF5003-11	P_i	.10	150	.730	.312	.17	—	17	31	49	60	70	70	70	70	70
0012	RF5003-12	P_i	.10	150	.730	.187	.17	—	17	31	49	60	70	70	70	70	70
0013	RF5003-13	L_2	.30	50	.630	.312	.23	6	15	23	35	42	54	63	70	70	70
0014	RF5003-14	L_2	.30	50	.630	.187	.23	6	15	23	35	42	54	63	70	70	70
0015	RF5003-15	L_1	.30	50	.630	.312	.23	6	15	23	35	42	54	63	70	70	70
0016	RF5003-16	L_1	.30	50	.630	.187	.23	6	15	23	35	42	54	63	70	70	70
0017	RF5003-17	P_i	.30	50	.730	.312	.23	4	29	44	62	73	80	80	80	80	80
0018	RF5003-18	P_i	.30	50	.730	.187	.23	4	29	44	62	73	80	80	80	80	80
0019	RF5003-19	L_2	.30	150	.630	.312	.23	—	6	13	25	32	44	52	60	60	60
0020	RF5003-20	L_2	.30	150	.630	.187	.23	—	6	13	25	32	44	52	60	60	60
0021	RF5003-21	L_1	.30	150	.630	.312	.23	—	6	13	25	32	44	52	60	60	60
0022	RF5003-22	L_1	.30	150	.630	.187	.23	—	6	13	25	32	44	52	60	60	60
0023	RF5003-23	P_i	.30	150	.730	.312	.23	—	8	24	43	53	70	70	70	70	70
0024	RF5003-24	P_i	.30	150	.730	.187	.23	—	8	24	43	53	70	70	70	70	70
0025	RF5003-25	L_2	.50	50	.630	.312	.18	5	12	19	29	36	48	57	69	70	70
0026	RF5003-26	L_2	.50	50	.630	.187	.18	5	12	19	29	36	48	57	69	70	70
0027	RF5003-27	L_1	.50	50	.630	.312	.18	5	12	19	29	36	48	57	69	70	70
0028	RF5003-28	L_1	.50	50	.630	.187	.18	5	12	19	29	36	48	57	69	70	70
0029	RF5003-29	P_i	.50	50	.730	.312	.18	—	21	37	56	67	80	80	80	80	80
0030	RF5003-30	P_i	.50	50	.730	.187	.18	—	21	37	56	67	80	80	80	80	80
0031	RF5003-31	L_2	.50	150	.630	.312	.18	—	3	9	20	26	39	47	59	60	60
0032	RF5003-32	L_2	.50	150	.630	.187	.18	—	3	9	20	26	39	47	59	60	60
0033	RF5003-33	L_1	.50	150	.630	.312	.18	—	3	9	20	26	39	47	59	60	60
0034	RF5003-34	L_1	.50	150	.630	.187	.18	—	3	9	20	26	39	47	59	60	60
0035	RF5003-35	P_i	.50	150	.730	.312	.18	—	—	15	37	48	66	70	70	70	70
0036	RF5003-36	P_i	.50	150	.730	.187	.18	—	—	15	37	48	66	70	70	70	70
0037	RF5003-37	L_2	1.0	50	.630	.312	.14	5	11	15	21	26	36	44	55	70	70
0038	RF5003-38	L_2	1.0	50	.630	.187	.14	5	11	15	21	26	36	44	55	70	70
0039	RF5003-39	L_1	1.0	50	.630	.312	.14	5	11	15	21	26	36	44	55	70	70
0040	RF5003-40	L_1	1.0	50	.630	.187	.14	5	11	15	21	26	36	44	55	70	70
0041	RF5003-41	P_i	1.0	50	.730	.312	.14	—	—	20	41	52	71	80	80	80	80
0042	RF5003-42	P_i	1.0	50	.730	.187	.14	—	—	20	41	52	71	80	80	80	80
0043	RF5003-43	L_2	1.0	150	.630	.312	.14	—	3	6	12	16	26	34	46	60	60
0044	RF5003-44	L_2	1.0	150	.630	.187	.14	—	3	6	12	16	26	34	46	60	60
0045	RF5003-45	L_1	1.0	150	.630	.312	.14	—	3	6	12	16	26	34	46	60	60
0046	RF5003-46	L_1	1.0	150	.630	.187	.14	—	3	6	12	16	26	34	46	60	60
0047	RF5003-47	P_i	1.0	150	.730	.312	.14	—	—	—	18	32	51	65	70	70	70
0048	RF5003-48	P_i	1.0	150	.730	.187	.14	—	—	—	18	32	51	65	70	70	70
0049	RF5003-49	L_2	2.0	50	.630	.312	.14	5	10	14	20	24	32	38	48	70	70
0050	RF5003-50	L_2	2.0	50	.630	.187	.14	5	10	14	20	24	32	38	48	70	70
0051	RF5003-51	L_1	2.0	50	.630	.312	.14	5	10	14	20	24	32	38	48	70	70
0052	RF5003-52	L_1	2.0	50	.630	.187	.14	5	10	14	20	24	32	38	48	70	70
0053	RF5003-53	P_i	2.0	50	.730	.312	.14	—	—	—	33	46	65	76	80	80	80
0054	RF5003-54	P_i	2.0	50	.730	.187	.14	—	—	—	33	46	65	76	80	80	80
0055	RF5003-55	L_2	2.0	150	.630	.312	.14	—	3	5	11	15	23	29	38	60	60
0056	RF5003-56	L_2	2.0	150	.630	.187	.14	—	3	5	11	15	23	29	38	60	60
0057	RF5003-57	L_1	2.0	150	.630	.312	.14	—	3	5	11	15	23	29	38	60	60
0058	RF5003-58	L_1	2.0	150	.630	.187	.14	—	3	5	11	15	23	29	38	60	60
0059	RF5003-59	P_i	2.0	150	.730	.312	.14	—	—	—	—	22	45	59	70	70	70
0060	RF5003-60	P_i	2.0	150	.730	.187	.14	—	—	—	—	22	45	59	70	70	70

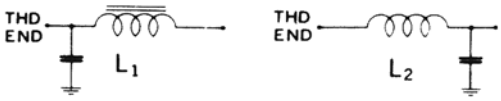


SUBMINIATURE FILTERS

STYLE FL12
M15733/24
28 VDC

M15733/24 DASH NO.	RFI PART NO.	CKT	RATING AMP	RATING DC VOLTS	A MAX	B MAX	D ±.010	MAX VOLT DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF5000-1	L_2	.300	28	.760	.385	.187	.69	16	34	44	62	70	70
0002	RF5000-2	L_2	.300	28	.740	.385	.312	.69	16	34	44	62	70	70
0003	RF5000-3	L_1	.300	28	.740	.385	.187	.69	16	34	44	62	70	70
0004	RF5000-4	L_1	.300	28	.740	.385	.312	.69	16	34	44	62	70	70
0005	RF5000-5	L_2	10.0	28	.760	.385	.187	.10	15	28	31	42	56	70
0006	RF5000-6	L_2	10.0	28	.760	.385	.312	.10	15	28	31	42	56	70
0007	RF5000-7	L_1	10.0	28	.740	.385	.187	.10	15	28	31	42	56	70
0008	RF5000-8	L_1	10.0	28	.740	.385	.312	.10	15	28	31	42	56	70
0009	RF5000-9	L_2	.060	28	.760	.385	.187	4.2	44	68	70	70	70	70
0010	RF5000-10	L_2	.150	28	.760	.385	.187	1.8	24	48	58	70	70	70
0011	RF5000-11	L_2	.250	28	.760	.385	.187	1.0	18	42	51	70	70	70
0012	RF5000-12	L_2	.450	28	.760	.385	.187	.54	15	29	33	46	66	70
0013	RF5000-13	L_2	.060	28	.740	.385	.312	4.2	44	68	70	70	70	70
0014	RF5000-14	L_2	.150	28	.740	.385	.312	1.8	24	48	58	70	70	70
0015	RF5000-15	L_2	.250	28	.760	.385	.312	1.0	18	42	51	70	70	70
0016	RF5000-16	L_2	.450	28	.760	.385	.312	.54	15	29	33	46	66	70
0017	RF5000-17	L_1	.060	28	.740	.385	.187	4.2	44	68	70	70	70	70
0018	RF5000-18	L_1	.150	28	.740	.385	.187	1.8	24	48	58	70	70	70
0019	RF5000-19	L_1	.250	28	.760	.385	.187	1.0	18	42	51	70	70	70
0020	RF5000-20	L_2	.450	28	.760	.385	.187	.54	15	29	33	46	66	70
0021	RF5000-21	L_1	.060	28	.740	.385	.312	4.2	44	68	70	70	70	70
0022	RF5000-22	L_1	.150	28	.740	.385	.312	1.8	24	48	58	70	70	70
0023	RF5000-23	L_1	.250	28	.760	.385	.312	1.0	18	42	51	70	70	70
0024	RF5000-24	L^1	.450	28	.760	.385	.312	.54	15	29	33	40	66	70

CIRCUIT CONFIGURATIONS

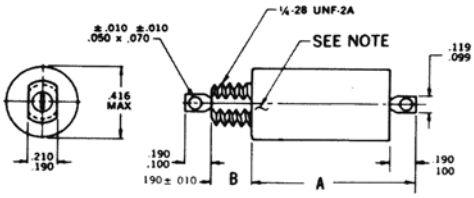


NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

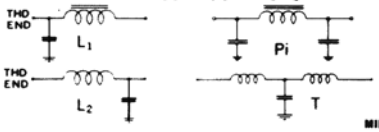
CIRCUIT	SYMBOL
L_1	C
L_2	L

SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @ 25°C @ RATED VOLTAGE
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP



CIRCUIT CONFIGURATIONS



SUBMINIATURE FILTERS

STYLE FL13
M15733/25
100 VDC

M15733/25 DASH NO.	RFI PART NO.	CKT	RATING AMP	RATING DC VOLTS	A MAX.	B ±.015	MAX VOLT. DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 75 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF5004-1	L_1	1.0	100	.743	.187	.250	15	23	34	55	70	70
0002	RF5004-2	P_1	1.0	100	.793	.187	.250	—	33	52	80	80	70
0003	RF5004-3	L_2	1.0	100	.738	.187	.250	15	23	34	55	70	70
0004	RF5004-4	P_1	3.0	100	.793	.187	.150	—	20	34	68	80	70
0005	RF5004-5	L_1	5.0	100	.743	.187	.075	11	17	23	35	69	70
0006	RF5004-6	P_1	5.0	100	.793	.187	.075	—	—	17	57	80	70
0007	RF5004-7	T	4.0	100	1.345	.187	.250	16	22	28	43	80	70
0008	RF5004-8	L_2	5.0	100	.738	.187	.075	11	17	23	35	69	70
0009	RF5004-9	L_1	.25	100	.743	.187	.375	24	35	47	68	70	70
0010	RF5004-10	P_1	.25	100	.793	.187	.375	31	48	66	80	80	70
0011	RF5004-11	L_2	.25	100	.738	.187	.375	24	35	47	68	70	70
0012	RF5004-12	T	2.0	100	1.179	.187	.20	16	22	31	55	80	70
0013	RF5004-13	L_1	1.0	100	.743	.312	.250	15	23	34	55	70	70
0014	RF5004-14	P	1.0	100	.793	.312	.250	—	33	52	80	80	70
0015	RF5004-15	L_2	1.0	100	.738	.312	.250	15	23	34	55	70	70
0016	RF5004-16	P_1	3.0	100	.793	.312	.150	—	20	34	68	80	70
0017	RF5004-17	L_1	5.0	100	.743	.312	.075	11	17	23	35	69	70
0018	RF5004-18	P_1	5.0	100	.793	.312	.075	—	—	17	57	80	70
0019	RF5004-19	T	4.0	100	1.345	.312	.250	16	22	28	43	80	70
0020	RF5004-20	L_2	5.0	100	.738	.312	.075	11	17	23	35	69	70
0021	RF5004-21	L_1	.25	100	.743	.312	.375	24	35	47	68	70	70
0022	RF5004-22	P_1	.25	100	.793	.312	.375	31	48	66	80	80	70
0023	RF5004-23	L_2	.25	100	.738	.312	.375	24	35	47	68	70	70
0024	RF5004-24	T	2.0	100	1.179	.312	.20	16	22	31	55	80	70

SPECIFICATIONS

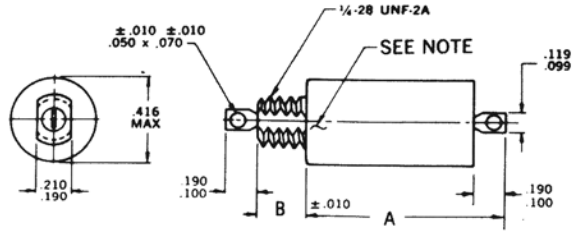
OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @ 25°C @ RATED VOLTAGE
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_1	C
L_2	L

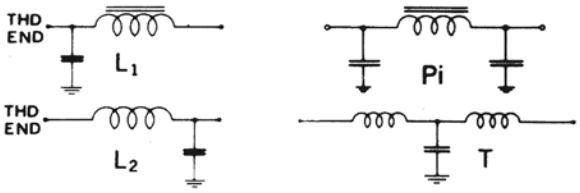
SUBMINIATURE FILTERS

STYLE FL14
M15733/26
125 VAC, 0-400 Hz, 150 VDC



M15733/26 DASH NO.	RFI PART NO.	CKT	A MAX	B ±.015	RATING AMP	DC VOLTS	AC VOLTS AT 60Hz & 400 Hz	MAX VOLT. DROP	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF4914-1	L_1	.743	.187	1	150	125	.250	13	24	45	80	70
0002	RF4914-2	P	.793	.187	1	150	125	.250	11	32	63	80	70
0003	RF4914-3	L_2	.738	.187	1	150	125	.250	13	24	45	80	70
0004	RF4914-4	L_1	.743	.187	3	150	125	.150	8	15	30	68	70
0005	RF4914-5	P	.793	.187	3	150	125	.150	5	6	47	80	70
0006	RF4914-6	L_2	.738	.187	3	150	125	.150	8	15	30	68	70
0007	RF4914-7	L_1	.743	.187	5	150	125	.075	8	14	25	58	70
0008	RF4914-8	T	1.345	.187	4	150	125	.250	11	18	33	80	70
0009	RF4914-9	P	.793	.187	5	150	125	.075	7	10	35	80	70
0010	RF4914-10	L_2	.738	.187	5	150	125	.075	8	14	25	58	70
0011	RF4914-11	P	.793	.187	.25	150	125	.375	29	47	70	80	70
0012	RF4914-12	T	1.179	.187	2	150	125	.200	13	21	43	80	70
0013	RF4914-13	L_1	.743	.312	1	150	125	.250	13	24	45	80	70
0014	RF4914-14	P	.793	.312	1	150	125	.250	11	32	63	80	70
0015	RF4914-15	L_2	.738	.312	1	150	125	.250	13	24	45	80	70
0016	RF4914-16	L_1	.743	.312	3	150	125	.150	8	15	30	68	70
0017	RF4914-17	P	.793	.312	3	150	125	.150	5	6	47	80	70
0018	RF4914-18	L_2	.738	.312	3	150	125	.150	8	15	30	68	70
0019	RF4914-19	L_1	.743	.312	5	150	125	.075	8	14	25	58	70
0020	RF4914-20	T	1.345	.312	4	150	125	.250	11	18	33	80	70
0021	RF4914-21	P	.793	.312	5	150	125	.075	7	10	35	80	70
0022	RF4914-22	L_2	.738	.312	5	150	125	.075	8	14	25	58	70
0023	RF4914-23	P	.793	.312	.25	150	125	.375	29	47	70	80	.70
0024	RF4914-24	T	1.179	.312	2	150	125	.200	13	21	43	80	70

CIRCUIT CONFIGURATIONS



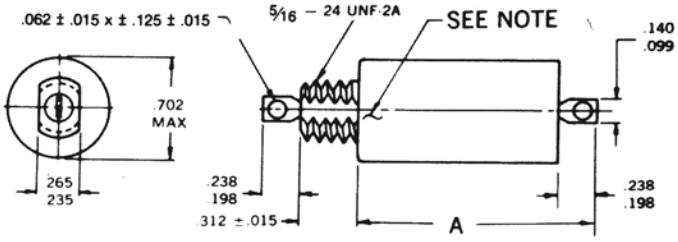
NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_1	C
L_2	L

SPECIFICATIONS
OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @ 25°C @ RATED VOLTAGE
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

SUBMINIATURE FILTERS

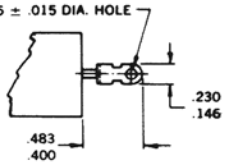
STYLE FL15
M15733/27
125 VAC, 0-400 Hz, 200 VDC



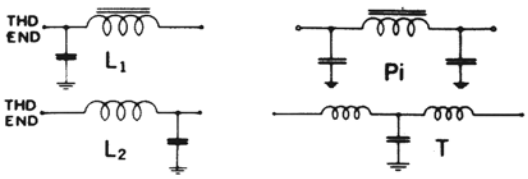
SPECIFICATIONS
OPERATING TEMPERATURE -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @ 25°C @ RATED VOLTAGE
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: SOLDER DIP

M15733/27 DASH NO.	RFI PART NO.	CKT	RATING AMP	DC VOLTS	AC VOLTS AT 60Hz & 400Hz	A MAX	MAX VOLT. DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 50 KHz	100 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF5001-1	L_1	1	200	125	.900	.40	11	18	25	37	58	80	70
0002	RF5001-2	L_2	1	200	125	.900	.40	11	18	25	37	58	80	70
0003	RF5001-3	P	1	200	125	1.031	.40	20	32	43	61	80	80	70
0004	RF5001-4	P	1	200	125	1.195	.35	20	36	47	65	80	80	70
0005	RF5001-5	L_1	3	200	125	.900	.15	5	10	14	21	39	80	70
0006	RF5001-6	L_2	3	200	125	.900	.15	5	10	14	21	39	80	70
0007	RF5001-7	P	3	200	125	1.031	.15	5	10	19	42	74	80	70
0008	RF5001-8	L_1	5	200	125	.900	.10	5	10	13	19	32	69	70
0009	RF5001-9	L_2	5	200	125	.900	.10	5	10	13	19	32	69	70
0010	RF5001-10	P	5	200	125	1.195	.10	–	–	10	28	64	80	70
0011	RF5001-11	L_1	10	200	125	1.031	.075	5	8	13	19	30	61	70
0012	RF5001-12	L_2	10	200	125	1.031	.075	5	8	13	19	30	61	70
0013	RF5001-13	P	10	200	125	1.195	.075	–	–	16	18	48	80	70
0014	RF5001-14	L_1	15	200	125	1.763	.075	9	15	19	25	36	60	70
0015	RF5001-15	L_2	15	200	125	1.763	.075	9	15	19	25	36	60	70
0016	RF5001-16	T	.7	200	125	1.195	.42	19	28	38	56	80	80	70
0017	RF5001-17	T	1.5	200	125	1.195	.225	6	12	19	32	62	70	70
0018	RF5001-18	T	4	200	125	1.195	.12	6	11	14	21	36	70	70
0019	RF5001-19	L_1	2	200	125	.900	.20	5	11	15	25	45	80	70
0020	RF5001-20	L_2	2	200	125	.900	.20	5	11	15	25	45	80	70
0021	RF5001-21	P	2	200	125	1.031	.20	1	15	28	48	79	80	70
0022	RF5001-22	P	2	200	125	1.195	.22	4	24	36	54	80	80	70
0023	RF5001-23	T	2	200	125	1.195	.15	5	11	15	25	51	70	70

TERMINAL DETAIL FOR .0014 AND .0015 TERM. TO ACCEPT NO. 12 AWG WIRE

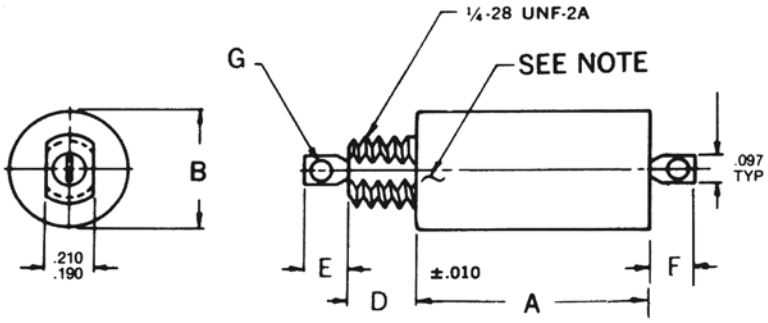


CIRCUIT CONFIGURATIONS



NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_1	C
L_2	L



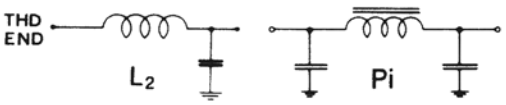
SUBMINIATURE FILTERS

STYLE FL16
M15733/38
50 VDC AND 150 VDC

SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: PER MIL-F-15733/38 SPEC.
INSULATION RESISTANCE: 500 MEGOHMS MIN. FOR DASH NUMBER 0001, 100 MEGOHMS FOR DASH NUMBERS 0002 THRU 0006 @ 25°C @ RATED VOLTAGE
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

CIRCUIT CONFIGURATIONS



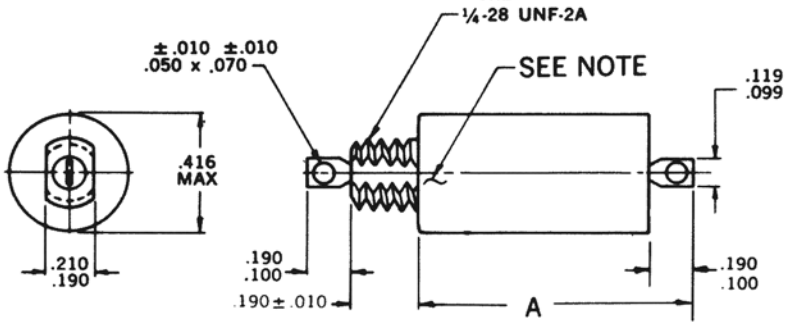
NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_2	L

DIMENSIONS

M15733/38 DASH NO.	RFI PART NO.	A MAX	B MAX	D	E MIN.	E MAX.	F MIN.	F MAX.	G
0001	RF7632-1	.310	.42	.312	.100	.190	.100	.190	.05 × .07
0002	RF7632-2	.291	.415	.187	.100	.190	.100	.190	.05 × .07
0003	RF7632-3	.550	.385	.187	.100	.190	.100	.190	.05 × .07
0004	RF7632-4	.180	.385	.187	.100	.190	.100	.190	.05 × .07
0005	RF7632-5	.180	.385	.187	.100	.190	.100	.190	.05 × .07
0006	RF7632-6	.291	.415	.312	.100	.190	.100	.190	.05 × .07

M15733/38 DASH NO.	RFI PART NO.	CKT	AMP	DC VOLTS	MAX VOLT DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220 (FULL LOAD) 30 KHz	100 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF7632-1	L_2	10	50	.04	—	24	—	—	44	64	—
0002	RF7632-2	L_2	15	50	.12	15	—	28	33	44	64	70
0003	RF7632-3	P_1	3	150	.15	—	—	7	24	54	80	80
0004	RF7632-4	L_2	10	50	.08	15	—	28	33	44	60	70
0005	RF7632-5	L_2	10	50	.08	15	—	28	33	44	60	70
0006	RF7632-6	L_2	15	50	.12	15	—	28	33	44	64	70



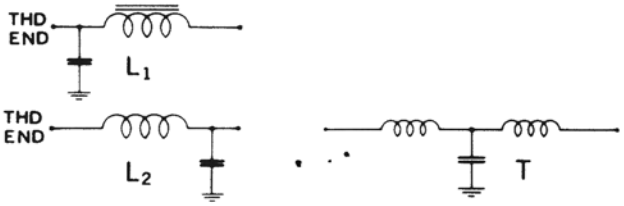
SUBMINIATURE FILTERS

STYLE FL64
M15733/59
150 VAC/200 VDC

NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_1	C
L_2	L

CIRCUIT CONFIGURATIONS



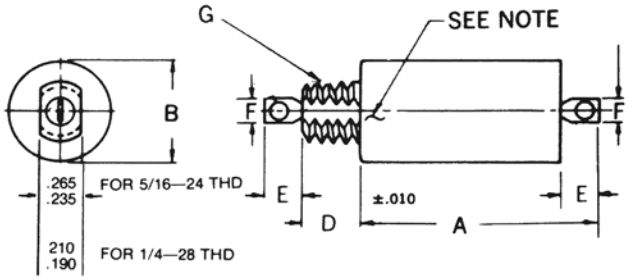
SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.0 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @ 25°C @ RATED VOLTAGE.
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

M15733/59 DASH NO.	RFI PART NO.	CKT	RATING AMP	RATING DC VOLTS	RATING AC VOLTS 400 Hz	A MAX.	MAX VOLT. DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD) 150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF9498-1	L_2	1.0	200	150	.743	.250	12	23	44	70	70
0002	RF9498-2	L_1	1.0	200	150	.743	.250	12	23	44	70	70
0003	RF9498-3	L_2	3.0	200	150	.743	.150	7	13	29	67	70
0004	RF9498-4	L_1	3.0	200	150	.743	.150	7	13	29	67	70
0005	RF9498-5	L_2	5.0	200	150	.743	.075	7	12	24	57	70
0006	RF9498-6	L_1	5.0	200	150	.743	.075	7	12	24	57	70
0007	RF9498-7	T	2.0	200	150	1.17	.200	11	19	42	70	70
0008	RF9498-8	T	4.0	200	150	1.17	.250	10	17	32	70	70

SUBMINIATURE FILTERS

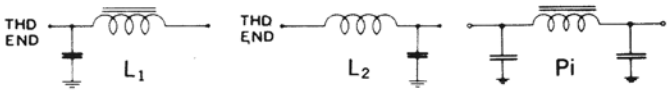
STYLE FL90
M15733/34
AC AND DC



SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @25°C
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

CIRCUIT CONFIGURATIONS



NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_1	C
L_2	L

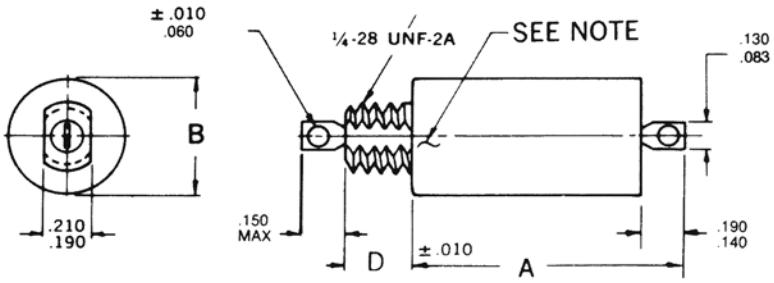
DIMENSIONS

M15733/34 DASH NO.	RFI PART NO.	A MAX	B MAX	D ±.010	E MIN.	E MAX.	F MIN.	F MAX.	G
0001	RF5005-1	1.763	.702	.312	.400	.483	.146	.230	5/16-24
0002	RF5005-2	1.763	.702	.312	.400	.483	.146	.230	5/16-24
0003	RF5005-3	.730	.416	.187	.120	.190	.083	.130	1/4-28
0004	RF5005-4	1.195	.702	.312	.198	.238	.099	.140	5/16-24
0005	RF5005-5	1.195	.702	.312	.198	.238	.099	.140	5/16-24
0006	RF5005-6	1.195	.702	.312	.198	.238	.099	.140	5/16-24
0007	RF5005-7	.760	.385	.187	.140	.190	.083	.130	1/4-28
0008	RF5005-8	.760	.385	.187	.140	.190	.083	.130	1/4-28
0009	RF5005-9	1.170	.690	.312	.198	.238	.099	.140	5/16-24
0010	RF5005-10	.793	.416	.312	.120	.190	.099	.140	1/4-28
0011	RF5005-11	.890	.702	.312	.199	.234	.099	.140	5/16-24
0012	RF5005-12	.890	.702	.312	.199	.234	.099	.140	5/16-24
0013	RF5005-13	.890	.702	.312	.199	.234	.099	.140	5/16-24
0014	RF5005-14	.730	.416	.312	—	.190	—	.130	1/4-28
0015	RF5005-15	.743	.416	.312	—	.190	.099	.119	1/4-28
0016	RF5005-16	.890	.416	.187	.140	.190	.1	.190	1/4-28
0017	RF5005-17	.740	.416	.187	.140	.190	.1	.190	1/4-28
0018	RF5005-18	.740	.416	.187	.140	.190	.1	.190	1/4-28
0019	RF5005-19	.793	.416	.312	—	.190	.1	.190	1/4-28
0020	RF5005-20	.900	.702	.312	.198	.238	.099	.140	5/16-24
0021	RF5005-21	.900	.702	.312	.198	.238	.099	.140	5/16-24
0029	RF5005-29	.900	.702	.312	—	.238	—	.14	5/16-24
0030	RF5005-30	.690	.416	.187	—	.19	.14	.16	1/4-28

M15733/34 DASH NO.	RFI PART NO.	CKT	AMP	RATING DC VOLTS	RATING AC VOLTS AT 400Hz	RATING MAX VOLT DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220 A (FULL LOAD) 30 KHz	50 KHz	100 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF5005-1	L_1	20	200	125	.100	—	9	14	19	25	35	57	70
0002	RF5005-2	L_2	20	200	125	.100	—	9	14	19	25	35	57	70
0003	RF5005-3	P_1	2	50	—	.14	—	—	33	46	65	80	80	80
0004	RF5005-4	P_1	5	200	125	.10	—	—	—	10	28	64	80	70
0005	RF5005-5	P_1	10	200	125	.750	—	—	—	16	18	48	80	70
0006	RF5005-6	P_1	2	200	125	.22	—	4	24	36	54	80	80	70
0007	RF5005-7	L_2	10	28	—	.10	15	—	—	28	31	42	56	70
0008	RF5005-8	L_2	.450	28	—	.54	15	—	—	29	33	46	66	70
0009	RF5005-9	P_1	5	100	—	.10		—	20	38	50	80	80	80
0010	RF5005-10	L_2	2	150	125	.13	—	—	—	8	15	30	68	70
0011	RF5005-11	L_1	10	150	125	.08	—	9	14	18	24	34	54	70
0012	RF5005-12	L_1	10	300	125	.3	5	—	—	19	25	30	57	70
0013	RF5005-13	L_2	10	150	125	.3	—	6	12	14	21	30	54	70
0014	RF5005-14	P_1	5	100	—	.05	—	—	—	—	17	55	70	70
0015	RF5005-15	L_1	3	150	125	.15	—	—	—	8	15	30	68	—
0016	RF5005-16	L_1	3	200	125	.2	2	6	—	15	20	34	67	70
0017	RF5005-17	L_1	10	100	—	.1	10	15	—	26	29	38	56	70
0018	RF5005-18	L_1	.5	100	—	.375	13	18	—	33	44	64	70	70
0019	RF5005-19	P_1	3	150	125	.15	—	—	—	—	20	55	80	80
0020	RF5005-20	L_1	3	200	125	.15	—	—	10	14	21	39	80	—
0021	RF5005-21	L_1	5	200	125	.1	—	—	10	13	19	32	69	—
0029	RF5005-29	L_1	2	200	125	.2	—	—	11	15	25	45	80	—
0030	RF5005-30	L_2	5	200	125	.750	2	5	—	15	21	32	60	70

WIRE HOLE DIMENSION TABLE

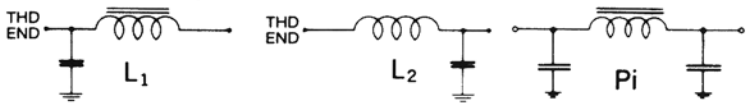
Dash Number	Wire hole type and size (2 places)	
0001 and 0002	Round hole	.095 ±.015 dia.
0003, 0016 thru 0018 and 0030	Round hole	.050 ±.010 dia.
0015	Round hole Slotted hole	.062 ±.020 dia. or .050 ±.010 x .070 ±.010
0004 thru 0006, 0020, 0021 and 0029	Slotted hole	.062 ±.015 x .125 ±.015
0007, 0008	Round hole	.070 ±.020 dia.
0009, 0010, 0014 and 0019	Round hole Slotted hole	.060 ±.020 dia. or .060 ±.015 x .125 ±.015
0011 thru 0013	Round hole Slotted hole	.093 dia. or .062 x .125



SUBMINIATURE FILTERS

STYLE FL91
M15733/39
50 VDC/100 VDC

CIRCUIT CONFIGURATIONS



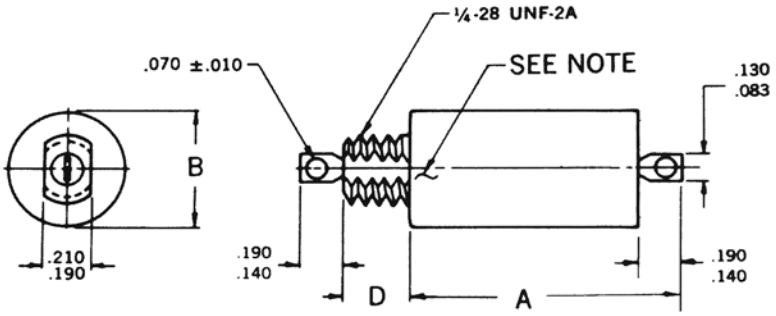
NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

CIRCUIT	SYMBOL
L_1	C
L_2	L

SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. @ 25°C @ RATED VOLTAGE. CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

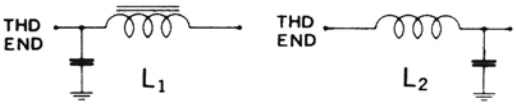
M15733/39 DASH NO.	RFI PART NO.	CKT	AMP	DC VOLTS	A MAX	B MAX	D ±.010	MAX VOLT DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220 A (FULL LOAD) .03 MHz	.15 MHz	.3 MHz	1 MHz	2 MHz	5 MHz	10 MHz	20 MHz	50 MHz	100 MHz	1 GHz
0001	RF5008-1	L_1	0.5	100	.760	.385	.187	1.0	6	28	40	60	60	60	60	60	60	60	70
0002	RF5008-2	L_2	0.5	100	.760	.385	.187	1.0	6	28	40	60	60	60	60	60	60	60	70
0003	RF5008-3	L_1	1.0	100	.760	.385	.187	1.0	6	20	30	50	60	60	60	60	60	60	70
0004	RF5008-4	L_2	1.0	100	.760	.385	.187	1.0	6	20	30	50	60	60	60	60	60	60	70
0005	RF5008-5	L_1	2.0	100	.760	.385	.187	1.0	6	20	26	40	48	60	60	60	60	60	70
0006	RF5008-6	L_2	2.0	100	.760	.385	.187	1.0	6	20	26	40	48	60	60	60	60	60	70
0007	RF5008-7	L_1	5.0	100	.760	.385	.187	1.0	6	20	26	35	42	52	60	60	60	60	70
0008	RF5008-8	L_2	5.0	100	.760	.385	.187	1.0	6	20	26	35	42	52	60	60	60	60	70
0009	RF5008-9	L_1	10.0	100	.760	.385	.187	1.0	6	20	26	35	41	49	56	60	60	60	70
0010	RF5008-10	L_2	10.0	100	.760	.385	.187	1.0	6	20	26	35	41	49	56	60	60	60	70
0011	RF5008-11	P_i	10.0	100	.760	.385	.187	.03	9	24	29	40	—	—	70	70	70	70	70
0012	RF5008-12	P_i	10.0	100	.760	.385	.187	.03	9	24	29	40	—	—	70	70	70	70	70
0013	RF5008-13	L_2	10.0	50	.760	.385	.312	.03	14	28	34	44	—	—	52	70	—	—	70
0014	RF5008-14	L_1	10.0	50	.760	.385	.312	.03	14	28	34	44	—	—	52	70	—	—	70
0016	RF5008-16	P_i	.25	100	.800	.416	.187	.375	—	—	76	80	—	—	80	—	—	—	80
0017	RF5008-17	P_i	3.0	100	.800	.416	.187	.18	—	—	41	76	—	—	80	—	—	—	80
0018	RF5008-18	P_i	5.0	100	.800	.416	.187	.2	—	—	28	68	—	—	80	—	—	—	80



SUBMINIATURE FILTERS

STYLE FL92
M15733/48
28 VDC/30 VDC

CIRCUIT CONFIGURATIONS



SPECIFICATIONS

OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
INSULATION RESISTANCE: 1000 MEGOHMS MIN. FOR DASH 0001, 100 MEGOHMS FOR DASH 0002 THRU 0005 @ 25°C @ RATED VOLTAGE CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP

M15733/48 DASH NO.	RFI PART NO.	CKT	RATING AMP	DC VOLTS	A MAX	B MAX	D ±.010	MAX VOLT DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220 A (FULL LOAD) 30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF5006-1	L_1	10.0	28	.760	.385	.187	.10	15	28	33	44	64	70
0002	RF5006-2	L_2	10.0	30	.861	.406	.187	.10	15	28	33	44	64	70
0003	RF5006-3	L_1	10.0	28	.760	.385	.312	.10	15	28	33	44	64	70
0004	RF5006-4	L_2	.150	28	.760	.385	.312	1.8	24	52	64	70	70	70
0005	RF5006-5	L_2	10.0	28	.760	.385	.312	.10	15	28	33	44	64	70

NOTE: THE CASE SHALL BE MARKED AT THE THREADED END OF FILTER, WITH THE SYMBOL "C" OR THE SYMBOL "L", AS FOLLOWS:

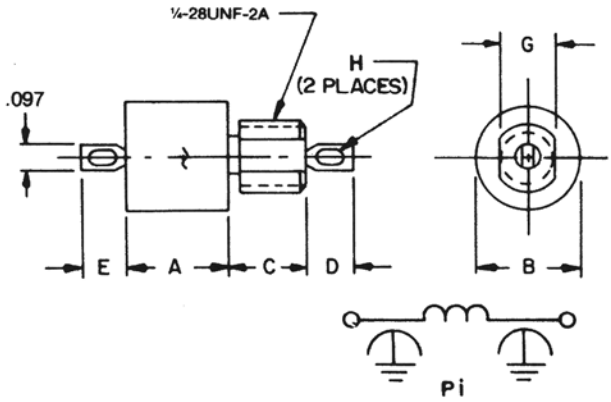
CIRCUIT	SYMBOL
L_1	C
L_2	L

SUBMINIATURE FILTERS

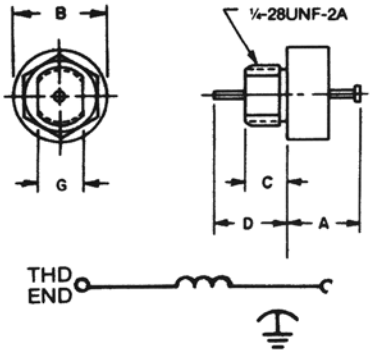
STYLE FL93
M15733/49
50-150 VDC

SPECIFICATIONS

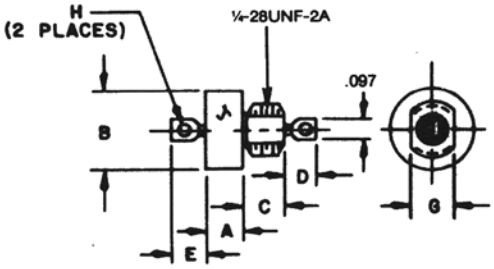
OPERATING TEMPERATURE: -55°C TO +125°C
DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-F-15733.
FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
FINISH: HOT SOLDER DIP, SILVER PLATE - 0001 ONLY



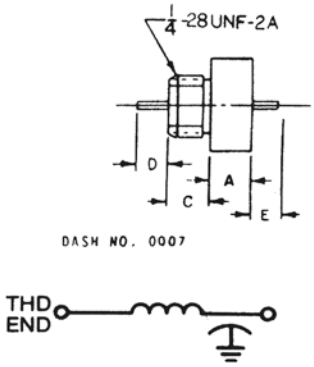
CIRCUIT CONFIGURATION
FOR -0002



CIRCUIT CONFIGURATION
FOR -0001



Dash number 0003 and 0004, **0006**



CIRCUIT CONFIGURATION

DIMENSIONS

M15733/49 DASH NO.	RFI PART NO.	A MAX.	B MAX.	C +.01	D MIN.	D MAX.	E MIN.	E MAX.	G MAX.	H
0001	RF7876	.319	.416	.187	.281	.343	—	—	.200	—
0002	RF7632-3	.550	.385	.187		.19	.140	.160	.210	.05 × .07
0003	RF7632-4	.180	.385	.187	.140	.160	—	.190	.210	.05x.07
0004	RF7632-5	.180	.385	.187	.140	.160	—	.190	.210	.05x.07
0006	RF9956	.180	.385	.187	.140	.160	.100	.190	.210	.05 × .07
0007	RF9956-1	.180	.385	.187	.250	.270	.250	.270	.210	—

M15733/49 DASH NO.	RFI PART NO.	CKT	AMP	DC VOLTS	MAX. VOLT DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220 A (FULL LOAD) 30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
0001	RF7876	L_2	15	100	.12	8	20	28	38	55	70
0002	RF7632-3	P_1	3	150	.15	—	7	24	54	80	80
0003	RF7632-4	L_2	10	50	.08	15	28	33	44	60	70
0004	RF7632-5	L_2	10	50	.08	15	28	33	44	60	70
0006	RF9956	L_2	15	50	.15	15	28	33	44	60	70
0007	RF9956-1	L_2	15	50	.15	15	28	33	44	60	70

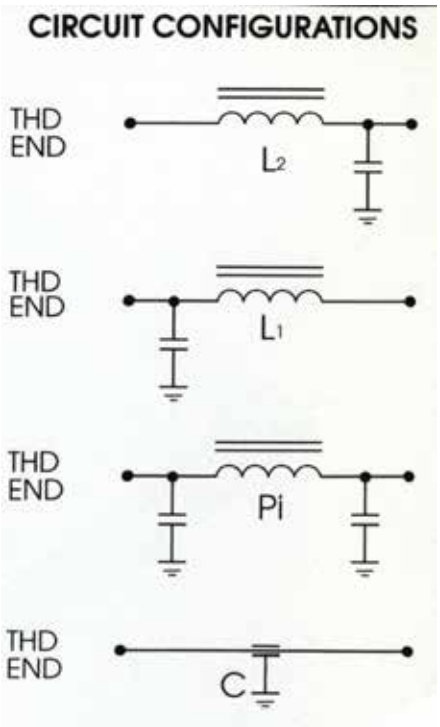
HIGH REL FILTER SERIES

The RF6900 Subminiature Filter Series compliments our other tubular filter types as a high-reliability option for design engineers. These filters were designed according to, and meet the relevant requirements of Mil-PRF-28861.

This filter series incorporates monolithic discoidal feedthrough capacitors designed for minimum size, optimum performance, and reliability. Filters are available in various circuit configurations, at voltages from 50 VDC to 125 VAC, and current ratings from 0.1 to 15 Amperes.

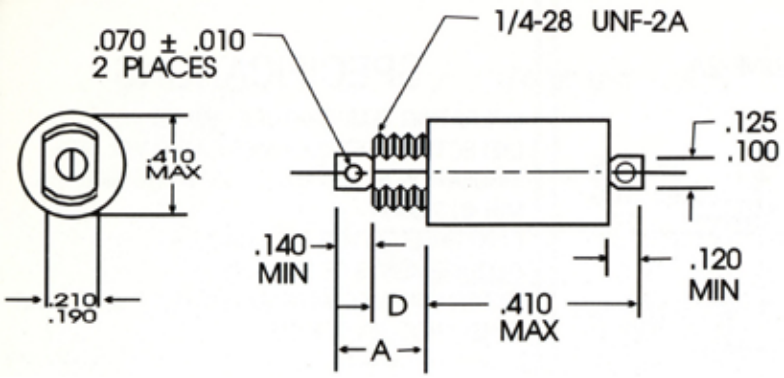
These filters can be employed in space, aerospace and mission critical applications or any program which requires high reliability components.

RF6901 SERIES	50 to 200 VDC
RF6902 SERIES	100 VDC
RF6903 SERIES	150 VDC
RF6904 SERIES	70 VDC
RF6905 SERIES	200 VDC, 125VAC, 400Hz



RF6901 SERIES SPECIFICATIONS

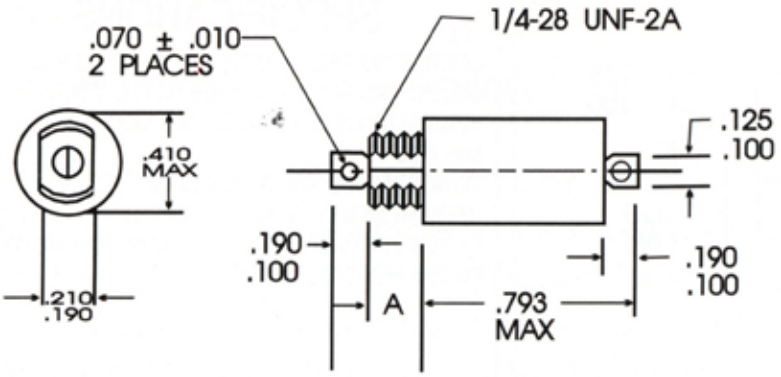
- OPERATING TEMPERATURE: -55° TO +125°C
- DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
- INSULATION RESISTANCE: 1000 MEGOHMS
- MIN. @ 25°C
- CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-PRF-28861
- FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
- FINISH: HOT SOLDER DIP
- RATED FOR 50-200 VDC



PART #	CKT	RATING		ACV	A MAX	D± .010	MAX V DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD)					
		AMP	DCV					30KHZ	150KHZ	300KHZ	1MHZ	100MHZ	1GHZ
RF6901-1X	L2	15	50	–	.357	.187	.12	15	28	33	40	70	70
RF6901-2X	C	15	50	–	.357	.187	.12	15	28	33	40	70	70
RF6901-3X	L2	15	70	–	.357	.187	.12	10	24	30	40	64	70
RF6901-4X	C	15	70	–	.357	.187	.12	10	24	30	40	64	70
RF6901-5X	L2	15	100	–	.357	.187	.12	6	19	25	36	60	70
RF6901-6X	C	15	100	–	.357	.187	.12	6	19	25	36	60	70
RF6901-7X	L2	15	150	–	.357	.187	.12	–	14	20	31	56	70
RF6901-8X	C	15	150	–	.357	.187	.12	–	14	20	31	56	70
RF6901-9X	L2	15	200	125	.357	.187	.12	–	10	16	26	52	70
RF6901-10X	C	15	200	125	.357	.187	.12	–	10	16	26	52	70
RF6901-11X	L2	15	50	–	.482	.312	.12	15	28	33	40	70	70
RF6901-12X	C	15	50	–	.482	.312	.12	15	28	33	40	70	70
RF6901-13X	L2	15	70	–	.482	.312	.12	10	24	30	40	64	70
RF6901-14X	C	15	70	–	.482	.312	.12	10	24	30	40	64	70
RF6901-15X	L2	15	100	–	.482	.312	.12	6	19	25	36	60	70
RF6901-16X	C	15	100	–	.482	.312	.12	6	19	25	36	60	70
RF6901-17X	L2	15	150	–	.482	.312	.12	–	14	20	31	56	70
RF6901-18X	C	15	150	–	.482	.312	.12	–	14	20	31	56	70
RF6901-19X	L2	15	200	125	.482	.312	.12	–	10	16	26	52	70
RF6901-20X	C	15	200	125	.482	.312	.12	–	10	16	26	52	70

RF6902 SERIES SPECIFICATIONS

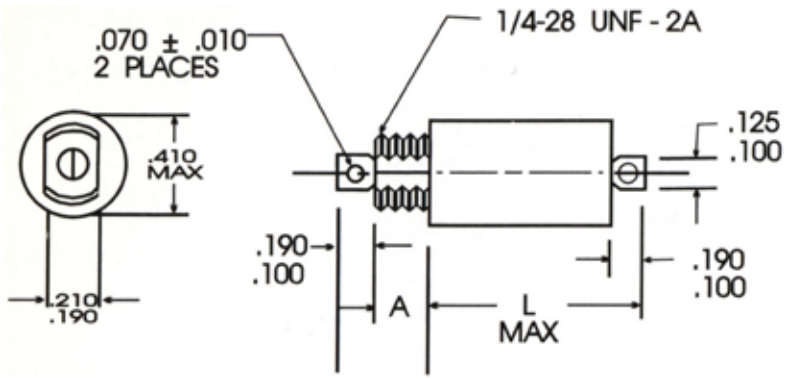
- OPERATING TEMPERATURE: -55° TO +125°C
- DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
- INSULATION RESISTANCE: 1000 MEGOHMS
- MIN. @ 25°C
- CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-PRF-28861
- FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
- FINISH: HOT SOLDER DIP
- RATED FOR 100 VDC



PART #	CKT	RATING		A± .010	MAX V DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD)					
		AMP	DCV			100KHZ	150KHZ	300KHZ	1MHZ	10MHZ	1GHZ
RF6902-1X	L_1	.25	100	.187	.375	30	38	50	60	60	70
RF6902-2X	L_2	.25	100	.187	.375	30	38	50	60	60	70
RF6902-3X	Pi	.25	100	.187	.375	54	64	80	80	80	80
RF6902-4X	L_1	1.0	100	.187	.25	15	23	34	55	60	70
RF6902-5X	L_2	1.0	100	.187	.25	15	23	34	55	60	70
RF6902-6X	Pi	1.0	100	.187	.25	40	52	70	80	80	80
RF6902-7X	L_1	3.0	100	.187	.15	14	18	27	45	60	70
RF6902-8X	L_2	3.0	100	.187	.15	14	18	27	45	60	70
RF6902-9X	Pi	3.0	100	.187	.15	–	25	51	80	80	80
RF6902-10X	L_1	5.0	100	.187	.075	14	17	24	36	60	70
RF6902-11X	L_2	5.0	100	.187	.075	14	17	24	36	60	70
RF6902-12X	Pi	5.0	100	.187	.075	–	–	38	75	80	80
RF6902-13X	L_1	.25	100	.312	.375	30	38	50	60	60	70
RF6902-14X	L_2	.25	100	.312	.375	30	38	50	60	60	70
RF6902-15X	Pi	.25	100	.312	.375	54	64	80	80	80	80
RF6902-16X	L_1	1.0	100	.312	.25	15	23	34	55	60	70
RF6902-17X	L_2	1.0	100	.312	.25	15	23	34	55	60	70
RF6902-18X	Pi	1.0	100	.312	.25	40	52	70	80	80	80
RF6902-19X	L_1	3.0	100	.312	.15	14	18	27	45	60	70
RF6902-20X	L_2	3.0	100	.312	.15	14	18	27	45	60	70
RF6902-21X	Pi	3.0	100	.312	.15	–	25	51	80	80	80
RF6902-22X	L_1	5.0	100	.312	.075	14	17	24	36	60	70
RF6902-23X	L_2	5.0	100	.312	.075	14	17	24	36	60	70
RF6902-24X	Pi	5.0	100	.312	.075	–	–	38	75	80	80

RF6903 SERIES SPECIFICATIONS

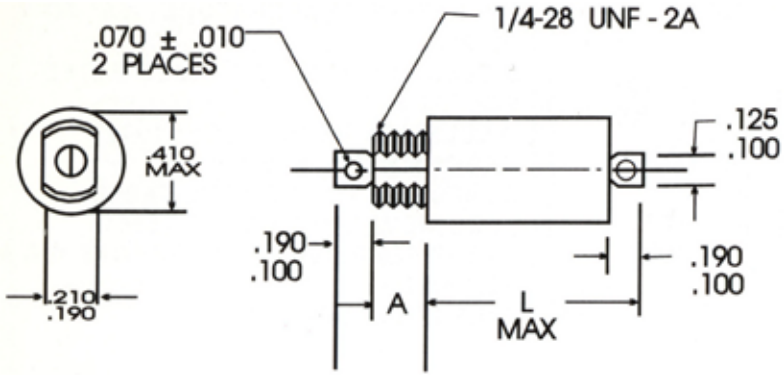
- OPERATING TEMPERATURE: -55° TO +125°C
- DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
- INSULATION RESISTANCE: 1000 MEGOHMS
- MIN. @ 25°C
- CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-PRF-28861
- FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
- FINISH: HOT SOLDER DIP
- RATED FOR 150 VDC



PART #	CKT	RATING		L MAX	A± .010	MAX V DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD)					
		AMP	DCV				100KHZ	150KHZ	300KHZ	1MHZ	10MHZ	1GHZ
RF6903-1X	L1	.1	150	.630	.187	.17	32	39	51	60	60	70
RF6903-2X	L2	.1	150	.630	.187	.17	32	39	51	60	60	70
RF6903-3X	Pi	.1	150	.730	.187	.17	49	60	70	80	80	80
RF6903-4X	L1	.3	150	.630	.187	.23	25	30	44	60	60	70
RF6903-5X	L2	.3	150	.630	.187	.23	25	30	44	60	60	70
RF6903-6X	Pi	.3	150	.730	.187	.23	43	53	70	80	80	80
RF6903-7X	L1	.5	150	.630	.187	.18	20	26	39	59	60	70
RF6903-8X	L2	.5	150	.630	.187	.18	20	26	39	59	60	70
RF6903-9X	Pi	.5	150	.730	.187	.18	37	48	66	80	80	80
RF6903-10X	L1	1.0	150	.630	.187	.14	12	16	26	48	60	70
RF6903-11X	L2	1.0	150	.630	.187	.14	12	16	26	48	60	70
RF6903-12X	Pi	1.0	150	.730	.187	.14	28	40	58	80	80	80
RF6903-13X	L1	3.0	150	.630	.187	.15	11	15	20	36	60	70
RF6903-14X	L2	3.0	150	.630	.187	.15	11	15	20	36	60	70
RF6903-15X	Pi	3.0	150	.730	.187	.15	–	–	38	70	80	80
RF6903-16X	L1	5.0	150	.630	.187	.075	8	12	20	32	60	70
RF6903-17X	L2	5.0	150	.630	.187	.075	8	12	20	32	60	70
RF6903-18X	Pi	5.0	150	.730	.187	.075	–	–	20	63	80	80
RF6903-19X	L1	.1	150	.630	.312	.17	32	39	51	60	60	70
RF6903-20X	L2	.1	150	.630	.312	.17	32	39	51	60	60	70
RF6903-21X	Pi	.1	150	.730	.312	.17	49	60	70	80	80	80
RF6903-22X	L1	.3	150	.630	.312	.23	25	30	44	60	60	70
RF6903-23X	L2	.3	150	.630	.312	.23	25	30	44	60	60	70
RF6903-24X	Pi	.3	150	.730	.312	.23	43	53	70	80	80	80
RF6903-25X	L1	.5	150	.630	.312	.18	20	26	39	59	60	70
RF6903-26X	L2	.5	150	.630	.312	.18	20	26	39	59	60	70
RF6903-27X	Pi	.5	150	.730	.312	.18	37	48	66	80	80	80
RF6903-28X	L1	1.0	150	.630	.312	.14	12	16	26	48	60	70
RF6903-29X	L2	1.0	150	.630	.312	.14	12	16	26	48	60	70
RF6903-30X	Pi	1.0	150	.730	.312	.14	28	40	58	80	80	80
RF6903-31X	L1	3.0	150	.630	.312	.15	11	15	20	36	60	70
RF6903-32X	L2	3.0	150	.630	.312	.15	11	15	20	36	60	70
RF6903-33X	Pi	3.0	150	.730	.312	.15	–	–	38	70	80	80
RF6903-34X	L1	5.0	150	.630	.312	.075	8	12	20	32	60	70
RF6903-35X	L2	5.0	150	.630	.312	.075	8	12	20	32	60	70
RF6903-36X	Pi	5.0	150	.730	.312	.075	–	–	20	63	80	80

RF6904 SERIES SPECIFICATIONS

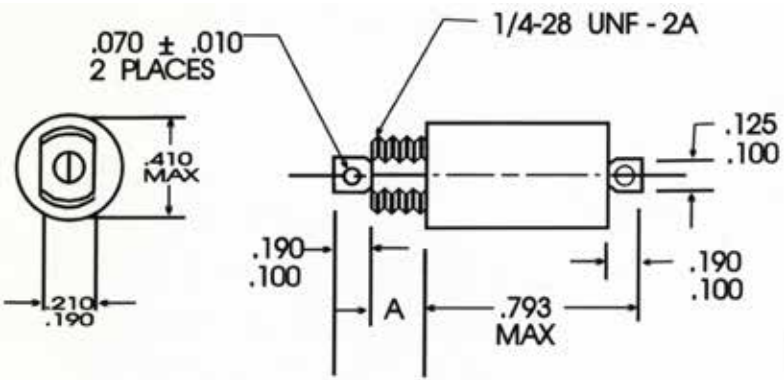
- OPERATING TEMPERATURE: -55° TO +125°C
- DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
- INSULATION RESISTANCE: 1000 MEGOHMS
- MIN. @ 25°C
- CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-PRF-28861
- FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
- FINISH: HOT SOLDER DIP
- RATED FOR 70 VDC



PART #	CKT	RATING		L MAX	A± .010	MAX V DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD)						
		AMP	DCV				15KHZ	30KHZ	150KHZ	300KHZ	1MHZ	10MHZ	1GHZ
RF6904-1X	L_1	.1	70	.630	.187	.17	9	20	48	60	7	70	70
RF6904-2X	L_2	.1	70	.630	.187	.17	9	20	48	60	70	70	70
RF6904-3X	Pi	.1	70	.730	.187	.17	15	36	79	80	80	80	80
RF6904-4X	L_1	.3	70	.630	.187	.23	6	15	42	54	70	70	70
RF6904-5X	L_2	.3	70	.630	.187	.23	6	15	42	54	70	70	70
RF6904-6X	Pi	.3	70	.730	.187	.23	–	29	73	80	80	80	80
RF6904-7X	L_1	.5	70	.630	.187	.18	5	12	36	48	69	70	70
RF6904-8X	L_2	.5	70	.630	.187	.18	5	12	36	48	69	70	70
RF6904-9X	Pi	.5	70	.730	.187	.18	–	21	67	80	80	80	80
RF6904-10X	L_1	1.0	70	.630	.187	.14	5	11	26	36	55	70	70
RF6904-11X	L_2	1.0	70	.630	.187	.14	5	11	26	36	55	70	70
RF6904-12X	Pi	1.0	70	.730	.187	.14	–	–	57	75	80	80	80
RF6904-13X	L_1	3.0	70	.630	.187	.15	5	10	24	31	45	70	70
RF6904-14X	L_2	3.0	70	.630	.187	.15	5	10	24	31	45	70	70
RF6904-15X	Pi	3.0	70	.730	.187	.15	–	–	36	51	80	80	80
RF6904-16X	L_1	5.0	70	.630	.187	.075	–	–	17	24	36	70	70
RF6904-17X	L_2	5.0	70	.630	.187	.075	–	–	17	24	36	70	70
RF6904-18X	Pi	5.0	70	.730	.187	.075	–	–	16	38	75	80	80
RF6904-19X	L_1	.1	70	.630	.312	.17	9	20	48	60	7	70	70
RF6904-20X	L_2	.1	70	.630	.312	.17	9	20	48	60	70	70	70
RF6904-21X	Pi	.1	70	.730	.312	.17	15	36	79	80	80	80	80
RF6904-22X	L_1	.3	70	.630	.312	.23	6	15	42	54	70	70	70
RF6904-23X	L_2	.3	70	.630	.312	.23	6	15	42	54	70	70	70
RF6904-24X	Pi	.3	70	.730	.312	.23	–	29	73	80	80	80	80
RF6904-25X	L_1	.5	70	.630	.312	.18	5	12	36	48	69	70	70
RF6904-26X	L_2	.5	70	.630	.312	.18	5	12	36	48	69	70	70
RF6904-27X	Pi	.5	70	.730	.312	.18	–	21	67	80	80	80	80
RF6904-28X	L_1	1.0	70	.630	.312	.14	5	11	26	36	55	70	70
RF6904-29X	L_2	1.0	70	.630	.312	.14	5	11	26	36	55	70	70
RF6904-30X	Pi	1.0	70	.730	.312	.14	–	–	57	75	80	80	80
RF6904-31X	L_1	3.0	70	.630	.312	.15	5	10	24	31	45	70	70
RF6904-32X	L_2	3.0	70	.630	.312	.15	5	10	24	31	45	70	70
RF6904-33X	Pi	3.0	70	.730	.312	.15	–	–	36	51	80	80	80
RF6904-34X	L_1	5.0	70	.630	.312	.075	–	–	17	24	36	70	70
RF6904-35X	L_2	5.0	70	.630	.312	.075	–	–	17	24	36	70	70
RF6904-36X	Pi	5.0	70	.730	.312	.075	–	–	16	38	75	80	80

RF6905 SERIES SPECIFICATIONS

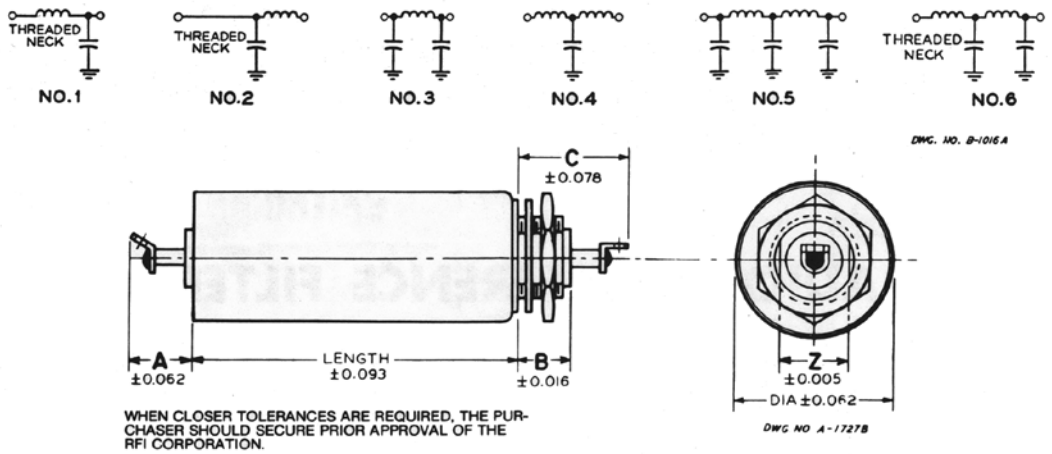
- OPERATING TEMPERATURE: -55° TO +125°C
- DIELECTRIC TEST: 2.5 TIMES RATED VOLTAGE
- INSULATION RESISTANCE: 1000 MEGOHMS
- MIN. @ 25°C
- CONFORMS TO THE APPLICABLE REQUIREMENTS OF MIL-PRF-28861
- FILTER SUPPLIED WITH LOCKWASHER & HEX NUT
- FINISH: HOT SOLDER DIP
- RATED FOR 200 VDC, 125VAC, 400 Hz



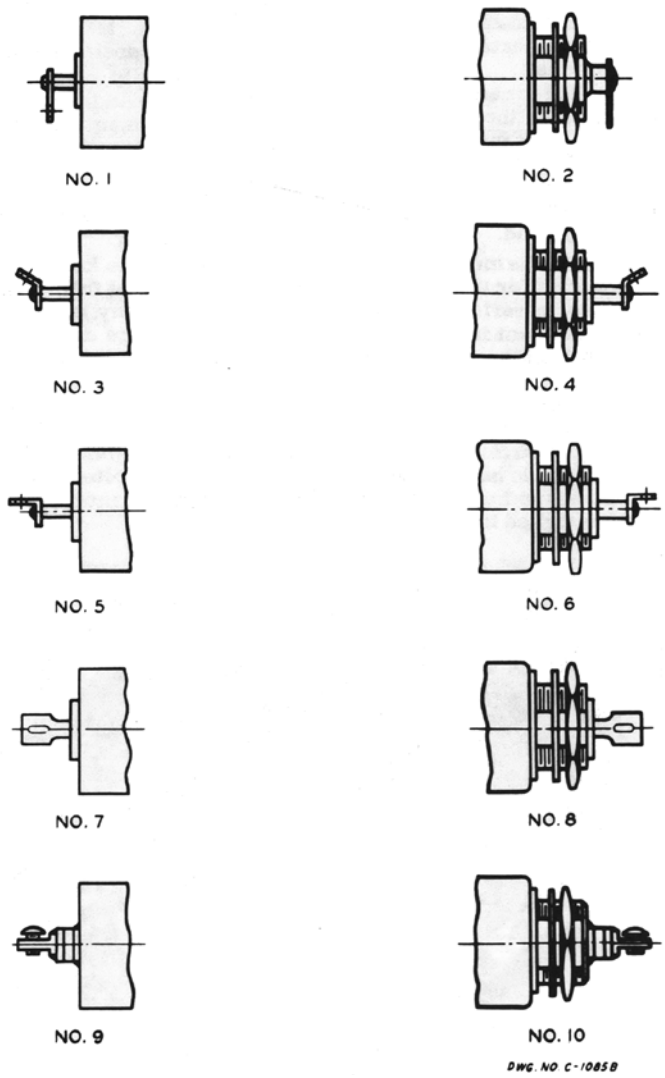
PART #	CKT	RATING		ACV	A± .010	MAX V DROP	MINIMUM INSERTION LOSS IN DECIBELS MIL-STD-220A (FULL LOAD)					
		AMP	DCV				100KHZ	150KHZ	300KHZ	1MHZ	10MHZ	1GHZ
RF6905-1X	L_1	.25	200	125	.187	.375	22	28	40	60	60	70
RF6905-2X	L_2	.25	200	125	.187	.375	22	28	40	60	60	70
RF6905-3X	Pi	.25	200	125	.187	.375	34	44	62	80	80	80
RF6905-4X	L_1	1.0	200	125	.187	.25	8	13	24	45	60	70
RF6905-5X	L_2	1.0	200	125	.187	.25	8	13	24	45	60	70
RF6905-6X	Pi	1.0	200	125	.187	.25	18	32	50	80	80	80
RF6905-7X	L_1	3.0	200	125	.187	.15	5	8	16	30	60	70
RF6905-8X	L_2	3.0	200	125	.187	.15	5	8	16	30	60	70
RF6905-9X	Pi	3.0	200	125	.187	.15	–	–	19	59	80	80
RF6905-10X	L_1	5.0	200	125	.187	.075	5	8	14	26	55	70
RF6905-11X	L_2	5.0	200	125	.187	.075	5	8	14	26	55	70
RF6905-12X	Pi	5.0	200	125	.187	.075	–	–	–	51	80	80
RF6905-13X	L_1	.25	200	125	.312	.375	22	28	40	60	60	70
RF6905-14X	L_2	.25	200	125	.312	.375	22	28	40	60	60	70
RF6905-15X	Pi	.25	200	125	.312	.375	34	44	62	80	80	80
RF6905-16X	L_1	1.0	200	125	.312	.25	8	13	24	45	60	70
RF6905-17X	L_2	1.0	200	125	.312	.25	8	13	24	45	60	70
RF6905-18X	Pi	1.0	200	125	.312	.25	18	32	50	80	80	80
RF6905-19X	L_1	3.0	200	125	.312	.15	5	8	16	30	60	70
RF6905-20X	L_2	3.0	200	125	.312	.15	5	8	16	30	60	70
RF6905-21X	Pi	3.0	200	125	.312	.15	–	–	19	59	80	80
RF6905-22X	L_1	5.0	200	125	.312	.075	5	8	14	26	55	70
RF6905-23X	L_2	5.0	200	125	.312	.075	5	8	14	26	55	70
RF6905-24X	Pi	5.0	200	125	.312	.075	–	–	–	51	80	80

THE SPRAGUE FILTER

The Sprague filter remains a popular option for replacement parts and new designs. The following pages provide design and performance details for 60 popular Sprague cylindrical-style filters. These are now included with RFI Specialty Components. All are suitable for continuous operation within the specified ambient temperature range. For applications that require intermittent duty cycles or surge conditions, contact the factory for recommendations.



WHEN CLOSER TOLERANCES ARE REQUIRED, THE PURCHASER SHOULD SECURE PRIOR APPROVAL OF THE RFI CORPORATION.



TERMINAL DRAWINGS REPRESENT STYLE AND NOT NECESSARILY RADIAL ORIENTATION. IF ORIENTATION IS CRITICAL, SUBMIT YOUR REQUIREMENTS TO THE FACTORY.

SPRAGUE FILTERS PERFORMANCE CHARACTERISTICS

1. Rating. Filters are designed for continuous operation at rated current, voltage, frequency, and temperature. A-C filters may be operated at any frequency, up to and including the rated line frequency.

2. Operating Temperature Range. The temperature ranges common to this type of filter are from −55 C to +85 C, +100 C, and +125 C. Units that do not fall in these temperature ranges may be designed upon request.

3. Insertion Loss. The tabulated insertion loss values represent minimum no-load filter performance when measured in accordance with Military Standard MIL-STD-220.

4. Dielectric Withstanding Voltage. Filters shall withstand a voltage of twice rated value for two minutes, applied between either terminal and case.

4.1 The test voltage must be applied and discharged through a resistor of at least one ohm per volt.

4.2 Types 2JX49 and 2JX83 shall withstand a voltage of 400 volts d-c.

5. Altitude. Filters shall withstand the application of 125% rated voltage at the specified altitude.

6. Terminal Strength. Filters shall withstand the application of the specified force applied to the terminal at the point where the lead from the external circuit connects to it. The force may be applied in any direction including the weakest and shall be increased gradually to the specified magnitude and held at that value for at least 30 seconds.

6.1 Any terminal that shows visible bending in the terminal-pull test shall be bent back and forth five times through an arc of 90°.

7. Heat Rise. The case temperature rise, when operated at rated current, voltage, and line frequency, shall not exceed 25 C.

8. Vibration. Filters shall withstand the vibration test as detailed in Military Specification MIL-F-15733 (Military Standard MIL-STD-202, method 204, test condition B).

9. Corrosion. Filters shall withstand the corrosion test as detailed in Military Specification MIL-F-15733 (Military Standard MIL-STD-202, method 101) for the conditions specified below:

Condition A 96 hours

10. Temperature Cycling. Filters shall withstand the temperature cycling test specified in Military Specification MIL-F-15733.

11. Immersion Cycling. Filters shall withstand the immersion cycling test of Military Specification MIL-F-15733.

12. Shock. Filters shall withstand the shock test as detailed in Military Specification MIL-F-15733 (MIL-STD-202, Method 205, test condition C.)

Catalog Number	Current in Amperes	Voltage Rating		Maximum Ambient Temperature	Maximum Altitude in Feet	Circuit Number	Max. D-C Ohms	Terminal Pull in lbs.
		D-C	A-C @ Frequency					
1JX141	0.005	200	———	85 C	80K	3	18.5	2.5
1JX15	0.03	400	———	100 C	80K	1	16.0	5.0
1JX315	0.05	50	30 @ 400 cy	85 C	80K	5	2.7	2.5
1JX152	0.05	300	———	125 C	80K	6	10.0	2.5
1JX113	0.05	500	115 @ 1000 cy	85 C	60K	6	6.8	2.5
1JX311	0.1	300	115 @ 60 cy	85 C	80K	3	4.5	1.5
1JX313	0.1	125	———	85 C	80K	3	6.1	1.5
1JX125	0.1	300	———	85 C	80K	1	3.5	1.0
1JX181	0.1	300	———	100 C	80K	3	2.8	1.5
1JX177	0.1	600	250 @ 60 cy	85 C	60K	3	8.5	5.0
1JX312	0.2	400	115 @ 60 cy	85 C	80K	3	2.9	5.0
1JX182	0.25	125	———	100 C	80K	2	0.83	1.5
1JX112	0.3	125	———	85 C	80K	6	0.41	2.5
1JX97	0.3	300	———	85 C	80K	6	2.7	2.5
1JX106	0.4	125	———	125 C	80K	6	2.0	2.5
1JX98	0.5	100	———	85 C	80K	6	2.0	2.5
1JX96	0.5	125	———	85 C	80K	3	2.5	5.0
1JX134	0.5	150	———	85 C	80K	3	2.3	5.0
1JX179	0.5	400	125 @ 60 cy	85 C	80K	3	2.4	5.0
1JX161	0.5	1000	———	85 C	40K	3	2.9	5.0
1JX92	1.0	100	———	85 C	80K	1	0.17	1.5
1JX127	1.0	100	———	85 C	80K	3	0.65	5.0
1JX314	1.0	125	———	85 C	80K	3	0.70	5.0
1JX63	1.0	300	———	85 C	80K	1	0.17	1.0
1JX165	1.0	400	125 @ 400 cy	85 C	80K	3	0.70	5.0
1JX117	1.0	300	115 @ 1600 cy	85 C	80K	3	0.50	1.0
1JX130	1.0	600	250 @ 60 cy	125 C	60K	3	0.50	2.5
2JX32	1.5	300	115 @ 1200 cy	85 C	80K	3	0.40	5.0
2JX89	1.5	50	———	85 C	80K	3	0.12	5.0
2JX49	1.5	300	125 @ 400 cy	85 C	80K	2	0.19	1.0
2JX83	1.5	300	125 @ 400 cy	85 C	80K	1	0.19	1.0
2JX51	1.5	400	115 @ 400 cy	125 C	80K	3	0.071	2.5
2JX40	2.0	50	———	85 C	80K	3	0.13	2.5
2JX27	2.0	100	———	85 C	80K	3	0.24	5.0
2JX47	2.0	100	———	85 C	80K	1	0.13	5.0
2JX48	2.0	100	———	85 C	80K	2	0.13	1.0
2JX11	2.0	100	65 @ 400 cy	100 C	80K	1	0.10	5.0
2JX90	2.0	400	115 @ 60 cy	85 C	80K	3	0.19	5.0
2JX38	2.0	400	125 @ 60 cy	85 C	80K	3	0.36	5.0
2JX44	2.0	400	115 @ 400 cy	95 C	80K	3	0.29	5.0
2JX50	2.0	600	250 @ 400 cy	85 C	60K	3	0.15	5.0
3JX39	2.5	300	125 @ 1000 cy	125 C	80K	3	0.085	3.0
3JX56	3.0	300	125 @ 60 cy	85 C	80K	3	0.10	5.0
4JX61	3.2	300	115 @ 400 cy	100 C	80K	3	0.075	5.0
4JX15	3.5	400	115 @ 1200 cy	85 C	80K	3	0.068	2.5
5JX118	5.0	100	———	85 C	80K	3	0.027	1.5
5JX130	5.0	125	———	85 C	80K	3	0.06	5.0
5JX94	5.0	400	125 @ 400 cy	85 C	80K	3	0.072	5.0
5JX100	5.0	600	250 @ 60 cy	125 C	60K	3	0.035	2.5
10JX33	10.0	400	125 @ 60 cy	85 C	80K	3	0.014	2.5
10JX78	10.0	125	———	85 C	80K	3	0.016	5.0
10JX63	10.0	400	125 @ 400 cy	85 C	80K	3	0.022	5.0
10JX34	10.0	600	250 @ 60 cy	125 C	60K	3	0.014	2.5
15JX26	15.0	400	125 @ 400 cy	105 C	80K	3	0.0074	5.0
20JX91	20.0	125	———	85 C	80K	3	0.0052	5.0
20JX35	20.0	400	125 @ 400 cy	85 C	80K	3	0.0063	5.0
20JX31	20.0	400	125 @ 400 cy	125 C	80K	3	0.008	5.0
30JX21	30.0	125	———	85 C	80K	3	0.0033	5.0
30JX25	30.0	600	250 @ 60 cy	125 C	60K	3	0.0025	5.0
50JX33	50.0	400	120 @ 400 cy	85 C	70K	3	0.002	5.0

Minimum No-Load Insertion Loss In Decibels						Body Size		Terminals		Terminal Dimensions				
.15 Mc	.5 Mc	1.0 Mc	10 Mc	100 Mc	400 Mc	Length	Dia.	Left	Right	Thd. Size	Z	A	B	C
33	33	33	40	40	40	1.250	0.670	1	2	¼-28	.201	.172	.250	.406
30	37	40	40	54	60	1.297	0.734	3	4	½-28	.437	.469	.375	.703
42	80	80	70	70	70	1.250	0.670	1	2	¼-28	.201	.125	.250	.375
60	90	90	70	70	70	1.250	0.670	1	2	¼-28	.201	.188	.250	.375
45	80	80	80	63	61	1.250	0.670	1	2	¼-28	.201	.125	.250	.406
36	65	68	80	80	80	1.875	0.625	3	6	5/16-24	.250	.344	.281	.609
56	87	87	87	80	80	2.062	0.625	3	6	5/16-24	.250	.344	.281	.578
28	50	58	44	54	60	1.093	0.562	7	8	5/16-24	.250	.296	.281	.578
42	75	80	80	74	74	1.875	0.625	7	2	5/16-24	.250	.312	.297	.469
70	80	80	80	80	80	2.281	0.875	3	4	½-28	.437	.344	.375	.703
34	66	80	66	60	60	2.218	0.670	1	2	½-28	.437	.281	.312	.578
24	44	60	53	60	60	1.437	0.562	1	6	5/16-24	.250	.188	.297	.609
40	68	85	85	85	70	1.625	0.500	1	2	¼-28	.201	.125	.250	.375
40	72	80	80	60	60	1.250	0.670	1	2	¼-28	.201	.125	.250	.406
46	84	100	70	70	70	1.250	0.670	1	2	¼-28	.201	.188	.250	.375
50	90	100	90	74	74	1.250	0.670	1	2	¼-28	.201	.125	.250	.406
67	95	95	95	90	90	2.125	0.688	5	6	½-28	.437	.469	.375	.875
80	80	80	80	80	80	2.250	1.000	5	6	½-28	.437	.469	.375	.875
80	80	100	80	80	80	2.750	1.000	5	6	½-28	.437	.469	.375	.875
60	85	85	85	85	85	2.937	0.875	3	4	½-28	.437	.344	.375	.765
33	52	60	60	80	80	1.688	0.670	7	8	5/16-24	.250	.344	.281	.594
74	100	95	80	80	80	2.438	1.000	5	6	½-28	.437	.469	.375	.875
50	82	100	80	80	80	2.188	0.750	3	4	½-28	.437	.344	.375	.766
32	52	63	66	80	80	2.656	0.670	7	8	5/16-24	.250	.344	.281	.594
50	78	90	90	90	90	2.469	0.875	3	4	½-28	.437	.344	.375	.703
45	80	80	63	50	50	1.250	1.125	1	2	7/16-20	.375	.156	.438	.579
60	91	96	75	75	75	2.688	1.000	1	2	7/16-20	.375	.234	.438	.703
52	85	100	87	86	86	2.000	0.875	1	2	7/16-20	.375	.125	.312	.438
45	75	90	90	90	90	2.062	0.750	3	4	½-28	.437	.344	.375	.766
20	38	49	70	60	60	1.188	0.562	7	8	5/16-24	.250	.312	.281	.578
20	38	49	70	60	60	1.188	0.562	7	8	5/16-24	.250	.312	.281	.578
40	70	88	90	90	90	2.062	0.670	1	2	¼-28	.201	.156	.250	.406
50	80	85	85	85	70	1.625	0.750	1	2	7/16-20	.375	.188	.438	.750
57	86	95	95	90	90	2.250	0.875	5	6	½-28	.437	.469	.375	.875
20	38	49	70	60	60	1.188	0.562	1	2	5/16-24	.250	.188	.281	.421
20	38	49	70	60	60	1.188	0.562	7	8	5/16-24	.250	.312	.281	.578
20	41	53	50	66	80	1.297	0.875	3	4	½-28	.437	.469	.375	.703
20	42	70	100	76	76	2.188	0.750	3	4	½-28	.437	.344	.375	.766
80	100	100	80	80	80	2.937	1.250	5	6	¾-20	.656	.469	.375	.875
50	81	100	85	80	80	2.000	0.875	1	2	7/16-20	.375	.188	.312	.547
57	87	100	80	90	90	3.000	1.125	3	4	⅝-24	.531	.344	.375	.765
45	74	90	80	80	80	2.031	1.000	1	2	7/16-20	.375	.188	.438	.719
42	74	89	92	84	80	3.312	0.750	5	6	½-28	.437	.453	.375	.875
46	77	95	92	80	80	2.188	1.250	1	2	⅝-24	.531	.156	.312	.515
46	76	80	80	80	80	2.438	1.000	1	2	⅜-24	.312	.188	.375	.640
49	78	96	100	85	80	2.125	0.750	3	4	½-28	.437	.312	.375	.656
60	92	100	80	80	80	2.625	0.875	3	4	½-28	.437	.344	.375	.766
54	85	94	84	80	80	3.000	1.125	3	4	⅝-24	.531	.344	.375	.703
60	90	100	80	80	80	3.438	1.250	1	2	7/16-20	.375	.218	.438	.688
44	73	90	90	90	90	2.562	1.125	1	2	7/16-20	.375	.188	.438	.703
65	95	100	100	87	80	3.000	1.125	3	4	⅝-24	.531	.344	.375	.766
60	88	100	85	85	85	3.406	1.250	3	4	⅝-24	.531	.344	.375	.703
60	90	90	90	80	80	3.750	1.500	1	2	⅝-24	.531	.218	.437	.703
38	70	80	80	80	80	3.094	1.250	9	10	¾-20	.656	.688	.375	1.062
58	86	90	90	90	84	2.938	1.250	3	4	⅝-24	.531	.344	.375	.765
54	83	100	100	100	90	3.594	1.500	9	10	¾-20	.656	.688	.375	1.062
52	82	90	90	90	90	4.000	1.500	9	10	¾-20	.656	.688	.375	1.062
64	95	100	100	90	90	3.593	1.500	9	10	¾-20	.656	.688	.375	1.062
60	80	80	80	80	80	4.000	2.188	9	10	1⅛-18	1.046	.812	.562	1.125
60	90	90	90	90	90	4.000	2.243	9	10	1⅛-18	N/A	.859	.531	1.093