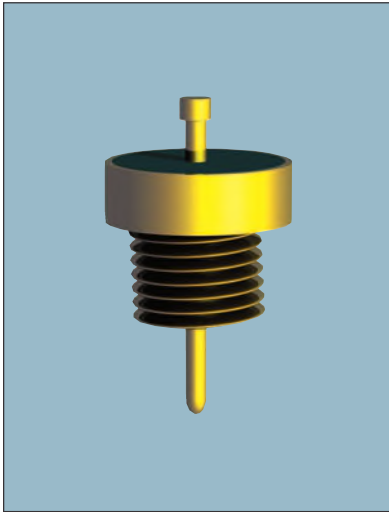


Cylindrical Style EMI Filters

BL Series – .375 Dia. – Button Epoxy Sealed – Circuits Available – C & L



APPLICATIONS

The BL series offers effective filtering from 30 KHz up through 1 GHz. It offers epoxy resin seals on both ends in order to optimize volumetric efficiency and reduce cost. Where severe moisture environments exist the slightly larger companion BK series is recommended as it incorporates a glass to metal hermetic seal at both ends. The BL series is designed for bulk-head mounting in a slotted hole with nut and lockwasher supplied. This series is ideal for low to medium impedance

circuits where large amounts of capacitance to ground can be tolerated. In the “L” section version an internal ferrite bead element provides both inductance and series resistance (lossy characteristic) which improves insertion loss at lower current ratings and provides superior transient performance.

Alternate lead configurations or special capacitance values may be ordered.

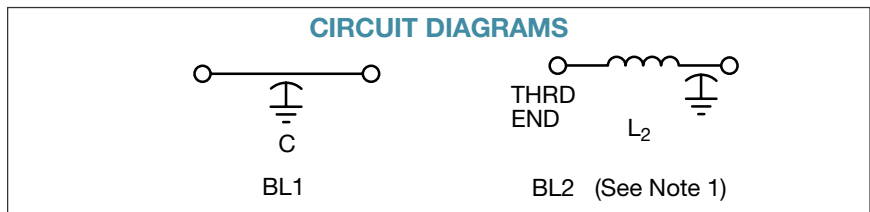
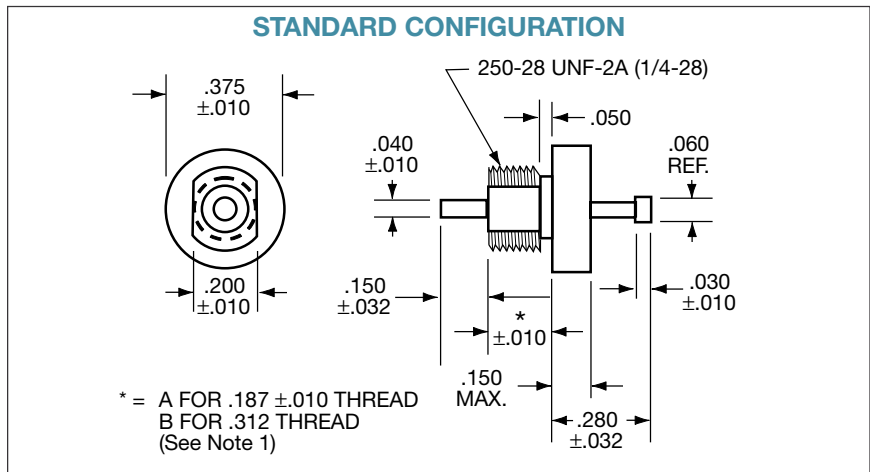
Custom packages or filter arrays utilizing the BL series can be furnished.

CHARACTERISTICS

- Internal ferrite bead provides inductance for the L-section version.
- High DC current rating: 15 Amps.

SPECIFICATIONS

- Case/Terminal Plating:
Electro-tin standard – Gold or silver available
- Material:
Case: Brass Standard – Steel available
End Seal: Epoxy
Terminals: Copper nailhead standard
- Operating Temperature Range:
-55°C to +125°C
- Electrical Characteristics:
 - Rated Voltage: See chart
 - Insulation Resistance:
 - At 25°C: 1,000 megohm-microfarad min., or 50,000 megohms min., whichever is less, at the rated DC voltage
 - At 125°C: 100 megohm-microfarad min., or 5,000 megohms min., whichever is less
 - Dielectric Withstanding Voltage (DWW):
 - R-level designs:
2.0 times rated DC voltage
 - Class B designs:
2.5 times rated DC voltage
 - Capacitance: Values listed in chart are “guaranteed minimum value” (GMV)
- Marking:
Standard Marking: AVX, AVX part number, lot code
BL2 only: Letter “L” denotes ferrite bead inductor at threaded end
See Reliability Codes section for definition of Reliability Level marking. See How to Order section for part number construction.
- Installation:
 - Mounting Torque:
44 oz-in. ± 4 oz-in.
 - Refer to “Installation, Handling, Hardware Options” section of the catalog.



millimeters (inches)

.25 (.010)	2.54 (.100)
.76 (.030)	3.81 (.150)
.81 (.032)	4.57 (.180)
1.02 (.040)	5.08 (.200)
1.52 (.060)	9.53 (.375)

(See Note 2)

Notes:

- All BL2 L-Section Filters have inductor (bead) at threaded end.
- Metric equivalent dimensions given for information only.

Cylindrical Style EMI Filters

BL Series – .375 Dia. – Button Epoxy Sealed – Circuits Available – C & L



SPECIFICATIONS

AVX P/N	CKT	CAP ¹	DC Voltage	Insertion Loss ² Per MIL-STD-220, +25°C						
				30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
BL1CA-754	C	.75	50	11	24	30	40	40	64	70
BL1CA-105	C	1.0	50	12	24	30	40	40	65	70
BL1CA-125	C	1.2	50	15	28	33	40	40	70	70
BL1CA-145	C	1.4	50	15	28	33	40	40	70	70
BL2CA-754	L2	.75	50	11	24	30	40	40	64	70
BL2CA-105	L2	1.0	50	12	24	30	40	40	65	70
BL2CA-125	L2	1.2	50	15	28	33	40	40	70	70
BL2CA-145	L2	1.4	50	15	28	33	40	40	70	70
BL1AA-504	C	.50	100	6	19	25	36	40	60	70
BL1AA-754	C	.75	100	11	24	30	40	40	64	70
BL1AA-105	C	1.0	100	12	24	30	40	40	65	70
BL1AA-125	C	1.2	100	15	28	33	40	40	70	70
BL2AA-504	L2	.50	100	6	19	25	36	40	60	70
BL2AA-754	L2	.75	100	11	24	30	40	40	64	70
BL2AA-105	L2	1.0	100	12	24	30	40	40	65	70
BL2AA-125	L2	1.2	100	15	28	33	40	40	70	70
BL1BA-103	C	.01	200	–	–	–	2	20	40	55
BL1LA-753	C	.075	200*	–	–	7	18	37	46	70
BL1LA-154	C	.15	200*	–	10	16	26	40	52	70
BL2BA-103	L2	.01	200	–	–	–	2	20	40	55
BL2LA-753	L2	.075	200*	–	–	7	18	37	51	70
BL2LA-154	L2	.15	200*	–	10	16	26	40	52	70

* Also rated 125 VAC/400 Hz

¹ Decimal point values indicate capacitance in microfarads.
Non-decimal point values indicate capacitance in picofarads.

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor
resonances and other design constraints.

Cylindrical Style EMI Filters

BK Series – .375/.410 Dia. – Button Hermetically Sealed

Circuits Available – C & L



APPLICATIONS

The BK series offers effective filtering from 500 KHz to 10 GHz. Glass sealed for hermeticity, this low profile series is impervious to high moisture, solvents, or other severe environmental conditions commonly encountered in military applications. It is designed for bulkhead mounting in a slotted hole with nut and lockwasher supplied. This series is ideal for low to medium impedance circuits where large amounts of capacitance to

ground can be tolerated. In the “L” section version an internal ferrite bead element provides both inductance and series resistance (lossy characteristic) which improves insertion loss and provides superior transient performance.

Alternate lead configurations or special capacitance values may be ordered.

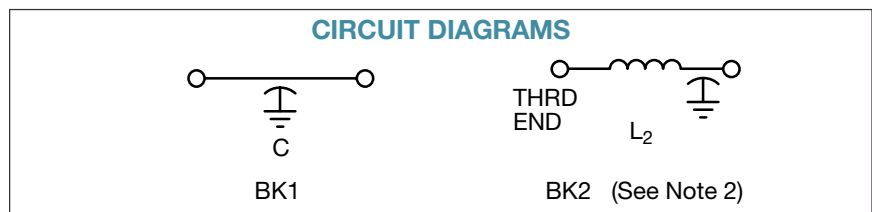
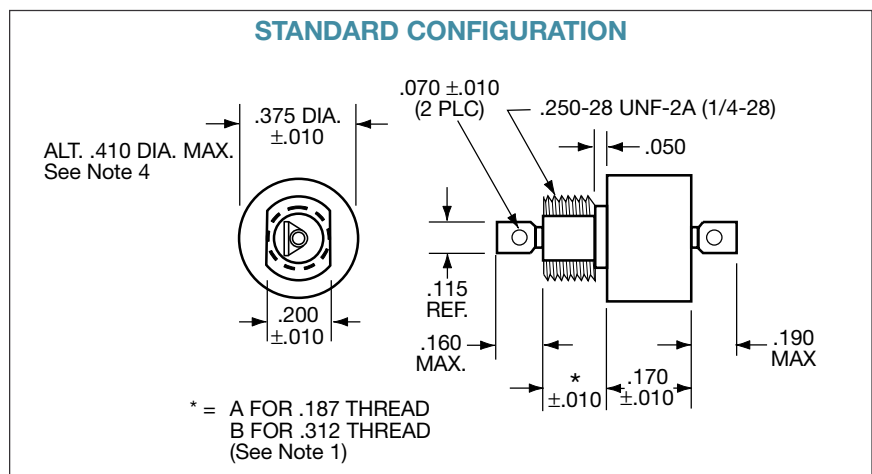
Custom packages or filter arrays utilizing the BK series can be furnished.

CHARACTERISTICS

- .410 Dia. version (AK) meets or exceeds the applicable requirements of MIL-F-28861/1. See QPL listings.
- Glass hermetic seal on both ends.
- Internal ferrite bead provides inductance for the L-section version.
- High DC current rating: 15 Amps

SPECIFICATIONS

- Case/Terminal Plating:
Electro-tin standard – Silver or gold available
- Material:
Case: Brass standard – Steel available
End Seal: Mild steel
Terminals: Nickel-iron alloy
- Operating Temperature Range:
-55°C to +125°C
- Electrical Characteristics:
 - Rated Voltage: See chart
 - Insulation Resistance:
At 25°C: 1,000 megohm-microfarad min., or 50,000 megohms, whichever is less, at the rated DC voltage
At 125°C: 100 megohm-microfarad min., or 5,000 megohms, whichever is less
 - Dielectric Withstanding Voltage (DWV):
R-level designs:
2.0 times rated DC voltage
Class B, Class S designs:
2.5 times rated DC voltage
 - Capacitance: Values listed in chart are “guaranteed minimum value” (GMV)
- Marking:
Standard Marking: AVX, AVX part number, lot code
BK2 only: Letter “L” denotes ferrite bead inductor at threaded end
See Reliability Codes section for definition of Reliability Level marking. See How to Order section for part number construction.
- Installation:
 - Mounting Torque:
44 oz-in. ± 4 oz-in.
 - Refer to “Installation, Handling, Hardware Options” section of the catalog.



millimeters (inches)	
.25 (.010)	4.75 (.187)
1.27 (.050)	4.83 (.190)
1.78 (.070)	5.08 (.200)
2.92 (.115)	7.93 (.312)
3.81 (.150)	9.53 (.375)
4.32 (.170)	— —

(See Note 3)
(See Note 1)

Notes:

1. Thread length option. Standard part numbers shown (e.g., BK1CA-103) are .187" thread length. Optional .312 length available. (e.g., BK1CB-103).
2. Ferrite bead inductor at threaded end (BK2 only).
3. Metric equivalent dimensions given for information only.
4. .410 Dia. (identified as AK) is required for all hi-rel tested parts (e.g., MIL-F-28861/1 series).

Cylindrical Style EMI Filters

BK Series – .375/.410 Dia. – Button Hermetically Sealed

Circuits Available – C & L



SPECIFICATIONS

AVX P/N	CKT	CAP ¹	DC Voltage	Insertion Loss ² Per MIL-STD-220, +25°C						
				30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
BK1CA-125	C	1.2	50	15	28	33	40	40	70	70
BK1CB-125	C	1.2	50	15	28	33	40	40	70	70
BK2CA-125	L2	1.2	50	15	28	33	40	40	70	70
BK2CB-125	L2	1.2	50	15	28	33	40	40	70	70
BK1NA-704	C	.7	70	10	24	30	40	40	64	70
BK1NB-704	C	.7	70	10	24	30	40	40	64	70
BK2NA-704	L2	.7	70	10	24	30	40	40	64	70
BK2NB-704	L2	.7	70	10	24	30	40	40	64	70
BK1AA-103	C	.01	100	–	–	–	2	20	40	55
BK1AA-454	C	.45	100	6	19	25	36	40	60	70
BK1AB-454	C	.45	100	6	19	25	36	40	60	70
BK1AA-754	C	.75	100	11	24	30	40	40	64	70
BK1AA-105	C	1.0	100	12	24	30	40	40	65	70
BK2AA-454	L2	.45	100	6	19	25	36	40	60	70
BK2AB-454	L2	.45	100	6	19	25	36	40	60	70
BK2AA-754	L2	.75	100	11	24	30	40	40	64	70
BK2AA-105	L2	1.0	100	12	24	30	40	40	65	70
BK1HA-254	C	.25	150	–	14	20	31	40	56	70
BK1HB-254	C	.25	150	–	14	20	31	40	56	70
BK2HA-254	L2	.25	150	–	14	20	31	40	56	70
BK2HB-254	L2	.25	150	–	14	20	31	40	56	70
BK1LA-753	C	.075	200*	–	–	7	18	37	46	70
BK1LA-154	C	.15	200*	–	10	16	26	40	52	70
BK1LB-154	C	.15	200*	–	10	16	26	40	52	70
BK2BA-203	L2	.02	200*	–	–	–	7	25	40	60
BK2LA-753	L2	.075	200*	–	–	7	18	37	51	70
BK2LA-154	L2	.15	200*	–	10	16	26	40	52	70
BK2LB-154	L2	.15	200*	–	10	16	26	40	52	70

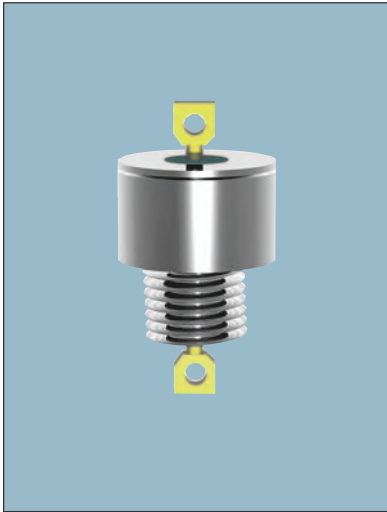
* Also rated 125 VAC/400 Hz

¹ Decimal point values indicate capacitance in microfarads.
Non-decimal point values indicate capacitance in picofarads.

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor resonances and other design constraints.

Cylindrical Style EMI Filters

CK Series – .375 Dia. – Button Hermetically Sealed – Circuits Available – C & L



APPLICATIONS

The CK series offers effective filtering from 100 KHz to 10 GHz. Glass sealed for hermeticity, this medium profile series is impervious to high moisture, solvents, or other severe environmental conditions commonly encountered in military applications. It is designed for bulkhead mounting in a slotted hole with nut and lockwasher supplied. This series is ideal for low to medium impedance circuits where large amounts of capacitance to

ground can be tolerated. In the “L” section version an internal ferrite bead element provides both inductance and series resistance (lossy characteristic) which improves insertion loss and provides superior transient performance.

Alternate lead configurations or special capacitance values may be ordered.

Custom packages or filter arrays utilizing the CK series can be furnished.

CHARACTERISTICS

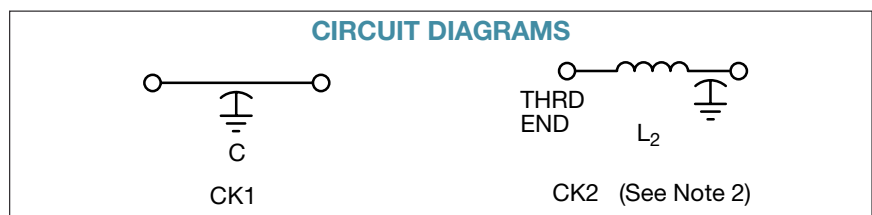
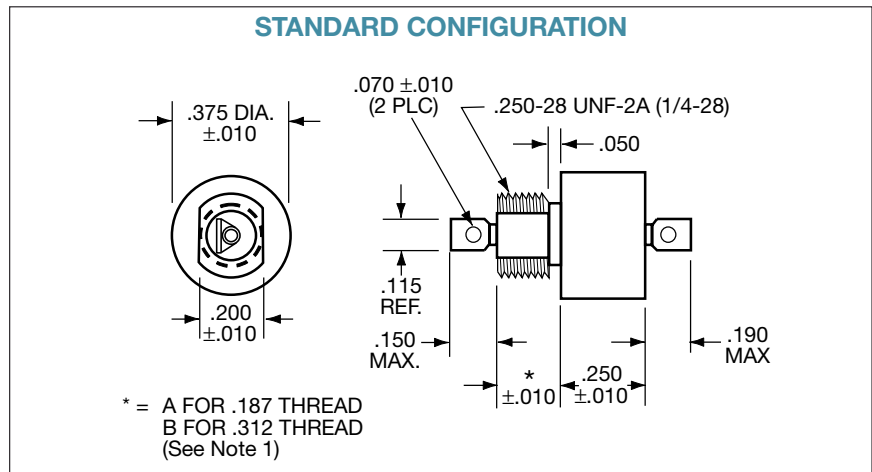
- Meets or exceeds the applicable requirements of MIL-F-15733, and the environmental/test requirements of MIL-F-28861.
- Glass hermetic seal on both ends.
- Internal ferrite bead provides inductance

for the L-section version.

- High DC current rating: 15 Amps.
- High capacitance values available.
- Conservatively rated for 125 VAC/400 Hz in certain values.

SPECIFICATIONS

- Case/Terminal Plating:
Electro-tin standard –
Silver or gold available
- Material:
Case: Brass standard – Steel available
End Seal: Mild steel
Terminals: Nickel-iron alloy
- Operating Temperature Range:
-55°C to +125°C
- Electrical Characteristics:
 - Rated Voltage: See chart
 - Insulation Resistance:
At 25°C: 1,000 megohm-microfarad min.,
or 50,000 megohms min.,
whichever is less, at the rated DC voltage
At 125°C: 100 megohm-microfarad min.,
or 5,000 megohms min.,
whichever is less
 - Dielectric Withstanding Voltage (DWV):
R-level designs:
2.0 times rated DC voltage
Class B, Class S designs:
2.5 times rated DC voltage
 - Capacitance: Values listed in chart are
“guaranteed minimum value” (GMV)
- Marking:
Standard Marking: AVX, AVX part number,
rated current, voltage, lot code
B. CK2 only: Letter “L” to denote ferrite bead
inductor at threaded end
C. See Reliability Codes section for definition
of Reliability Level marking. See How to
Order section for part number construction.
- Installation:
 - Mounting Torque: 44 oz-in. ± 4 oz-in.
 - Refer to “Installation, Handling, Hardware
Options” section of the catalog.



millimeters (inches)

0.25 (.010)	4.83 (.190)
1.27 (.050)	5.08 (.200)
1.78 (.070)	6.35 (.250)
2.92 (.115)	7.93 (.312)
3.81 (.150)	9.53 (.375)
4.75 (.187)	—

(See Note 3)

Notes:

- Thread length option.
EXAMPLE: CK1CA-103
(.187 thrd. L)
CK1CB-103
(.312 thrd. L).
- All CK2 L-Section Filters
have inductor (bead) at
threaded end.
- Metric equivalent dimen-
sions given for informa-
tion only.

Cylindrical Style EMI Filters

CK Series – .375 Dia. – Button Hermetically Sealed – Circuits Available – C & L



SPECIFICATIONS

AVX P/N	Current AMP	CKT	CAP ¹	DC Voltage	Insertion Loss ² Per MIL-STD-220, +25°C						
					30 KHz	150 KHz	500 KHz	1 MHz	10 MHz	100 MHz	1 GHz
CK1CA-754	15	C	.75	50	11	24	30	40	40	64	70
CK1CA-105	15	C	1.0	50	12	24	30	40	40	65	70
CK1CA-145	15	C	1.4	50	15	28	33	40	40	70	70
CK1CA-205	15	C	2.0	50	16	30	35	43	45	70	70
CK2CA-754	15	L2	.75	50	11	24	30	40	40	64	70
CK2CA-105	15	L2	1.0	50	12	24	30	40	40	65	70
CK2CA-145	15	L2	1.4	50	15	28	33	40	40	70	70
CK2CA-205	15	L2	2.0	50	16	30	35	43	45	70	70
CK1AA-504	15	C	.5	100	–	16	26	34	42	58	70
CK1AA-754	15	C	.75	100	11	24	30	40	40	64	70
CK1AA-105	15	C	1.0	100	12	24	30	40	40	65	70
CK1AA-185	15	C	1.8	100	15	28	33	41	45	70	70
CK2AA-504	15	L2	.5	100	–	16	26	36	44	60	70
CK2AA-754	15	L2	.75	100	11	24	30	40	40	64	70
CK2AA-105	15	L2	1.0	100	12	24	30	40	40	65	70
CK2AA-185	15	L2	1.8	100	15	28	33	41	45	70	70
CK1BA-103	15	C	.01	200	–	–	–	2	20	40	55
CK1LA-753	15	C	.075	200*	–	–	7	18	37	46	70
CK1BA-104	15	C	.1	200	–	–	14	24	38	50	70
CK1LA-154	15	C	.15	200*	–	10	16	26	40	52	70
CK1BA-304	15	C	.3	200	–	15	23	32	40	56	70
CK1BA-504	15	C	.5	200	6	19	25	36	40	58	70
CK2BA-103	15	L2	.01	200	–	–	–	2	20	40	55
CK2LA-753	15	L2	.075	200*	–	–	7	18	37	51	70
CK2BA-104	15	L2	.1	200	–	–	14	24	38	50	70
CK2LA-154	15	L2	.15	200*	–	10	16	26	40	52	70
CK2BA-304	15	L2	.3	200	–	15	23	32	40	56	70
CK2BA-504	15	L2	.5	200	6	19	25	36	40	60	70

* Also rated 125 VAC/400 Hz

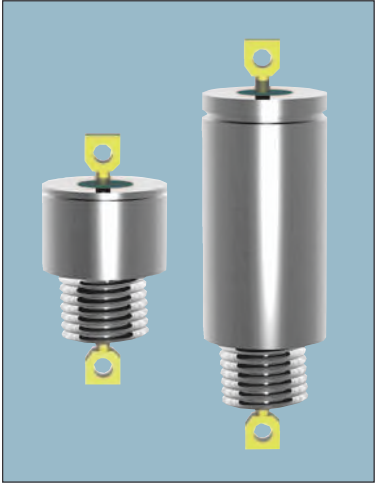
¹ Decimal point values indicate capacitance in microfarads.
Non-decimal point values indicate capacitance in picofarads.

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor
resonances and other design constraints.

Cylindrical Style EMI Filters

GK Series – .375/.410 Dia.

Hermetically Sealed – Circuits Available – C, L, π , T



APPLICATIONS

The GK series offers effective filtering from 30 KHz to 10 GHz. Glass sealed for hermeticity, this series is impervious to high moisture, solvents, or other severe environmental conditions commonly encountered in military applications. It is designed for bulkhead mounting in a slotted hole with nut and lockwasher supplied.

The “L” and “T” configurations are designed to provide effective attenuation over a wide range of circuit impedances. For current ratings under 10 Amps toroidal wound

inductor elements offer increased filter performance and protection against circuit transients. Data showing the actual inductance versus various levels of DC or AC bias current are available as well as the attenuation in any combination of source and load impedances.

Alternate lead configurations or special capacitance/inductance values may be ordered.

Custom packages or filter arrays utilizing the GK series can be furnished.

CHARACTERISTICS

- .410 Dia. version (HK) meets or exceeds the applicable requirements of MIL-F-28861/2,/3,/4,/5. See QPL listing.
- Glass hermetic seal on both ends.
- Wound toroidal inductor used in current ratings up through 5 Amps. Ferrite bead inductor used in 10 and 15 Amp designs.
- High DC current rating: 15 Amps.
- High capacitance values available.

SPECIFICATIONS

- Case/Terminal Plating:
Electro-tin standard – Silver or gold available
 - Material:
Case: Brass standard – Steel available
End Seal: Mild steel
Terminals: Nickel-iron alloy
 - Operating Temperature Range:
-55°C to +125°C
 - Electrical Characteristics:
 - Rated Voltage and Current: See chart
 - Insulation Resistance:
At 25°C: 1,000 megohm-microfarad min., or 50,000 megohms min., whichever is less, at the rated DC voltage
At 125°C: 100 megohm-microfarad min., or 5,000 megohms min., whichever is less
 - Dielectric Withstanding Voltage (DWW):
R-level designs:
2.0 times rated DC voltage
Class B, Class S designs:
2.5 times rated DC voltage
 - Capacitance: Total capacitance listed in chart for each filter type is “guaranteed minimum value” (GMV)
 - Marking:
Standard Marking: AVX, AVX part number, rated current, voltage, lot code, schematic
NOTE: Schematic to indicate location of inductor (standard or reverse) for GK2 L-Section Filters.
 - Installation:
A. Mounting Torque: 44 oz-in. \pm 4 oz-in.
B. Refer to “Installation, Handling, Hardware Options” section of the catalog.
- See Reliability Codes section for definition of Reliability Level marking. See How to Order section for part number construction.

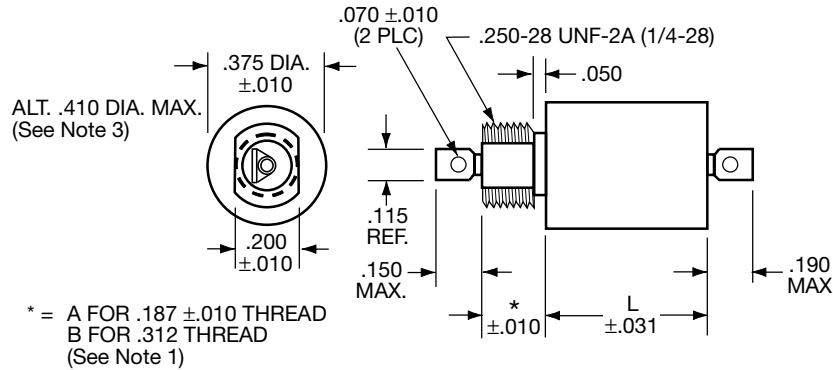
Cylindrical Style EMI Filters

GK Series – .375/.410 Dia.

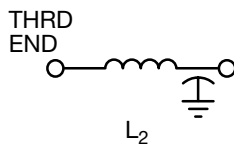
Hermetically Sealed – Circuits Available – C, L, π , T



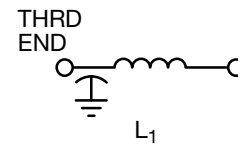
STANDARD CONFIGURATION



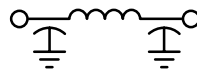
CIRCUIT DIAGRAMS



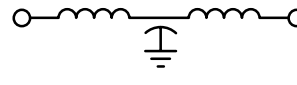
GK2 - Standard



GK2 - Reverse



GK3



GK4

millimeters (inches)

0.25 (.010)	4.75 (.187)
0.79 (.031)	4.83 (.190)
1.27 (.050)	5.08 (.200)
1.78 (.070)	7.93 (.312)
2.92 (.115)	9.53 (.375)
3.81 (.150)	13.72 (.540)

(See Note 2)

Notes:

1. Thread length option. Standard part numbers shown (e.g., GK2BA-S02) are .187" thread length. Optional .312 length available (e.g., GK2BB-S02).
2. Metric equivalent dimensions given for information only.

3. All QPL MIL-F-28861, and Hi-rel, will be supplied with .410 diameter (HK). See applicable slash sheet for mechanical dimensions.

* = A for .187 ±.010 Thread
 B for .312 Thread
 (See Note 1)

Cylindrical Style EMI Filters

GK Series – .375/.410 Dia. – Hermetically Sealed –

Circuits Available – L, π , T



SPECIFICATIONS

AVX P/N	Current AMP	CKT	L. dim	DCR	Insertion Loss ² Per MIL-STD-220, +25°C							
					10 KHz	30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
50 VDC, 1.4 μF												
GK2CA-S01	.06	L2	.540	12	16	44	70	70	70	70	70	70
GK2CA-S02	.1	L2	.540	10	15	34	62	70	70	70	70	70
GK2CA-S03	.15	L2	.540	4	7	24	52	64	70	70	70	70
GK2CA-S04	.25	L2	.540	4	6	25	53	65	70	70	70	70
GK2CA-S05	.30	L2	.540	0.5	5	16	35	45	66	70	70	70
GK2CA-S06	.45	L2	.540	0.3	5	15	33	44	65	70	70	70
GK2CA-S07	.50	L2	.540	1	5	16	41	54	70	70	70	70
GK2CA-S08	1.0	L2	.540	.25	5	15	31	42	63	70	70	70
GK2CA-S09	2.0	L2	.540	.063	5	15	28	35	51	70	70	70
GK2CA-S10	3.0	L2	.540	.027	5	15	28	34	45	70	70	70
GK2CA-S12	10	L2	.540	.008	5	15	28	34	44	52	65	65
GK3CA-P02	.1	π	.540	10	12	44	70	70	70	70	70	70
GK3CA-P04	.25	π	.540	4	8	36	70	70	70	70	70	70
GK3CA-P07	.5	π	.540	1	7	24	66	70	70	70	70	70
GK3CA-P08	1	π	.540	.25	5	15	54	70	70	70	70	70
GK3CA-P09	2	π	.540	.063	5	15	40	60	70	70	70	70
GK3CA-P10	3	π	.540	.027	5	15	30	50	70	70	70	70
GK3CA-P12	10	π	.540	.008	5	15	28	34	40	52	70	70
GK4CA-T08	1	T	1.020	.5	5	16	34	56	70	70	70	70
GK4CA-T09	2	T	1.020	.09	5	15	26	37	61	70	70	70
GK4CA-T16	4	T	1.020	.03	5	15	26	34	47	70	70	70
GK4CA-T12	10	T	1.020	.008	5	17	27	34	44	60	70	70

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor resonances and other design constraints.

NOTE: All "L2" circuits are also available as "L1".
Insertion loss and other parameters are identical.
Only the part number changes
(e.g., L2 = GK2LA-S04, L1 = GK2LA-R04).

Cylindrical Style EMI Filters

GK Series – .375/.410 Dia. – Hermetically Sealed –

Circuits Available – L, π , T



SPECIFICATIONS

AVX P/N	Current AMP	CKT	L. dim	CAP ¹	DCR	Insertion Loss ² Per MIL-STD-220, +25°C									
						15 KHz	30 KHz	50 KHz	100 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
70 VDC, .7–1.4 μF															
GK2NA-S02	.1	L2	.540	.7	1.7	9	20	29	41	48	60	70	70	70	70
GK2NA-S05	.3	L2	.540	.7	.77	6	15	23	35	42	54	70	70	70	70
GK2NA-S07	.5	L2	.540	.7	.36	5	12	19	29	36	48	69	70	70	70
GK2NA-S08	1	L2	.540	.7	.14	5	11	15	21	26	36	55	70	70	70
GK2NA-S10	3	L2	.540	.7	.05	5	10	14	20	24	31	45	70	70	70
GK2NA-S11	5	L2	.540	.7	.015	–	–	–	14	17	24	36	60	70	70
GK2NA-S12	10	L2	.540	.7	.008	–	10	14	20	24	30	40	40	64	70
GK3NA-P02	.1	π	.540	1.4	1.7	15	36	50	69	79	80	80	80	80	80
GK3NA-P05	.3	π	.540	1.4	.77	–	29	44	62	73	80	80	80	80	80
GK3NA-P07	.5	π	.540	1.4	.36	–	21	37	56	67	80	80	80	80	80
GK3NA-P08	1	π	.540	1.4	.14	–	–	20	46	57	75	80	80	80	80
GK3NA-P10	3	π	.540	1.4	.05	–	–	–	17	36	51	80	80	80	80
GK3NA-P11	5	π	.540	1.4	.015	–	–	–	–	16	38	75	80	80	80
GK3NA-P12	10	π	.540	1.4	.008	5	15	20	24	28	34	40	52	80	80
GK4NA-T08	1	T	1.020	.75	–	–	10	15	21	26	49	70	70	70	70
GK4NA-T09	2	T	1.020	.75	–	–	10	13	17	20	32	55	70	70	70
GK4NA-T16	4	T	1.020	.75	–	–	9	12	15	19	29	42	70	70	70
GK4NA-T12	10	T	1.020	.75	–	–	9	12	15	19	28	38	55	70	70

¹ Decimal point values indicate capacitance in microfarads.
Non-decimal point values indicate capacitance in picofarads.

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor resonances and other design constraints.

NOTE: All “L2” circuits are also available as “L1”.
Insertion loss and other parameters are identical.
Only the part number changes
(e.g., L2 = GK2LA-S04, L1 = GK2LA-R04).

Cylindrical Style EMI Filters

GK Series – .375/.410 Dia. – Hermetically Sealed –

Circuits Available – L, π



SPECIFICATIONS

AVX P/N	Current AMP	CKT	L. dim	CAP ¹	DCR	Insertion Loss ² Per MIL-STD-220, +25°C							
						10 KHz	30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
100 VDC, .45–1.4 μF													
GK2AA-S01	.06	L2	.540	1.4	12	15	44	70	70	70	70	70	70
GK2AA-S02	.1	L2	.540	1.4	10	12	34	62	70	70	70	70	70
GK2AA-S03	.15	L2	.540	1.4	4	7	24	52	64	70	70	70	70
GK2AA-S05	.3	L2	.540	1.4	.5	–	14	35	45	66	70	70	70
GK2AA-S06	.45	L2	.540	1.4	.3	–	14	33	44	65	70	70	70
GK2AA-S07	.5	L2	.540	1.4	1	–	16	41	54	70	70	70	70
GK2AA-S09	2	L2	.540	1.4	.063	–	15	28	35	51	70	70	70
GK2AA-S12	10	L2	.540	1.4	.008	–	14	28	33	44	52	70	70
GK3AA-P02	.1	π	.540	1.0	10	12	40	70	70	70	70	70	70
GK3AA-P07	.5	π	.540	1.0	1	–	18	60	70	70	70	70	70
GK3AA-P09	2	π	.540	1.0	.063	–	9	36	53	70	70	70	70
GK3AA-P12	10	π	1.020	1.0	.008	–	9	24	29	40	70	70	70
GK4AA-T08	1	T	1.020	.75	.5	–	10	25	49	70	70	70	70
GK4AA-T09	2	T	1.020	.75	.09	–	10	20	32	56	70	70	70
GK4AA-T16	4	T	1.020	.75	.03	–	10	19	29	42	70	70	70
GK4AA-T12	10	T	1.020	.75	.008	–	9	19	28	39	58	65	65
GK2AA-S04	.25	L2	.540	.45	1.5	–	–	38	50	60	60	60	60
GK3AA-P04	.25	π	.540	.90	1.5	–	–	64	80	80	80	80	80
GK2AA-S08	1.0	L2	.540	.45	.25	–	–	23	34	55	60	60	60
GK3AA-P08	1.0	π	.540	.90	.25	–	–	52	70	80	80	80	80
GK2AA-S10	3.0	L2	.540	.45	.05	–	–	18	27	45	60	60	60
GK3AA-P10	3.0	π	.540	.90	.05	–	–	25	51	80	80	80	80
GK2AA-S11	5.0	L2	.540	.45	.015	–	–	17	24	36	60	60	60
GK3AA-P11	5.0	π	.540	.90	.015	–	–	–	38	75	80	80	80

¹ Decimal point values indicate capacitance in microfarads.
Non-decimal point values indicate capacitance in picofarads.

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor resonances and other design constraints.

NOTE: All “L2” circuits are also available as “L1”.
Insertion loss and other parameters are identical.
Only the part number changes
(e.g., L2 = GK2LA-S04, L1 = GK2LA-R04).

Cylindrical Style EMI Filters

GK Series – .375/.410 Dia. – Hermetically Sealed –

Circuits Available – L, π , T



SPECIFICATIONS

AVX P/N	Current AMP	CKT	L. dim	CAP ¹	DCR	Insertion Loss ² Per MIL-STD-220, +25°C							
						100 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz	
150 VDC, .25–.50 μF													
GK2HA-S02	.1	L2	.540	.25	1.7	32	39	51	60	60	60	70	
GK2HA-S05	.3	L2	.540	.25	.77	25	30	44	60	60	60	70	
GK2HA-S07	.5	L2	.540	.25	.36	20	26	39	59	60	60	70	
GK2HA-S08	1.0	L2	.540	.25	.14	12	16	26	48	60	60	70	
GK2HA-S10	3.0	L2	.540	.25	.05	11	15	20	36	60	60	70	
GK2HA-S11	5.0	L2	.540	.25	.015	8	12	20	32	60	60	70	
GK2HA-S12	10.0	L2	.540	.25	.008	6	12	20	32	40	56	70	
GK3HA-P02	0.1	π	.540	.50	1.7	49	60	70	80	80	80	80	
GK3HA-P05	0.3	π	.540	.50	.77	43	53	70	80	80	80	80	
GK3HA-P07	0.5	π	.540	.50	.36	37	48	66	80	80	80	80	
GK3HA-P08	1.0	π	.540	.50	.14	28	40	58	80	80	80	80	
GK3HA-P10	3.0	π	.540	.50	.05	–	–	38	70	80	80	80	
GK3HA-P11	5.0	π	.540	.50	.015	–	–	20	63	80	80	80	
GK3HA-P12	10.0	π	.540	.50	.008	–	–	15	35	60	80	80	
GK4HA-T08	1	T	1.020	.25	.5	15	23	42	70	80	80	80	
GK4HA-T09	2	T	1.020	.25	.09	9	13	32	50	70	80	80	
GK4HA-T16	4	T	1.020	.25	.03	6	10	21	40	60	80	80	
GK4HA-T12	10	T	1.020	.25	.006	–	9	21	28	44	60	80	
200 VDC, .15–.36 μF													
AVX P/N	Current AMP	CKT	L. dim	CAP ¹	DCR	10 KHz	30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
GK2BA-S02	.1	L2	.540	.15	10	–	21	50	61	70	70	70	70
GK2BA-S04	.25	L2	.540	.15	.4	–	11	39	51	70	70	70	70
GK2BA-S07	.5	L2	.540	.15	1	–	3	29	41	63	70	70	70
GK2BA-S08	1	L2	.540	.15	.25	–	–	18	28	49	70	70	70
GK2BA-S09	2	L2	.540	.15	.063	–	–	15	21	38	70	70	70
GK2BA-S10	3	L2	.540	.15	.027	–	–	15	21	31	70	70	70
GK2BA-S12	10	L2	.540	.15	.008	–	–	15	21	31	51	60	60
GK3BA-P02	.1	π	.540	.36	10	–	21	61	70	70	70	70	70
GK3BA-P04	.25	π	.540	.36	4	–	10	52	68	70	70	70	70
GK3BA-P07	.5	π	.540	.36	1	–	–	44	63	70	70	70	70
GK3BA-P08	1	π	.540	.36	.25	–	–	30	46	70	70	70	70
GK3BA-P09	2	π	.540	.36	.063	–	–	16	33	63	70	70	70
GK3BA-P10	3	π	.540	.36	.027	–	–	–	21	55	70	70	70
GK3BA-P12	10	π	.540	.36	.008	–	–	–	20	30	60	70	70
GK4BA-T08	1	T	1.020	.15	.5	–	3	17	42	70	70	70	70
GK4BA-T09	2	T	1.020	.15	.09	–	–	12	24	48	70	70	70
GK4BA-T16	4	T	1.020	.15	.03	–	–	12	21	34	70	70	70
GK4BA-T12	10	T	1.020	.15	.008	–	3	12	21	31	50	60	60

¹ Decimal point values indicate capacitance in microfarads. Non-decimal point values indicate capacitance in picofarads.

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor resonances and other design constraints.

NOTE: All “L2” circuits are also available as “L1”. Insertion loss and other parameters are identical.
Only the part number changes (e.g., L2 = GK2LA-S04, L1 = GK2LA-R04).

Cylindrical Style EMI Filters

GK Series – .375/.410 Dia. – Hermetically Sealed –

Circuits Available – L, π , T



SPECIFICATIONS

AVX P/N	Current AMP	CKT	L. dim	CAP ¹	DCR	Insertion Loss ² Per MIL-STD-220, +25°C							
						10 KHz	30 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
200 VDC (125 VAC/400 Hz) .15–.30 μF													
GK2LA-S02	.1	L2	.540	.15	10	–	14	42	54	70	70	70	70
GK2LA-S07	.5	L2	.540	.15	1	–	–	23	35	56	70	70	70
GK2LA-S09	2	L2	.540	.15	.063	–	–	8	14	30	70	70	70
GK2LA-S12	10	L2	.540	.15	.008	–	–	8	14	25	45	60	60
GK3LA-P02	.1	π	.540	.3	10	–	21	60	70	70	70	70	70
GK3LA-P07	.5	π	.540	.3	1	–	–	40	56	70	70	70	70
GK3LA-P10	3	π	.540	.3	.027	–	–	–	25	54	70	70	70
GK3LA-P12	10	π	.540	.3	.008	–	–	–	20	30	70	70	70
GK2LA-S04	.25	L2	.540	.15	1.5	–	6	28	40	60	60	60	70
GK2LA-S08	1	L2	.540	.15	.25	–	–	13	24	45	60	60	70
GK2LA-S10	3	L1	.540	.15	.05	–	–	8	16	30	60	60	70
GK2LA-S11	5	L2	.540	.15	.015	–	–	8	14	26	55	55	70
GK3LA-P04	.25	π	.540	.3	1.5	–	8	44	62	80	80	80	80
GK3LA-P08	1	π	.540	.3	.25	–	–	32	50	80	80	80	80
GK3LA-P10	3	π	.540	.3	.05	–	–	–	19	59	80	80	80
GK3LA-P11	5	π	.540	.3	.015	–	–	–	–	51	80	80	80
GK4LA-T08	1	T	1.020	.15	.5	–	–	10	36	66	70	70	70
GK4LA-T09	2	T	1.020	.15	.09	–	–	7	18	41	70	70	70
GK4LA-T16	4	T	1.020	.15	.03	–	–	8	15	27	70	70	70
GK4LA-T12	10	T	1.020	.15	.008	–	–	8	15	25	70	70	70

¹ Decimal point values indicate capacitance in microfarads.
Non-decimal point values indicate capacitance in picofarads.

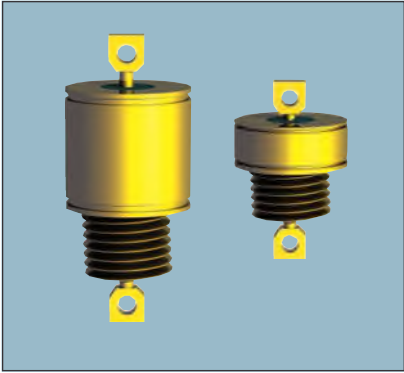
² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor resonances and other design constraints.

NOTE: All “L2” circuits are also available as “L1”.
Insertion loss and other parameters are identical.
Only the part number changes
(e.g., L2 = GK2LA-S04, L1 = GK2LA-R04).

Cylindrical Style EMI Filters

JD Series – .690 Dia.

Hermetically Sealed – Circuits Available – C, L, π , T



APPLICATIONS

The JD series offers effective filtering from 14 KHz to 10 GHz. The large diameter, increased length, restricted capacitance values and conservative dielectrics of the JD series are particularly important design features for 400 Hz AC applications where high reactive currents and the resultant heat dissipation must be controlled. Glass sealed on both ends for hermeticity, this series is impervious to high moisture, solvents, or other severe environmental conditions commonly encountered in military applications. It is designed for bulkhead mounting in a slotted hole with nut and lockwasher supplied.

The 230 VAC “T” section style is uniquely capable of handling very high pulse inrush currents or overvoltage conditions typical of EMP.

In addition, transient voltage suppression devices can be added to any of the JD circuit designs to provide complete circuit protection against EMP, lightning, or voltage spikes such as MIL-STD-704.

These devices when combined with high frequency attenuation characteristics of the discoidal capacitor and toroidal

inductors offer significant performance advantages by suppressing and absorbing the EMP pulse over a very broad spectral range. Very high pulse currents will occur within the EMI filter, however, reradiation to sensitive electronic circuits is prevented by the fully shielded case design. In some cases a slight increase in the case length of the filter is required to provide space for the transient suppression device.

The “L”, and the “T” designs are designed to provide effective attenuation over a wide range of circuit impedances. For current ratings under 15 Amps toroidal wound inductor elements offer increased filter performance and protection against circuit transients. Data showing the actual inductance versus various levels of DC or AC bias current are available as well as the attenuation in any combination of source and load impedance.

Alternate lead configurations or special capacitance/inductance values may be ordered.

Custom packages or filter arrays utilizing the JD series can be furnished.

CHARACTERISTICS

- Designed to meet the requirements of DESC drawings 84083, 84084 and MIL-F-28861/16 and /17.
- Glass hermetic seal on both ends.
- Wound toroidal inductor used in designs up to 10 Amps. 15 Amp designs incorporate ferrite bead inductor.
- Superior heat dissipation for both 125 VAC and 230 VAC designs.

SPECIFICATIONS

- Case/Terminal Plating:
Electro-tin standard –
Silver or gold available
- Material:
Case: Brass standard – Steel available
End Seal: Mild steel
Terminals: Nickel-iron alloy
- Operating Temperature Range:
-55°C to +125°C
- Electrical Characteristics:
 - Rated Voltage:
300 VDC/125 VAC, 400 Hz or
400 VDC/230 VAC, 400 Hz
 - Current Rating - see chart
- Insulation Resistance:
At 25°C: 1,000 megohm-microfarad
min., or 50,000 megohms
min., whichever is less, at
the rated DC voltage
At 125°C: 100 megohm-microfarad
min., or 5,000 megohms
min., whichever is less
- Dielectric Withstanding Voltage
(DWW):
R-level designs:
2.0 times rated DC voltage
Class B, Class S designs:
2.5 times rated DC voltage
- Capacitance: Total capacitance listed in
chart for each filter type is “guaranteed
minimum value” (GMV)
- Marking:
Standard Marking: AVX, AVX part
number, rated voltage, current, lot
number, schematic
NOTE: Schematic to indicate location of
inductor (standard or reverse) for
JD2 L-Section Filters.
See Reliability Codes section for
definition of Reliability Level marking.
See How to Order section for part
number construction.
- Installation:
 - Mounting Torque: 60 oz-in. \pm 4 oz-in.
 - Refer to “Installation and Handling”
section of Filter Design Guide

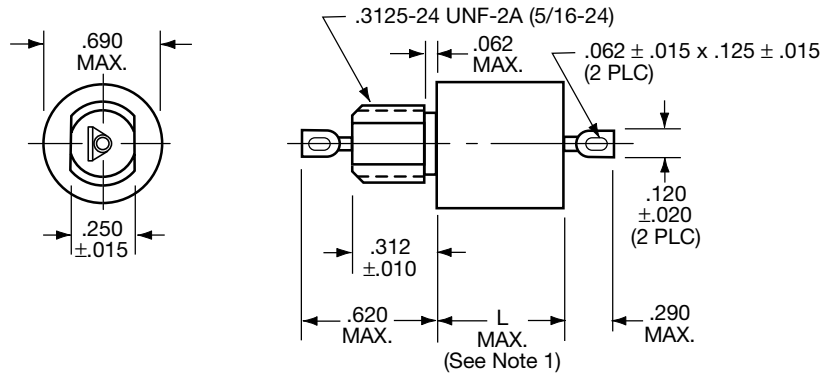
Cylindrical Style EMI Filters

JD Series – .690 Dia. – Hermetically Sealed –

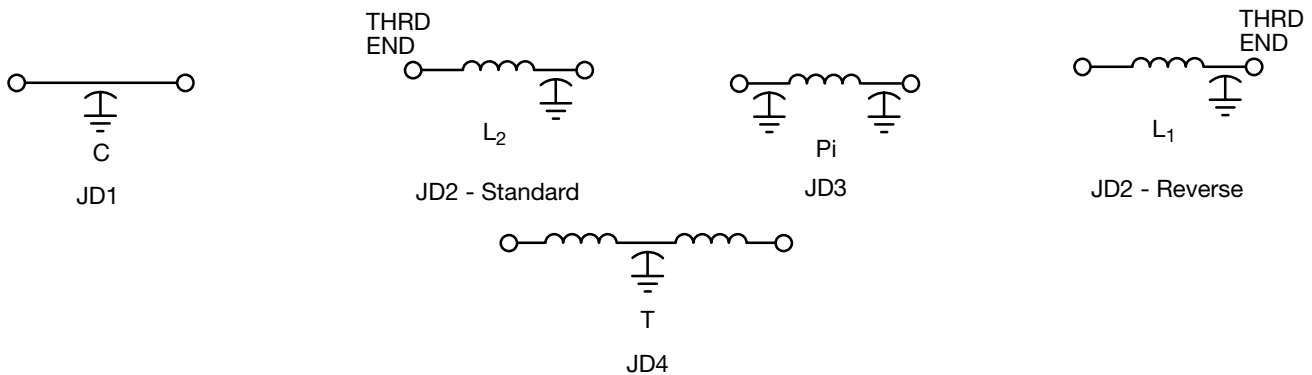
Circuits Available – C, L, π , T



STANDARD CONFIGURATION



CIRCUIT DIAGRAMS



millimeters (inches)

0.08 (.003)	6.35 (.250)
0.13 (.005)	7.37 (.290)
0.18 (.007)	7.92 (.312)
0.25 (.010)	9.53 (.375)
0.38 (.015)	10.67 (.420)
0.51 (.020)	11.18 (.440)
0.56 (.022)	15.75 (.620)
1.14 (.045)	17.27 (.680)
1.57 (.062)	17.78 (.700)
2.36 (.093)	26.92 (1.060)
3.05 (.120)	30.61 (1.205)
3.18 (.125)	33.02 (1.300)

(See Note 2)

MIL-F-28861/17
(See P/N Table)

Dash No.	L Dimension Max.	Weight (grams) Max.
001	.700	18.0
002	1.060	20.0
003	1.060	20.0
004	1.060	20.0
005	1.060	20.0
006	1.060	20.0
007	1.060	20.0
008	1.060	20.0
009	1.060	20.0
010	1.060	20.0
011	1.060	20.0
012	1.205	29.0
013	1.205	29.0
014	1.205	29.0
015	1.205	29.0
016	1.205	29.0
017	1.300	29.0
018	1.300	29.0
019	1.300	29.0

MIL-F-28861/16
(See P/N Table)

Dash No.	L Dimension Max.
001	.700
002 through 011	1.060
012 through 016	1.205
017 through 019	1.300

Notes:

1. Refer to Part Number Table for L-Max for specific filter.
2. Metric equivalent dimensions given for information only.
3. All dimensions for JD series filters established per MIL-F-28861/16 and /17, and DESC 84083 and 84084 requirements.

Cylindrical Style EMI Filters

JD Series – .690 Dia. – Hermetically Sealed –

Circuits Available – C, L, π , T



SPECIFICATIONS

AVX P/N	Current AMP	CKT	CAP ¹	DC Voltage	DCR	L. dim	Insertion Loss ² Per MIL-STD-220, +25°C						
							50 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
100 VDC, 1.2–2.8 μF													
JD1AB-125	15	C	1.2	100	.008	.700	16	27	34	43	60	60	60
JD1AB-704	15	C	1.2	100	.008	.700	10	19	28	40	50	60	60
JD2AB-S07	.5	L2	1.4	100	.3	1.060	21	40	58	70	70	70	70
JD2AB-S08	1	L2	1.4	100	.21	1.060	19	37	55	70	70	70	70
JD2AB-S10	3	L2	1.4	100	.03	1.060	16	26	37	55	70	70	70
JD2AB-S11	5	L2	1.4	100	.007	1.060	15	25	34	46	70	70	70
JD2AB-S12	10	L2	1.4	100	.006	1.060	15	24	34	44	70	70	70
JD3AB-P07	.5	π	2.8	100	.3	1.205	40	70	80	80	80	80	80
JD3AB-P08	1	π	2.8	100	.21	1.205	35	68	80	80	80	80	80
JD3AB-P10	3	π	2.8	100	.03	1.205	13	43	73	80	80	80	80
JD3AB-P11	5	π	2.8	100	.007	1.205	–	26	63	80	80	80	80
JD3AB-P12	10	π	2.8	100	.006	1.205	20	30	40	70	70	80	80
JD4AB-T08	1	T	1.4	100	.5	1.400	21	48	70	70	70	70	70
JD4AB-T09	2	T	1.4	100	.09	1.400	15	26	44	70	70	70	70
JD4AB-T16	4	T	1.4	100	.03	1.400	15	24	35	50	70	70	70
JD4AB-T12	10	T	1.4	100	.005	1.400	14	24	34	44	60	70	70
200 VDC, .45–.9 μF													
JD1BB-904	15	C	.9	200	.006	.700	12	21	30	40	53	60	60
JD1BB-454	15	C	.45	200	.006	.700	6	16	24	34	51	60	60
JD2BB-S07	.5	L2	.45	200	.3	1.060	10	30	48	65	70	70	70
JD2BB-S08	1	L2	.45	200	.21	1.060	8	28	45	65	70	70	70
JD2BB-S10	3	L2	.45	200	.03	1.060	6	16	28	45	60	70	70
JD2BB-S11	5	L2	.45	200	.007	1.060	6	14	24	36	52	70	70
JD2BB-S12	10	L2	.45	200	.006	1.060	6	15	24	34	50	70	70
JD3BB-P07	.5	π	.9	200	.3	1.205	15	50	70	80	80	80	80
JD3BB-P08	1	π	.9	200	.21	1.205	11	46	70	80	80	80	80
JD3BB-P10	3	π	.9	200	.03	1.205	–	18	50	80	80	80	80
JD3BB-P11	5	π	.9	200	.007	1.205	–	13	40	70	80	80	80
JD3BB-P12	10	π	.9	200	.006	1.205	9	20	30	40	55	80	80
JD4BB-T08	1	T	.45	200	.3	1.400	18	50	70	80	80	80	80
JD4BB-T09	2	T	.45	200	.21	1.400	12	48	70	80	80	80	80
JD4BB-T16	4	T	.45	200	.03	1.400	–	18	24	42	80	80	80
JD4BB-T12	10	T	.45	200	.006	1.400	–	12	22	34	70	80	80

¹ Decimal point values indicate capacitance in microfarads.
Non-decimal point values indicate capacitance in picofarads.

² Insertion loss limits are based on theoretical values.
Actual measurements may vary due to internal capacitor resonances and other design constraints.

NOTE: All “L2” circuits are also available as “L1”.
Insertion loss and other parameters are identical.
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L1 = GK2LA-R04).

Cylindrical Style EMI Filters

JD Series – .690 Dia. – Hermetically Sealed – Circuits Available – C, L, π , T



SPECIFICATIONS

AVX P/N	Current AMP	CKT	CAP ¹	DC Voltage	DCR	L. dim	Insertion Loss ² Per MIL-STD-220, +25°C						
							50 KHz	150 KHz	300 KHz	1 MHz	10 MHz	100 MHz	1 GHz
300 VDC (125 VAC/400Hz*), .3–.36 μF													
JD1LB-304	15	C	.3	300	.008	.700	7	16	22	32	46	58	70
JD2LB-S07	.5	L2	.3	300	.33	1.060	13	28	40	60	60	70	70
JD2LB-S08	1	L2	.3	300	.15	1.060	6	24	37	56	60	70	70
JD2LB-S10	3	L2	.3	300	.026	1.060	7	17	24	42	70	70	70
JD2LB-S11	5	L2	.3	300	.013	1.060	7	16	22	34	68	70	70
JD2LB-S12	10	L2	.3	300	.008	1.060	7	16	20	30	56	70	70
JD3LB-P07	.5	π	.36	300	.33	1.205	14	44	62	80	80	80	80
JD3LB-P08	1	π	.36	300	.15	1.205	–	37	56	80	80	80	80
JD3LB-P10	3	π	.36	300	.026	1.205	–	18	40	70	80	80	80
JD3LB-P11	5	π	.36	300	.013	1.205	–	–	25	60	80	80	80
JD3LB-P12	10	π	.36	300	.008	1.205	–	–	–	50	80	80	80
JD4LB-T08	1	T	.3	300	.07	1.400	6	18	28	58	70	70	70
JD4LB-T09	2	T	.3	300	.05	1.400	6	16	22	37	70	70	70
JD4LB-T16	4	T	.3	300	.03	1.400	6	16	20	34	70	70	70
JD4LB-T12	10	T	.3	300	.008	1.400	–	–	19	30	48	60	70
400 VDC (230 VAC/400Hz*), .15–.2 μF													
JD1EB-154	15	C	.15	400	.008	.700	–	10	16	26	40	52	70
JD2EB-S07	.5	L2	.15	400	.33	1.060	5	24	32	50	60	70	70
JD2EB-S08	1	L2	.15	400	.15	1.060	–	19	30	46	60	70	70
JD2EB-S10	3	L2	.15	400	.026	1.060	–	11	19	36	60	70	70
JD2EB-S11	5	L2	.15	400	.013	1.060	–	10	16	28	54	70	70
JD2EB-S12	10	L2	.15	400	.008	1.060	–	10	16	25	48	70	70
JD3EB-P07	.5	π	.2	400	.33	1.205	–	34	52	80	80	80	80
JD3EB-P08	1	π	.2	400	.15	1.205	–	27	46	74	80	80	80
JD3EB-P10	3	π	.2	400	.026	1.205	–	–	30	60	80	80	80
JD3EB-P11	5	π	.2	400	.013	1.205	–	–	12	50	80	80	80
JD3EB-P12	10	π	.2	400	.008	1.205	–	–	–	30	80	80	80
JD4EB-T08	1	T	.15	400	.07	1.300	–	12	25	48	70	70	70
JD4EB-T09	2	T	.15	400	.05	1.300	–	10	18	40	64	70	70
JD4EB-T16	4	T	.15	400	.03	1.300	–	10	16	31	58	70	70
JD4EB-T12	10	T	.15	400	.008	1.300	–	–	15	25	45	60	70

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L1 = GK2LA-R04).