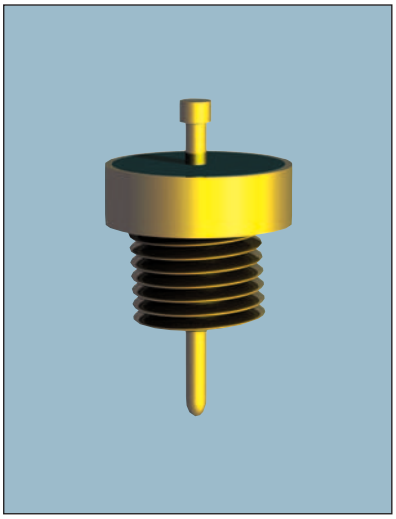
Cylindrical Style EMI Filters
BL Series – .375 Dia. – Button Epoxy Sealed – Circuits Available – C & L



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 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 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.

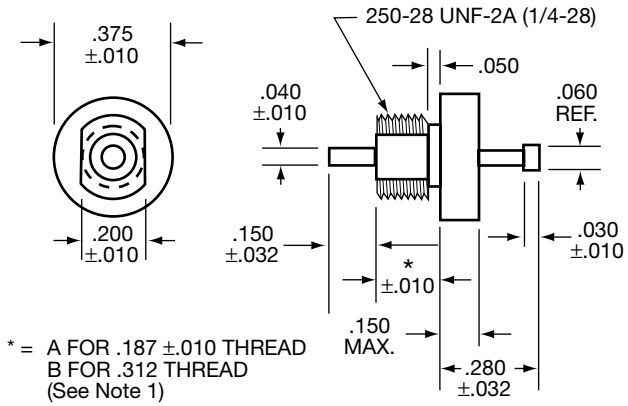
CHARACTERISTICS

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

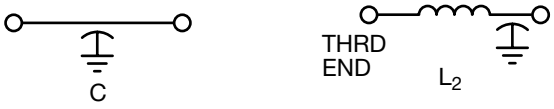
SPECIFICATIONS

1. Case/Terminal Plating:
   Electro-tin standard – Gold or silver available
2. Material:
   Case: Brass Standard – Steel available
   End Seal: Epoxy
   Terminals: Copper nailhead standard
3. Operating Temperature Range:
   -55°C to +125°C
4. Electrical Characteristics:
   A. Rated Voltage: See chart
   B. 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
   C. Dielectric Withstanding Voltage (DWV):
   R-level designs:
   2.0 times rated DC voltage
   Class B designs:
   2.5 times rated DC voltage
   D. Capacitance: Values listed in chart are "guaranteed minimum value" (GMV)
5. 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.
6. Installation:
   A. Mounting Torque:
   44 oz-in. ± 4 oz-in.
   B. Refer to "Installation, Handling, Hardware Options" section of the catalog.

STANDARD CONFIGURATION



CIRCUIT DIAGRAMS



BL1 BL2 (See Note 1)

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:

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

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SPECIFICATIONS

				Insertion Loss[2] Per MIL-STD-220, +25°C						
AVX P/N	CKT	CAP[1]	DC Voltage	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.