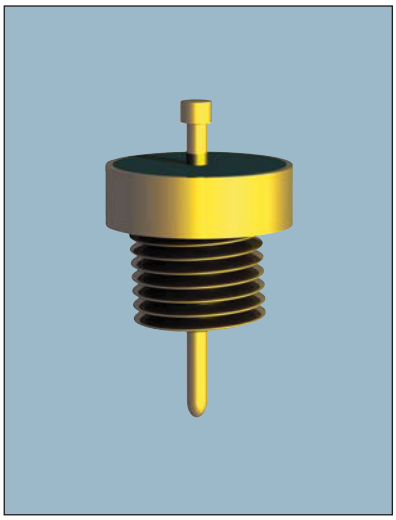
# Cylindrical Style EMI Filters
## BL Series – .375 Dia. – Button Epoxy Sealed – Circuits Available – C & L



## 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.

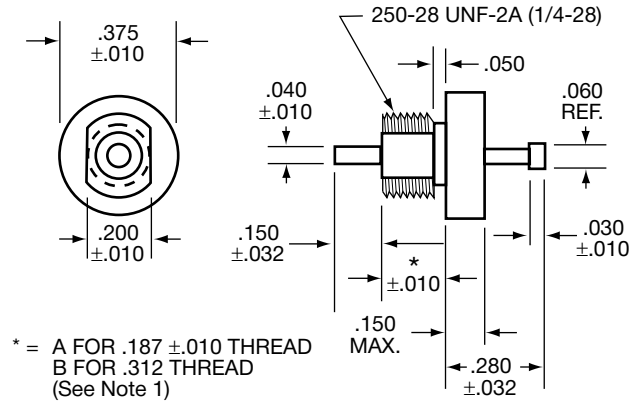
## CHARACTERISTICS

- 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 100,000 megohms min., whichever is less
      At 125°C: 100 megohm-microfarad min., or 10,000 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: KYOCERA AVX, KYOCERA 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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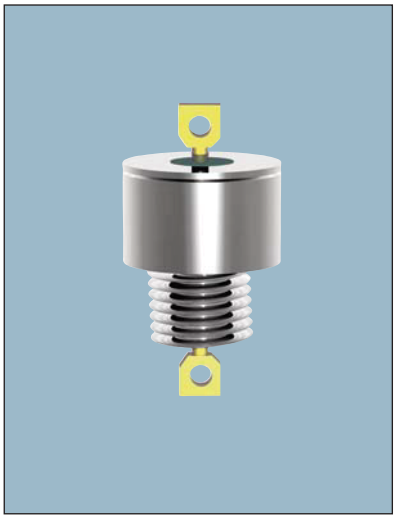
## SPECIFICATIONS

| | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| P/N | CKT | CAP (µF) | DC Voltage | 30 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| BL1CA-754 | C | 0.750 | 50 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| BL1CA-105 | C | 1.000 | 50 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| BL1CA-125 | C | 1.200 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BL1CA-145 | C | 1.400 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BL2CA-754 | L2 | 0.750 | 50 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| BL2CA-105 | L2 | 1.000 | 50 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| BL2CA-125 | L2 | 1.200 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BL2CA-145 | L2 | 1.400 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BL1AA-504 | C | 0.500 | 100 | 6 | 19 | 25 | 36 | 40 | 60 | 70 |
| BL1AA-754 | C | 0.750 | 100 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| BL1AA-105 | C | 1.000 | 100 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| BL1AA-125 | C | 1.200 | 100 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BL2AA-504 | L2 | 0.500 | 100 | 6 | 19 | 25 | 36 | 40 | 60 | 70 |
| BL2AA-754 | L2 | 0.750 | 100 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| BL2AA-105 | L2 | 1.000 | 100 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| BL2AA-125 | L2 | 1.200 | 100 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BL1BA-103 | C | 0.010 | 200 | – | – | – | 2 | 20 | 40 | 55 |
| BL1LA-753 | C | 0.075 | 200* | – | – | 7 | 18 | 37 | 46 | 70 |
| BL1LA-154 | C | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |
| BL2BA-103 | L2 | 0.010 | 200 | – | – | – | 2 | 20 | 40 | 55 |
| BL2LA-753 | L2 | 0.075 | 200* | – | – | 7 | 18 | 37 | 51 | 70 |
| BL2LA-154 | L2 | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |

* Also rated 125 VAC/400 Hz

[1] 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.

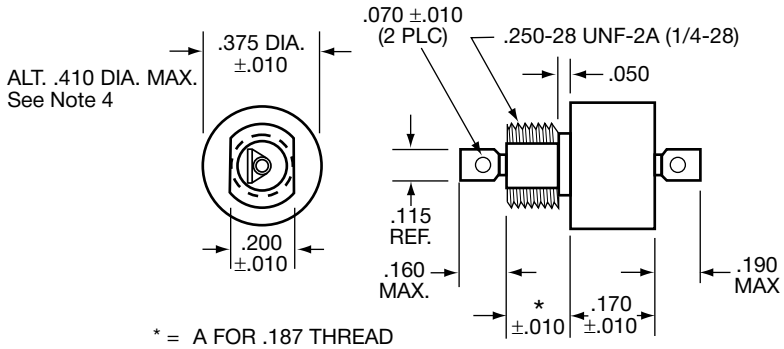
## CHARACTERISTICS

- .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

1. Case/Terminal Plating:
   Electro-tin standard – Silver or gold available
2. Material:
   Case: Brass Standard – Steel available
   End Seal: Mild steel
   Terminals: Nickel-iron alloy
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 100,000 megohms min., whichever is less
   At 125°C: 100 megohm-microfarad min., or 10,000 megohms min., whichever is less
   C. Dielectric Withstanding Voltage (DWV):
   R-level designs:
   2.0 times rated DC voltage
   Class B, Class S designs:
   2.5 times rated DC voltage
   D. Capacitance: Values listed in chart are "guaranteed minimum value" (GMV)
5. Marking:
   Standard Marking: KYOCERA AVX, KYOCERA 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.
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




BK1 BK2 (See Note 2)

**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).



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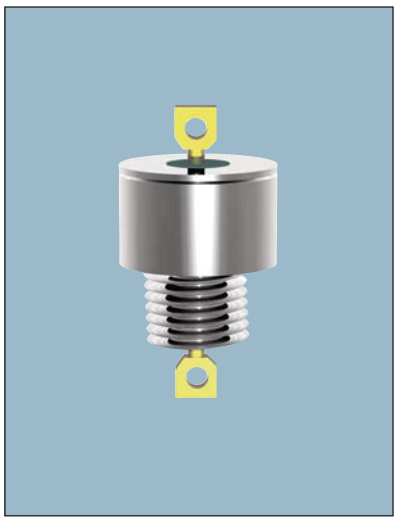
## SPECIFICATIONS

| | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| P/N | CKT | CAP (µF) | DC Voltage | 30 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| BK1CA-125 | C | 1.200 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BK1CB-125 | C | 1.200 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BK2CA-125 | L2 | 1.200 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BK2CB-125 | L2 | 1.200 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| BK1NA-704 | C | 0.700 | 70 | 10 | 24 | 30 | 40 | 40 | 64 | 70 |
| BK1NB-704 | C | 0.700 | 70 | 10 | 24 | 30 | 40 | 40 | 64 | 70 |
| BK2NA-704 | L2 | 0.700 | 70 | 10 | 24 | 30 | 40 | 40 | 64 | 70 |
| BK2NB-704 | L2 | 0.700 | 70 | 10 | 24 | 30 | 40 | 40 | 64 | 70 |
| BK1AA-103 | C | 0.010 | 100 | – | – | – | 2 | 20 | 40 | 55 |
| BK1AA-454 | C | 0.450 | 100 | 6 | 19 | 25 | 36 | 40 | 60 | 70 |
| BK1AB-454 | C | 0.450 | 100 | 6 | 19 | 25 | 36 | 40 | 60 | 70 |
| BK1AA-754 | C | 0.750 | 100 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| BK1AA-105 | C | 1.000 | 100 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| BK2AA-454 | L2 | 0.450 | 100 | 6 | 19 | 25 | 36 | 40 | 60 | 70 |
| BK2AB-454 | L2 | 0.450 | 100 | 6 | 19 | 25 | 36 | 40 | 60 | 70 |
| BK2AA-754 | L2 | 0.750 | 100 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| BK2AA-105 | L2 | 1.000 | 100 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| BK1HA-254 | C | 0.250 | 150 | – | 14 | 20 | 31 | 40 | 56 | 70 |
| BK1HB-254 | C | 0.250 | 150 | – | 14 | 20 | 31 | 40 | 56 | 70 |
| BK2HA-254 | L2 | 0.250 | 150 | – | 14 | 20 | 31 | 40 | 56 | 70 |
| BK2HB-254 | L2 | 0.250 | 150 | – | 14 | 20 | 31 | 40 | 56 | 70 |
| BK1LA-753 | C | 0.075 | 200* | – | – | 7 | 18 | 37 | 46 | 70 |
| BK1LA-154 | C | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |
| BK1LB-154 | C | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |
| BK2BA-203 | L2 | 0.020 | 200* | – | – | – | 7 | 25 | 40 | 60 |
| BK2LA-753 | L2 | 0.075 | 200* | – | – | 7 | 18 | 37 | 51 | 70 |
| BK2LA-154 | L2 | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |
| BK2LB-154 | L2 | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |

* Also rated 125 VAC/400 Hz

[1] 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.

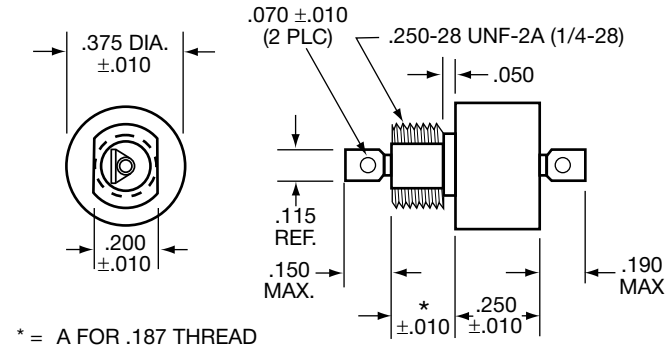
## CHARACTERISTICS

- Meets or exceeds the applicable requirements of MIL-F-15733, and the environmental/test requirements of MILF-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

1. Case/Terminal Plating:
   Electro-tin standard –
   Silver or gold available
2. Material:
   Case: Brass standard – Steel available
   End Seal: Mild steel
   Terminals: Nickel-iron alloy
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 100,000 megohms min., whichever is less
   At 125°C: 100 megohm-microfarad min., or 10,000 megohms min., whichever is less
   C. Dielectric Withstanding Voltage (DWV):
   R-level designs:
   2.0 times rated DC voltage
   Class B, Class S designs:
   2.5 times rated DC voltage
   D. Capacitance: Values listed in chart are "guaranteed minimum value" (GMV)
5. Marking:
   Standard Marking: KYOCERA AVX, KYOCERA 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.
6. Installation:
   A. Mounting Torque: 44 oz-in. ± 4 oz-in.
   B. Refer to "Installation, Handling, Hardware Options" section of the catalog.

### STANDARD CONFIGURATION




* = A FOR .187 THREAD
B FOR .312 THREAD
(See Note 1)

### CIRCUIT DIAGRAMS




CK1 CK2 (See Note 2)

**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:**

1. Thread length option.
   EXAMPLE: CK1CA-103 (.187 thrd. L)
   CK1CB-103 (.312 thrd. L).
2. All CK2 L-Section Filters have inductor (bead) at threaded end.
3. Metric equivalent dimensions given for information only.



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

## SPECIFICATIONS

| | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | CAP (µF) | DC Voltage | 30 KHz | 150 KHz | 500 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| CK1CA-754 | 15 | C | 0.750 | 50 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| CK1CA-105 | 15 | C | 1.000 | 50 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| CK1CA-145 | 15 | C | 1.400 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| CK1CA-205 | 15 | C | 2.000 | 50 | 16 | 30 | 35 | 43 | 45 | 70 | 70 |
| CK2CA-754 | 15 | L2 | 0.750 | 50 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| CK2CA-105 | 15 | L2 | 1.000 | 50 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| CK2CA-145 | 15 | L2 | 1.400 | 50 | 15 | 28 | 33 | 40 | 40 | 70 | 70 |
| CK2CA-205 | 15 | L2 | 2.000 | 50 | 16 | 30 | 35 | 43 | 45 | 70 | 70 |
| CK1AA-504 | 15 | C | 0.500 | 100 | – | 16 | 26 | 34 | 42 | 58 | 70 |
| CK1AA-754 | 15 | C | 0.750 | 100 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| CK1AA-105 | 15 | C | 1.000 | 100 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| CK1AA-185 | 15 | C | 1.800 | 100 | 15 | 28 | 33 | 41 | 45 | 70 | 70 |
| CK2AA-504 | 15 | L2 | 0.500 | 100 | – | 16 | 26 | 36 | 44 | 60 | 70 |
| CK2AA-754 | 15 | L2 | 0.750 | 100 | 11 | 24 | 30 | 40 | 40 | 64 | 70 |
| CK2AA-105 | 15 | L2 | 1.000 | 100 | 12 | 24 | 30 | 40 | 40 | 65 | 70 |
| CK2AA-185 | 15 | L2 | 1.800 | 100 | 15 | 28 | 33 | 41 | 45 | 70 | 70 |
| CK1BA-103 | 15 | C | 0.010 | 200 | – | – | – | 2 | 20 | 40 | 55 |
| CK1LA-753 | 15 | C | 0.075 | 200* | – | – | 7 | 18 | 37 | 46 | 70 |
| CK1BA-104 | 15 | C | 0.100 | 200 | – | – | 14 | 24 | 38 | 50 | 70 |
| CK1LA-154 | 15 | C | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |
| CK1BA-304 | 15 | C | 0.300 | 200 | – | 15 | 23 | 32 | 40 | 56 | 70 |
| CK1BA-504 | 15 | C | 0.500 | 200 | 6 | 19 | 25 | 36 | 40 | 58 | 70 |
| CK2BA-103 | 15 | L2 | 0.010 | 200 | – | – | – | 2 | 20 | 40 | 55 |
| CK2LA-753 | 15 | L2 | 0.075 | 200* | – | – | 7 | 18 | 37 | 51 | 70 |
| CK2BA-104 | 15 | L2 | 0.100 | 200 | – | – | 14 | 24 | 38 | 50 | 70 |
| CK2LA-154 | 15 | L2 | 0.150 | 200* | – | 10 | 16 | 26 | 40 | 52 | 70 |
| CK2BA-304 | 15 | L2 | 0.300 | 200 | – | 15 | 23 | 32 | 40 | 56 | 70 |
| CK2BA-504 | 15 | L2 | 0.500 | 200 | 6 | 19 | 25 | 36 | 40 | 60 | 70 |

* Also rated 125 VAC/400 Hz

[1] 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 – 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

1. Case/Terminal Plating:
   Electro-tin standard –
   Silver or gold available
2. Material:
   Case: Brass standard – Steel available
   End Seal: Mild steel
   Terminals: Nickel-iron alloy
3. Operating Temperature Range:
   -55°C to +125°C
4. Electrical Characteristics:
   A. Rated Voltage and Current: 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 10,000 megohms min., whichever is less
   C. Dielectric Withstanding Voltage (DWV):
      R-level designs:
      2.0 times rated DC voltage
      Class B, Class S designs:
      2.5 times rated DC voltage
   D. Capacitance: Total capacitance listed in chart for each filter type is "guaranteed minimum value" (GMV)
5. Marking:
   Standard Marking: KYOCERA AVX, KYOCERA AVX part number, rated current, voltage, lot code, schematic

NOTE: Schematic to indicate location of inductor (standard or reverse) for GK2 L-Section Filters.

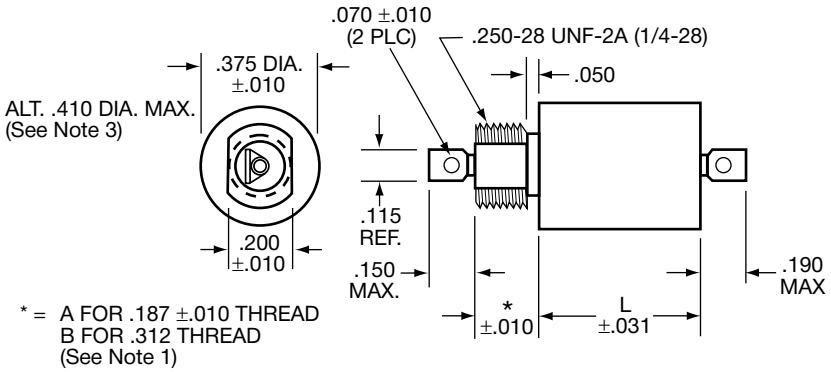
See Reliability Codes section for definition of Reliability Level marking. See How to Order section for part number construction.

6. Installation:
   A. Mounting Torque: 44 oz-in. ± 4 oz-in.
   B. Refer to "Installation, Handling, Hardware Options" section of the catalog.

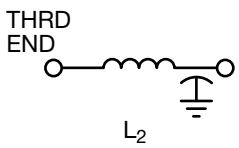


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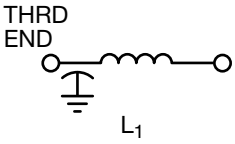
## STANDARD CONFIGURATION



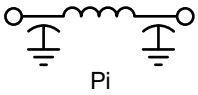

## CIRCUIT DIAGRAMS




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)

## SPECIFICATIONS

| | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | L. dim | DCR (Ω) | 10 KHz | 30 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| 50 VDC, 1.4 µF | | | | | | | | | | | | |
| GK2CA-S01 | 0.06 | L2 | 0.540 | 12.00 | 16 | 44 | 70 | 70 | 70 | 70 | 70 | 70 |
| GK2CA-S02 | 0.10 | L2 | 0.540 | 10.00 | 15 | 34 | 62 | 70 | 70 | 70 | 70 | 70 |
| GK2CA-S03 | 0.15 | L2 | 0.540 | 4.000 | 7 | 24 | 52 | 64 | 70 | 70 | 70 | 70 |
| GK2CA-S04 | 0.25 | L2 | 0.540 | 4.000 | 6 | 25 | 53 | 65 | 70 | 70 | 70 | 70 |
| GK2CA-S05 | 0.30 | L2 | 0.540 | 0.500 | 5 | 16 | 35 | 45 | 66 | 70 | 70 | 70 |
| GK2CA-S06 | 0.45 | L2 | 0.540 | 0.300 | 5 | 15 | 33 | 44 | 65 | 70 | 70 | 70 |
| GK2CA-S07 | 0.50 | L2 | 0.540 | 1.000 | 5 | 16 | 41 | 54 | 70 | 70 | 70 | 70 |
| GK2CA-S08 | 1.00 | L2 | 0.540 | 0.250 | 5 | 15 | 31 | 42 | 63 | 70 | 70 | 70 |
| GK2CA-S09 | 2.00 | L2 | 0.540 | 0.063 | 5 | 15 | 28 | 35 | 51 | 70 | 70 | 70 |
| GK2CA-S10 | 3.00 | L2 | 0.540 | 0.027 | 5 | 15 | 28 | 34 | 45 | 70 | 70 | 70 |
| GK2CA-S12 | 10.0 | L2 | 0.540 | 0.008 | 5 | 15 | 28 | 34 | 44 | 52 | 65 | 65 |
| GK3CA-P02 | 0.10 | π | 0.540 | 10.00 | 12 | 44 | 70 | 70 | 70 | 70 | 70 | 70 |
| GK3CA-P04 | 0.25 | π | 0.540 | 4.000 | 8 | 36 | 70 | 70 | 70 | 70 | 70 | 70 |
| GK3CA-P07 | 0.50 | π | 0.540 | 1.000 | 7 | 24 | 66 | 70 | 70 | 70 | 70 | 70 |
| GK3CA-P08 | 1.00 | π | 0.540 | 0.250 | 5 | 15 | 54 | 70 | 70 | 70 | 70 | 70 |
| GK3CA-P09 | 2.00 | π | 0.540 | 0.063 | 5 | 15 | 40 | 60 | 70 | 70 | 70 | 70 |
| GK3CA-P10 | 3.00 | π | 0.540 | 0.027 | 5 | 15 | 30 | 50 | 70 | 70 | 70 | 70 |
| GK3CA-P12 | 10.0 | π | 0.540 | 0.008 | 5 | 15 | 28 | 34 | 40 | 52 | 70 | 70 |
| GK4CA-T08 | 1.00 | T | 1.020 | 0.500 | 5 | 16 | 34 | 56 | 70 | 70 | 70 | 70 |
| GK4CA-T09 | 2.00 | T | 1.020 | 0.090 | 5 | 15 | 26 | 37 | 61 | 70 | 70 | 70 |
| GK4CA-T16 | 4.00 | T | 1.020 | 0.030 | 5 | 15 | 26 | 34 | 47 | 70 | 70 | 70 |
| GK4CA-T12 | 10.0 | T | 1.020 | 0.008 | 5 | 17 | 27 | 34 | 44 | 60 | 70 | 70 |

[1] 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).




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## SPECIFICATIONS

| | | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | L. dim | CAP (µF) | DCR (Ω) | 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 | 0.10 | L2 | 0.540 | 0.700 | 1.700 | 9 | 20 | 29 | 41 | 48 | 60 | 70 | 70 | 70 | 70 |
| GK2NA-S05 | 0.30 | L2 | 0.540 | 0.700 | 0.770 | 6 | 15 | 23 | 35 | 42 | 54 | 70 | 70 | 70 | 70 |
| GK2NA-S07 | 0.50 | L2 | 0.540 | 0.700 | 0.360 | 5 | 12 | 19 | 29 | 36 | 48 | 69 | 70 | 70 | 70 |
| GK2NA-S08 | 1.00 | L2 | 0.540 | 0.700 | 0.140 | 5 | 11 | 15 | 21 | 26 | 36 | 55 | 70 | 70 | 70 |
| GK2NA-S10 | 3.00 | L2 | 0.540 | 0.700 | 0.050 | 5 | 10 | 14 | 20 | 24 | 31 | 45 | 70 | 70 | 70 |
| GK2NA-S11 | 5.00 | L2 | 0.540 | 0.700 | 0.015 | – | – | – | 14 | 17 | 24 | 36 | 60 | 70 | 70 |
| GK2NA-S12 | 10.0 | L2 | 0.540 | 0.700 | 0.008 | – | 10 | 14 | 20 | 24 | 30 | 40 | 40 | 64 | 70 |
| GK3NA-P02 | 0.10 | π | 0.540 | 1.400 | 1.700 | 15 | 36 | 50 | 69 | 79 | 80 | 80 | 80 | 80 | 80 |
| GK3NA-P05 | 0.30 | π | 0.540 | 1.400 | 0.770 | – | 29 | 44 | 62 | 73 | 80 | 80 | 80 | 80 | 80 |
| GK3NA-P07 | 0.50 | π | 0.540 | 1.400 | 0.360 | – | 21 | 37 | 56 | 67 | 80 | 80 | 80 | 80 | 80 |
| GK3NA-P08 | 1.00 | π | 0.540 | 1.400 | 0.140 | – | – | 20 | 46 | 57 | 75 | 80 | 80 | 80 | 80 |
| GK3NA-P10 | 3.00 | π | 0.540 | 1.400 | 0.050 | – | – | – | 17 | 36 | 51 | 80 | 80 | 80 | 80 |
| GK3NA-P11 | 5.00 | π | 0.540 | 1.400 | 0.015 | – | – | – | – | 16 | 38 | 75 | 80 | 80 | 80 |
| GK3NA-P12 | 10.0 | π | 0.540 | 1.400 | 0.008 | 5 | 15 | 20 | 24 | 28 | 34 | 40 | 52 | 80 | 80 |
| GK4NA-T08 | 1.00 | T | 1.020 | 0.750 | – | – | 10 | 15 | 21 | 26 | 49 | 70 | 70 | 70 | 70 |
| GK4NA-T09 | 2.00 | T | 1.020 | 0.750 | – | – | 10 | 13 | 17 | 20 | 32 | 55 | 70 | 70 | 70 |
| GK4NA-T16 | 4.00 | T | 1.020 | 0.750 | – | – | 9 | 12 | 15 | 19 | 29 | 42 | 70 | 70 | 70 |
| GK4NA-T12 | 10.0 | T | 1.020 | 0.750 | – | – | 9 | 12 | 15 | 19 | 28 | 38 | 55 | 70 | 70 |

[1] 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).

## SPECIFICATIONS

| | | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | L. dim | CAP (µF) | DCR (Ω) | 10 KHz | 30 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| 100 VDC, .45–1.4 µF | | | | | | | | | | | | | |
| GK2AA-S01 | 0.06 | L2 | 0.540 | 1.40 | 12.00 | 15 | 44 | 70 | 70 | 70 | 70 | 70 | 70 |
| GK2AA-S02 | 0.10 | L2 | 0.540 | 1.40 | 10.00 | 12 | 34 | 62 | 70 | 70 | 70 | 70 | 70 |
| GK2AA-S03 | 0.15 | L2 | 0.540 | 1.40 | 4.000 | 7 | 24 | 52 | 64 | 70 | 70 | 70 | 70 |
| GK2AA-S05 | 0.30 | L2 | 0.540 | 1.40 | 0.500 | – | 14 | 35 | 45 | 66 | 70 | 70 | 70 |
| GK2AA-S06 | 0.45 | L2 | 0.540 | 1.40 | 0.300 | – | 14 | 33 | 44 | 65 | 70 | 70 | 70 |
| GK2AA-S07 | 0.50 | L2 | 0.540 | 1.40 | 1.000 | – | 16 | 41 | 54 | 70 | 70 | 70 | 70 |
| GK2AA-S09 | 2.00 | L2 | 0.540 | 1.40 | 0.063 | – | 15 | 28 | 35 | 51 | 70 | 70 | 70 |
| GK2AA-S12 | 10 | L2 | 0.540 | 1.40 | 0.008 | – | 14 | 28 | 33 | 44 | 52 | 70 | 70 |
| GK3AA-P02 | 0.10 | π | 0.540 | 1.00 | 10.00 | 12 | 40 | 70 | 70 | 70 | 70 | 70 | 70 |
| GK3AA-P07 | 0.50 | π | 0.540 | 1.00 | 1.000 | – | 18 | 60 | 70 | 70 | 70 | 70 | 70 |
| GK3AA-P09 | 2.00 | π | 0.540 | 1.00 | 0.063 | – | 9 | 36 | 53 | 70 | 70 | 70 | 70 |
| GK3AA-P12 | 10.0 | π | 1.020 | 1.00 | 0.008 | – | 9 | 24 | 29 | 40 | 70 | 70 | 70 |
| GK4AA-T08 | 1.00 | T | 1.020 | 0.75 | 0.500 | – | 10 | 25 | 49 | 70 | 70 | 70 | 70 |
| GK4AA-T09 | 2.00 | T | 1.020 | 0.75 | 0.090 | – | 10 | 20 | 32 | 56 | 70 | 70 | 70 |
| GK4AA-T16 | 4.00 | T | 1.020 | 0.75 | 0.030 | – | 10 | 19 | 29 | 42 | 70 | 70 | 70 |
| GK4AA-T12 | 10.0 | T | 1.020 | 0.75 | 0.008 | – | 9 | 19 | 28 | 39 | 58 | 65 | 65 |
| GK2AA-S04 | 0.25 | L2 | 0.540 | 0.45 | 1.500 | – | – | 38 | 50 | 60 | 60 | 60 | 60 |
| GK3AA-P04 | 0.25 | π | 0.540 | 0.90 | 1.500 | – | – | 64 | 80 | 80 | 80 | 80 | 80 |
| GK2AA-S08 | 1.00 | L2 | 0.540 | 0.45 | 0.250 | – | – | 23 | 34 | 55 | 60 | 60 | 60 |
| GK3AA-P08 | 1.00 | π | 0.540 | 0.90 | 0.250 | – | – | 52 | 70 | 80 | 80 | 80 | 80 |
| GK2AA-S10 | 3.00 | L2 | 0.540 | 0.45 | 0.050 | – | – | 18 | 27 | 45 | 60 | 60 | 60 |
| GK3AA-P10 | 3.00 | π | 0.540 | 0.90 | 0.050 | – | – | 25 | 51 | 80 | 80 | 80 | 80 |
| GK2AA-S11 | 5.00 | L2 | 0.540 | 0.45 | 0.015 | – | – | 17 | 24 | 36 | 60 | 60 | 60 |
| GK3AA-P11 | 5.00 | π | 0.540 | 0.90 | 0.015 | – | – | – | 38 | 75 | 80 | 80 | 80 |

[1] 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).




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## SPECIFICATIONS

| | | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | L. dim | CAP (µF) | DCR (Ω) | 100 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| 150 VDC, .25–.50 µF | | | | | | | | | | | | |
| GK2HA-S02 | 0.10 | L2 | 0.540 | 0.250 | 1.700 | 32 | 39 | 51 | 60 | 60 | 60 | 70 |
| GK2HA-S05 | 0.30 | L2 | 0.540 | 0.250 | 0.770 | 25 | 30 | 44 | 60 | 60 | 60 | 70 |
| GK2HA-S07 | 0.50 | L2 | 0.540 | 0.250 | 36.00 | 20 | 26 | 39 | 59 | 60 | 60 | 70 |
| GK2HA-S08 | 1.00 | L2 | 0.540 | 0.250 | 14.00 | 12 | 16 | 26 | 48 | 60 | 60 | 70 |
| GK2HA-S10 | 3.00 | L2 | 0.540 | 0.250 | 0.050 | 11 | 15 | 20 | 36 | 60 | 60 | 70 |
| GK2HA-S11 | 5.00 | L2 | 0.540 | 0.250 | 0.015 | 8 | 12 | 20 | 32 | 60 | 60 | 70 |
| GK2HA-S12 | 10.0 | L2 | 0.540 | 0.250 | 0.008 | 6 | 12 | 20 | 32 | 40 | 56 | 70 |
| GK3HA-P02 | 0.10 | π | 0.540 | 0.500 | 1.700 | 49 | 60 | 70 | 80 | 80 | 80 | 80 |
| GK3HA-P05 | 0.30 | π | 0.540 | 0.500 | 0.770 | 43 | 53 | 70 | 80 | 80 | 80 | 80 |
| GK3HA-P07 | 0.50 | π | 0.540 | 0.500 | 0.360 | 37 | 48 | 66 | 80 | 80 | 80 | 80 |
| GK3HA-P08 | 1.00 | π | 0.540 | 0.500 | 0.140 | 28 | 40 | 58 | 80 | 80 | 80 | 80 |
| GK3HA-P10 | 3.00 | π | 0.540 | 0.500 | 0.050 | – | – | 38 | 70 | 80 | 80 | 80 |
| GK3HA-P11 | 5.00 | π | 0.540 | 0.500 | 0.015 | – | – | 20 | 63 | 80 | 80 | 80 |
| GK3HA-P12 | 10.0 | π | 0.540 | 0.500 | 0.008 | – | – | 15 | 35 | 60 | 80 | 80 |
| GK4HA-T08 | 1.00 | T | 1.020 | 0.250 | 0.500 | 15 | 23 | 42 | 70 | 80 | 80 | 80 |
| GK4HA-T09 | 2.00 | T | 1.020 | 0.250 | 0.090 | 9 | 13 | 32 | 50 | 70 | 80 | 80 |
| GK4HA-T16 | 4.00 | T | 1.020 | 0.250 | 0.030 | 6 | 10 | 21 | 40 | 60 | 80 | 80 |
| GK4HA-T12 | 10.0 | T | 1.020 | 0.250 | 0.006 | – | 9 | 21 | 28 | 44 | 60 | 80 |

| 200 VDC, .15–.36 µF | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | L. dim | CAP (µF) | DCR (Ω) | 10 KHz | 30 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| GK2BA-S02 | 0.10 | L2 | 0.540 | 0.150 | 10.00 | – | 21 | 50 | 61 | 70 | 70 | 70 | 70 |
| GK2BA-S04 | 0.25 | L2 | 0.540 | 0.150 | 0.400 | – | 11 | 39 | 51 | 70 | 70 | 70 | 70 |
| GK2BA-S07 | 0.50 | L2 | 0.540 | 0.150 | 1.000 | – | 3 | 29 | 41 | 63 | 70 | 70 | 70 |
| GK2BA-S08 | 1.00 | L2 | 0.540 | 0.150 | 0.250 | – | – | 18 | 28 | 49 | 70 | 70 | 70 |
| GK2BA-S09 | 2.00 | L2 | 0.540 | 0.150 | 0.063 | – | – | 15 | 21 | 38 | 70 | 70 | 70 |
| GK2BA-S10 | 3.00 | L2 | 0.540 | 0.150 | 0.027 | – | – | 15 | 21 | 31 | 70 | 70 | 70 |
| GK2BA-S12 | 10.0 | L2 | 0.540 | 0.150 | 0.008 | – | – | 15 | 21 | 31 | 51 | 60 | 60 |
| GK3BA-P02 | 0.10 | π | 0.540 | 0.360 | 10.00 | – | 21 | 61 | 70 | 70 | 70 | 70 | 70 |
| GK3BA-P04 | 0.25 | π | 0.540 | 0.360 | 4.000 | – | 10 | 52 | 68 | 70 | 70 | 70 | 70 |
| GK3BA-P07 | 0.50 | π | 0.540 | 0.360 | 1.000 | – | – | 44 | 63 | 70 | 70 | 70 | 70 |
| GK3BA-P08 | 1.00 | π | 0.540 | 0.360 | 0.250 | – | – | 30 | 46 | 70 | 70 | 70 | 70 |
| GK3BA-P09 | 2.00 | π | 0.540 | 0.360 | 0.063 | – | – | 16 | 33 | 63 | 70 | 70 | 70 |
| GK3BA-P10 | 3.00 | π | 0.540 | 0.360 | 0.027 | – | – | – | 21 | 55 | 70 | 70 | 70 |
| GK3BA-P12 | 10.0 | π | 0.540 | 0.360 | 0.008 | – | – | – | 20 | 30 | 60 | 70 | 70 |
| GK4BA-T08 | 1.00 | T | 1.020 | 0.150 | 0.500 | – | 3 | 17 | 42 | 70 | 70 | 70 | 70 |
| GK4BA-T09 | 2.00 | T | 1.020 | 0.150 | 0.090 | – | – | 12 | 24 | 48 | 70 | 70 | 70 |
| GK4BA-T16 | 4.00 | T | 1.020 | 0.150 | 0.030 | – | – | 12 | 21 | 34 | 70 | 70 | 70 |
| GK4BA-T12 | 10.0 | T | 1.020 | 0.150 | 0.008 | – | 3 | 12 | 21 | 31 | 50 | 60 | 60 |

[1] 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).


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## SPECIFICATIONS

| | | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | L. dim | CAP (µF) | DCR (Ω) | 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 | 0.10 | L2 | 0.540 | 0.150 | 10.00 | – | 14 | 42 | 54 | 70 | 70 | 70 | 70 |
| GK2LA-S07 | 0.50 | L2 | 0.540 | 0.150 | 1.000 | – | – | 23 | 35 | 56 | 70 | 70 | 70 |
| GK2LA-S09 | 2.00 | L2 | 0.540 | 0.150 | 0.063 | – | – | 8 | 14 | 30 | 70 | 70 | 70 |
| GK2LA-S12 | 10.0 | L2 | 0.540 | 0.150 | 0.008 | – | – | 8 | 14 | 25 | 45 | 60 | 60 |
| GK3LA-P02 | 0.10 | π | 0.540 | 0.300 | 10.00 | – | 21 | 60 | 70 | 70 | 70 | 70 | 70 |
| GK3LA-P07 | 0.50 | π | 0.540 | 0.300 | 1.000 | – | – | 40 | 56 | 70 | 70 | 70 | 70 |
| GK3LA-P10 | 3.00 | π | 0.540 | 0.300 | 0.027 | – | – | – | 25 | 54 | 70 | 70 | 70 |
| GK3LA-P12 | 10.0 | π | 0.540 | 0.300 | 0.008 | – | – | – | 20 | 30 | 70 | 70 | 70 |
| GK2LA-S04 | 0.25 | L2 | 0.540 | 0.150 | 1.500 | – | 6 | 28 | 40 | 60 | 60 | 60 | 70 |
| GK2LA-S08 | 1.00 | L2 | 0.540 | 0.150 | 0.250 | – | – | 13 | 24 | 45 | 60 | 60 | 70 |
| GK2LA-S10 | 3.00 | L1 | 0.540 | 0.150 | 0.050 | – | – | 8 | 16 | 30 | 60 | 60 | 70 |
| GK2LA-S11 | 5.00 | L2 | 0.540 | 0.150 | 0.015 | – | – | 8 | 14 | 26 | 55 | 55 | 70 |
| GK3LA-P04 | 0.25 | π | 0.540 | 0.300 | 1.500 | – | 8 | 44 | 62 | 80 | 80 | 80 | 80 |
| GK3LA-P08 | 1.00 | π | 0.540 | 0.300 | 0.250 | – | – | 32 | 50 | 80 | 80 | 80 | 80 |
| GK3LA-P10 | 3.00 | π | 0.540 | 0.300 | 0.050 | – | – | – | 19 | 59 | 80 | 80 | 80 |
| GK3LA-P11 | 5.00 | π | 0.540 | 0.300 | 0.015 | – | – | – | – | 51 | 80 | 80 | 80 |
| GK4LA-T08 | 1.00 | T | 1.020 | 0.150 | 0.500 | – | – | 10 | 36 | 66 | 70 | 70 | 70 |
| GK4LA-T09 | 2.00 | T | 1.020 | 0.150 | 0.090 | – | – | 7 | 18 | 41 | 70 | 70 | 70 |
| GK4LA-T16 | 4.00 | T | 1.020 | 0.150 | 0.030 | – | – | 8 | 15 | 27 | 70 | 70 | 70 |
| GK4LA-T12 | 10.0 | T | 1.020 | 0.150 | 0.008 | – | – | 8 | 15 | 25 | 70 | 70 | 70 |

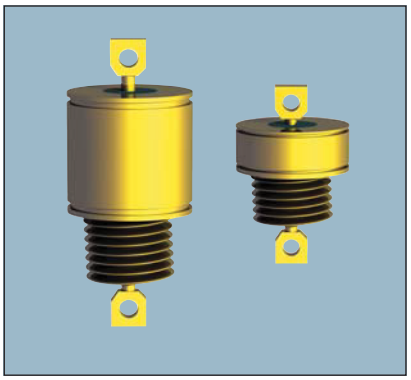
[1] Insertion loss limits are based on theoretical values. Actual measurements may vary due to internal capacitor resonances and other design constraints.

**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).




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# Cylindrical Style EMI Filters
## JD Series – .690 Dia.
## Hermetically Sealed – Circuits Available – C, L, π, T



## 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.

## 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.

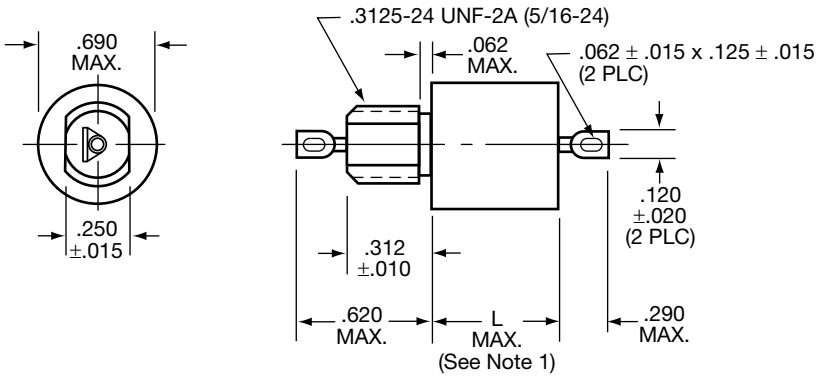
## SPECIFICATIONS

1. Case/Terminal Plating:
   Electro-tin standard –
   Silver or gold available
2. Material:
   Case: Brass standard – Steel available
   End Seal: Mild steel
   Terminals: Nickel-iron alloy
3. Operating Temperature Range:
   -55°C to +125°C
4. Electrical Characteristics:
   A. Rated Voltage
   300 VDC/125 VAC, 400 Hz or
   400 VDC/230 VAC, 400 Hz
   B. Current Rating - see chart
   C. 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 10,000 megohms min., whichever is less
   D. Dielectric Withstanding Voltage (DWV):
   R-level designs:
   2.0 times rated DC voltage
   Class B, Class S designs:
   2.5 times rated DC voltage
3. Capacitance: Total capacitance listed in chart for each filter type is "guaranteed minimum value" (GMV)
5. Marking:
   Standard Marking: KYOCERA AVX, KYOCERA AVX part number, rated voltage, current, lot number, schematic

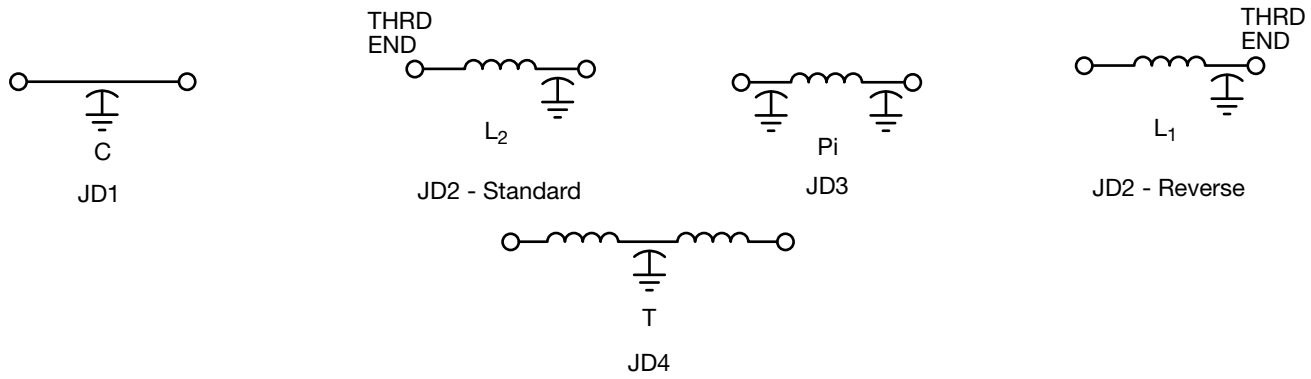
NOTE: Schematic to indicate location of inductor (standard or reverse) for JD2 L-Section Filters.
See Reliability Codes section for definition of Reliability Level marking.
See How to Order section for part number construction.

6. Installation:
   A. Mounting Torque: 60 oz-in. ± 4 oz-in.
   B. Refer to "Installation and Handling" section of Filter Design Guide

### 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.



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## SPECIFICATIONS

| | | | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | CAP (µF) | DC Voltage | DCR (Ω) | L. dim | 50 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| **100 VDC, 1.2–2.8 µF** | | | | | | | | | | | | | |
| JD1AB-125 | 15.0 | C | 1.200 | 100 | 0.008 | 0.700 | 16 | 27 | 34 | 43 | 60 | 60 | 60 |
| JD1AB-704 | 15.0 | C | 1.2000 | 100 | 0.008 | 0.700 | 10 | 19 | 28 | 40 | 50 | 60 | 60 |
| JD2AB-S07 | 0.50 | L2 | 1.400 | 100 | 0.300 | 1.060 | 21 | 40 | 58 | 70 | 70 | 70 | 70 |
| JD2AB-S08 | 1.00 | L2 | 1.400 | 100 | 0.210 | 1.060 | 19 | 37 | 55 | 70 | 70 | 70 | 70 |
| JD2AB-S10 | 3.00 | L2 | 1.400 | 100 | 0.030 | 1.060 | 16 | 26 | 37 | 55 | 70 | 70 | 70 |
| JD2AB-S11 | 5.00 | L2 | 1.400 | 100 | 0.007 | 1.060 | 15 | 25 | 34 | 46 | 70 | 70 | 70 |
| JD2AB-S12 | 10.0 | L2 | 1.400 | 100 | 0.006 | 1.060 | 15 | 24 | 34 | 44 | 70 | 70 | 70 |
| JD3AB-P07 | 0.50 | π | 2.800 | 100 | 0.300 | 1.205 | 40 | 70 | 80 | 80 | 80 | 80 | 80 |
| JD3AB-P08 | 1.00 | π | 2.800 | 100 | 0.210 | 1.205 | 35 | 68 | 80 | 80 | 80 | 80 | 80 |
| JD3AB-P10 | 3.00 | π | 2.800 | 100 | 0.030 | 1.205 | 13 | 43 | 73 | 80 | 80 | 80 | 80 |
| JD3AB-P11 | 5.00 | π | 2.800 | 100 | 0.007 | 1.205 | – | 26 | 63 | 80 | 80 | 80 | 80 |
| JD3AB-P12 | 10.0 | π | 2.800 | 100 | 0.006 | 1.205 | 20 | 30 | 40 | 70 | 70 | 80 | 80 |
| JD4AB-T08 | 1.00 | T | 1.400 | 100 | 0.500 | 1.400 | 21 | 48 | 70 | 70 | 70 | 70 | 70 |
| JD4AB-T09 | 2.00 | T | 1.400 | 100 | 0.090 | 1.400 | 15 | 26 | 44 | 70 | 70 | 70 | 70 |
| JD4AB-T16 | 4.00 | T | 1.400 | 100 | 0.030 | 1.400 | 15 | 24 | 35 | 50 | 70 | 70 | 70 |
| JD4AB-T12 | 10.0 | T | 1.400 | 100 | 0.005 | 1.400 | 14 | 24 | 34 | 44 | 60 | 70 | 70 |
| **200 VDC, .45–.9 µF** | | | | | | | | | | | | | |
| JD1BB-904 | 15.0 | C | 0.900 | 200 | 0.006 | 0.700 | 12 | 21 | 30 | 40 | 53 | 60 | 60 |
| JD1BB-454 | 15.0 | C | 0.450 | 200 | 0.006 | 0.700 | 6 | 16 | 24 | 34 | 51 | 60 | 60 |
| JD2BB-S07 | 0.50 | L2 | 0.450 | 200 | 0.300 | 1.060 | 10 | 30 | 48 | 65 | 70 | 70 | 70 |
| JD2BB-S08 | 1.00 | L2 | 0.450 | 200 | 0.210 | 1.060 | 8 | 28 | 45 | 65 | 70 | 70 | 70 |
| JD2BB-S10 | 3.00 | L2 | 0.450 | 200 | 0.030 | 1.060 | 6 | 16 | 28 | 45 | 60 | 70 | 70 |
| JD2BB-S11 | 5.00 | L2 | 0.450 | 200 | 0.007 | 1.060 | 6 | 14 | 24 | 36 | 52 | 70 | 70 |
| JD2BB-S12 | 10.0 | L2 | 0.450 | 200 | 0.006 | 1.060 | 6 | 15 | 24 | 34 | 50 | 70 | 70 |
| JD3BB-P07 | 0.50 | π | 0.900 | 200 | 0.300 | 1.205 | 15 | 50 | 70 | 80 | 80 | 80 | 80 |
| JD3BB-P08 | 1.00 | π | 0.900 | 200 | 0.210 | 1.205 | 11 | 46 | 70 | 80 | 80 | 80 | 80 |
| JD3BB-P10 | 3.00 | π | 0.900 | 200 | 0.030 | 1.205 | – | 18 | 50 | 80 | 80 | 80 | 80 |
| JD3BB-P11 | 5.00 | π | 0.900 | 200 | 0.007 | 1.205 | – | 13 | 40 | 70 | 80 | 80 | 80 |
| JD3BB-P12 | 10.0 | π | 0.900 | 200 | 0.006 | 1.205 | 9 | 20 | 30 | 40 | 55 | 80 | 80 |
| JD4BB-T08 | 1.00 | T | 0.450 | 200 | 3.000 | 1.400 | 18 | 50 | 70 | 80 | 80 | 80 | 80 |
| JD4BB-T09 | 2.00 | T | 0.450 | 200 | 0.210 | 1.400 | 12 | 48 | 70 | 80 | 80 | 80 | 80 |
| JD4BB-T16 | 4.00 | T | 0.450 | 200 | 0.030 | 1.400 | – | 18 | 24 | 42 | 80 | 80 | 80 |
| JD4BB-T12 | 10.0 | T | 0.450 | 200 | 0.006 | 1.400 | – | 12 | 22 | 34 | 70 | 80 | 80 |

[1] 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).

## SPECIFICATIONS

| | | | | | | | Insertion Loss[1] Per MIL-STD-220, +25°C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P/N | Current (A) | CKT | CAP (µF) | DC Voltage | DCR (Ω) | L. dim | 50 KHz | 150 KHz | 300 KHz | 1 MHz | 10 MHz | 100 MHz | 1 GHz |
| **300 VDC (125 VAC/400Hz*), .3–.36 µF** | | | | | | | | | | | | | |
| JD1LB-304 | 15.0 | C | 0.300 | 300 | 0.008 | 0.700 | 7 | 16 | 22 | 32 | 46 | 58 | 70 |
| JD2LB-S07 | 0.50 | L2 | 0.300 | 300 | 0.330 | 1.060 | 13 | 28 | 40 | 60 | 60 | 70 | 70 |
| JD2LB-S08 | 1.00 | L2 | 0.300 | 300 | 0.150 | 1.060 | 6 | 24 | 37 | 56 | 60 | 70 | 70 |
| JD2LB-S10 | 3.00 | L2 | 0.300 | 300 | 0.026 | 1.060 | 7 | 17 | 24 | 42 | 70 | 70 | 70 |
| JD2LB-S11 | 5.00 | L2 | 0.300 | 300 | 0.013 | 1.060 | 7 | 16 | 22 | 34 | 68 | 70 | 70 |
| JD2LB-S12 | 10.0 | L2 | 0.300 | 300 | 0.008 | 1.060 | 7 | 16 | 20 | 30 | 56 | 70 | 70 |
| JD3LB-P07 | 0.50 | π | 0.360 | 300 | 0.330 | 1.205 | 14 | 44 | 62 | 80 | 80 | 80 | 80 |
| JD3LB-P08 | 1.00 | π | 0.360 | 300 | 0.150 | 1.205 | – | 37 | 56 | 80 | 80 | 80 | 80 |
| JD3LB-P10 | 3.00 | π | 0.360 | 300 | 0.026 | 1.205 | – | 18 | 40 | 70 | 80 | 80 | 80 |
| JD3LB-P11 | 5.00 | π | 0.360 | 300 | 0.013 | 1.205 | – | – | 25 | 60 | 80 | 80 | 80 |
| JD3LB-P12 | 10.0 | π | 0.360 | 300 | 0.008 | 1.205 | – | – | – | 50 | 80 | 80 | 80 |
| JD4LB-T08 | 1.00 | T | 0.300 | 300 | 0.070 | 1.400 | 6 | 18 | 28 | 58 | 70 | 70 | 70 |
| JD4LB-T09 | 2.00 | T | 0.300 | 300 | 0.050 | 1.400 | 6 | 16 | 22 | 37 | 70 | 70 | 70 |
| JD4LB-T16 | 4.00 | T | 0.300 | 300 | 0.030 | 1.400 | 6 | 16 | 20 | 34 | 70 | 70 | 70 |
| JD4LB-T12 | 10.0 | T | 0.300 | 300 | 0.008 | 1.400 | – | – | 19 | 30 | 48 | 60 | 70 |
| **400 VDC (230 VAC/400Hz*), .15–.2 µF** | | | | | | | | | | | | | |
| JD1EB-154 | 15.0 | C | 0.150 | 400 | 0.008 | .700 | – | 10 | 16 | 26 | 40 | 52 | 70 |
| JD2EB-S07 | 0.50 | L2 | 0.150 | 400 | 0.330 | 1.060 | 5 | 24 | 32 | 50 | 60 | 70 | 70 |
| JD2EB-S08 | 1.00 | L2 | 0.150 | 400 | 0.150 | 1.060 | – | 19 | 30 | 46 | 60 | 70 | 70 |
| JD2EB-S10 | 3.00 | L2 | 0.150 | 400 | 0.026 | 1.060 | – | 11 | 19 | 36 | 60 | 70 | 70 |
| JD2EB-S11 | 5.00 | L2 | 0.150 | 400 | 0.013 | 1.060 | – | 10 | 16 | 28 | 54 | 70 | 70 |
| JD2EB-S12 | 10.0 | L2 | 0.150 | 400 | 0.008 | 1.060 | – | 10 | 16 | 25 | 48 | 70 | 70 |
| JD3EB-P07 | 0.50 | π | 0.200 | 400 | 0.330 | 1.205 | – | 34 | 52 | 80 | 80 | 80 | 80 |
| JD3EB-P08 | 1.00 | π | 0.200 | 400 | 0.150 | 1.205 | – | 27 | 46 | 74 | 80 | 80 | 80 |
| JD3EB-P10 | 3.00 | π | 0.200 | 400 | 0.026 | 1.205 | – | – | 30 | 60 | 80 | 80 | 80 |
| JD3EB-P11 | 5.00 | π | 0.200 | 400 | 0.013 | 1.205 | – | – | 12 | 50 | 80 | 80 | 80 |
| JD3EB-P12 | 10.0 | π | 0.200 | 400 | 0.008 | 1.205 | – | – | – | 30 | 80 | 80 | 80 |
| JD4EB-T08 | 1.00 | T | 0.150 | 400 | 0.070 | 1.300 | – | 12 | 25 | 48 | 70 | 70 | 70 |
| JD4EB-T09 | 2.00 | T | 0.150 | 400 | 0.050 | 1.300 | – | 10 | 18 | 40 | 64 | 70 | 70 |
| JD4EB-T16 | 4.00 | T | 0.150 | 400 | 0.030 | 1.300 | – | 10 | 16 | 31 | 58 | 70 | 70 |
| JD4EB-T12 | 10.0 | T | 0.150 | 400 | 0.008 | 1.300 | – | – | 15 | 25 | 45 | 60 | 70 |

[1] 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).




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