AVX Broadband Surface Mount Inductors



Table of Contents



GLMR47KAT1A



AVX, the industry leader, in introducing the new GLM Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

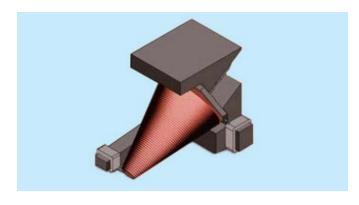
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency: 9.5 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.5 dB, typ.
- Return Loss (shunt mounted: > 20 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 0.47 µH ±10%
- Rated Current (R_{DC} max.): 815 mA*
- Resistance (I_{DC} max.): 0.19 Ω, typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

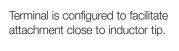
Notes:

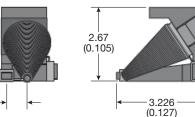
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

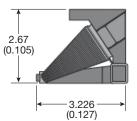
Current Rating: based on a 100°C temperature rise from a 25°C ambient

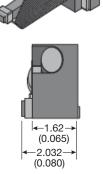
Wire: Copper, plated with gold 20 μ in. $\pm 5 \mu$ in.

DIMENSIONS mm (inches)



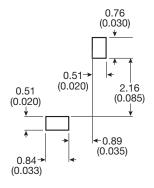






| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| М | 3.226 (0.127) | 2.032 (0.080) | 2.670 (0.105) | 38 | 22 |

RECOMMENDED FOOTPRINT



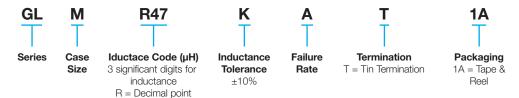


 0.75 ± 0.12

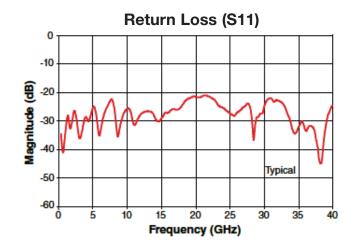
(0.030 + 0.005)













GLMR70KAT1A



AVX, the industry leader, in introducing the new GLM Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

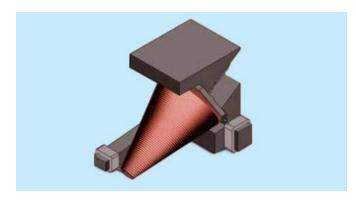
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 6.6 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.5 dB, typ.
- Return Loss (shunt mounted: > 20 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 0.70 µH ±10%
- Rated Current (R_{DC} max.): 619 mA*
- Resistance (I_{DC} max.): 0.32 Ω , typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

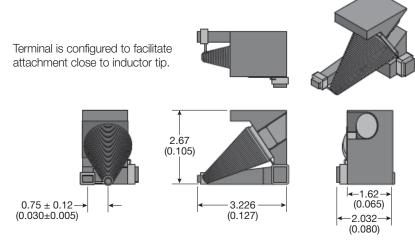
Notes:

Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

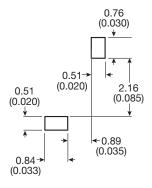
Current Rating: based on a 100°C temperature rise from a 25°C ambient

Wire: Copper, plated with gold 20 μ in. $\pm 5 \mu$ in.

DIMENSIONS mm (inches)



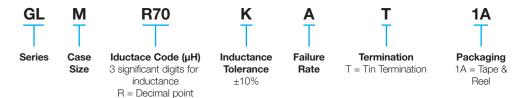
| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| М | 3.226 (0.127) | 2.032 (0.080) | 2.670 (0.105) | 40 | 27 |



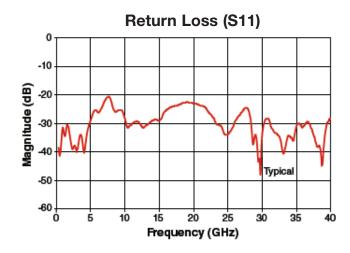














Ultra-Broadband SMT Inductor GLM1R1KAT1A



AVX, the industry leader, in introducing the new GLM Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

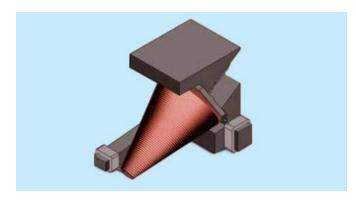
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 3.3 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.6 dB, typ.
- Return Loss (shunt mounted: > 22 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 1.10 µH ±10%
- Rated Current (R_{DC} max.): 438 mA*
- Resistance (I_{DC} max.): 0.64 Ω , typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

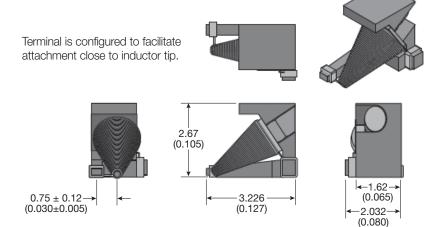
Notes:

Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

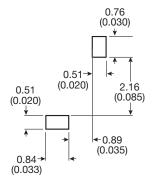
Current Rating: based on a 100°C temperature rise from a 25°C ambient

Wire: Copper, plated with gold 20 μ in. $\pm 5~\mu$ in.

DIMENSIONS mm (inches)



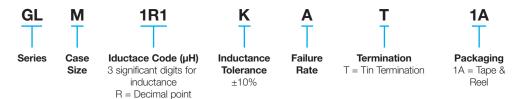
| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| М | 3.226 (0.127) | 2.032 (0.080) | 2.670 (0.105) | 42 | 34 |



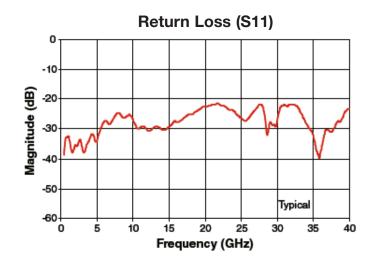


Ultra-Broadband SMT Inductor **GLM1R1KAT1A**











GLM2R0KAT1A



AVX, the industry leader, in introducing the new GLM Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

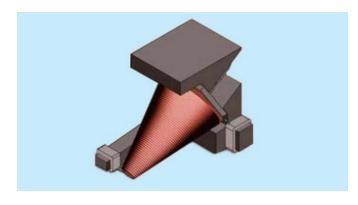
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 2.1 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.4 dB, typ.
- Return Loss (shunt mounted: > 20 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 2.00 µH ±10%
- Rated Current (R_{DC} max.): 277 mA*
- Resistance (I_{DC} max.): 1.60 Ω , typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

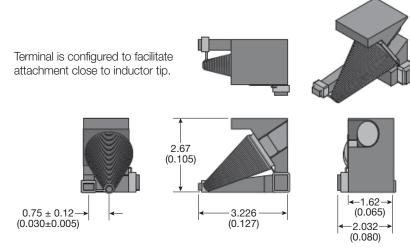
Notes:

Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

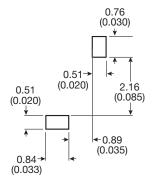
Current Rating: based on a 100°C temperature rise from a 25°C ambient

Wire: Copper, plated with gold 20 μ in. $\pm 5 \mu$ in.

DIMENSIONS mm (inches)



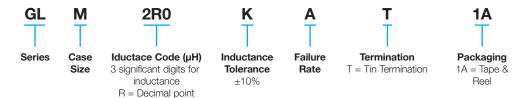
| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| М | 3.226 (0.127) | 2.032 (0.080) | 2.670 (0.105) | 44 | 46 |

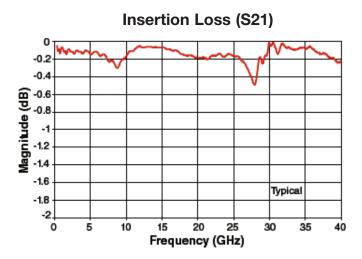


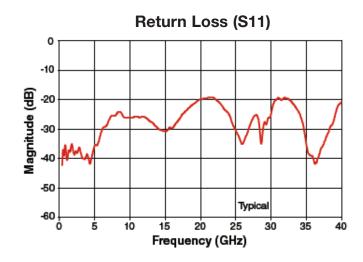












GLM3R8KAT1A



AVX, the industry leader, in introducing the new GLM Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

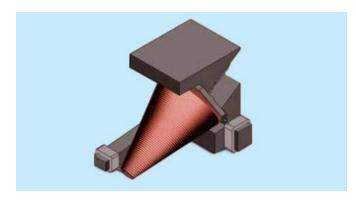
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 1.1 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.4 dB, typ.
- Return Loss (shunt mounted: > 25 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 3.8 µH ±10%
- Rated Current (R_{DC} max.): 182 mA*
- Resistance (I_{DC} max.): 3.70 Ω, typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

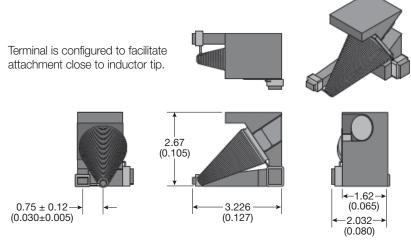
Notes:

Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

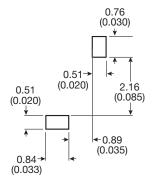
Current Rating: based on a 100°C temperature rise from a 25°C ambient

Wire: Copper, plated with gold 20 μ in. $\pm 5~\mu$ in.

DIMENSIONS mm (inches)



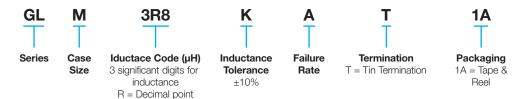
| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| М | 3.226 (0.127) | 2.032 (0.080) | 2.670 (0.105) | 47 | 60 |



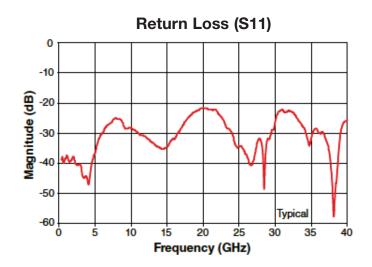














GLN1R47KAT1A



AVX, the industry leader, in introducing the new GLN Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

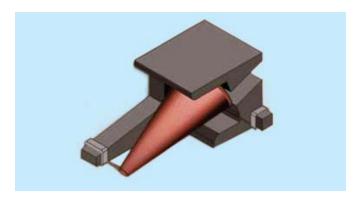
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 2.8 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.4 dB, typ.
- Return Loss (shunt mounted: > 17 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 1.47 µH ±10%
- Rated Current (R_{DC} max.): 694 mA*
- Resistance (I_{DC} max.): 0.33 Ω , typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

Notes:

Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

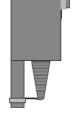
Current Rating: based on a 100°C temperature rise from a 25°C ambient

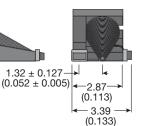
Wire: Copper, plated with gold 20 μ in. $\pm 5~\mu$ in.

DIMENSIONS mm (inches)

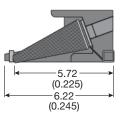
Terminal is configured to facilitate attachment close to inductor tip.

2.972 (0.117)

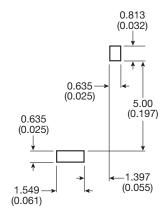








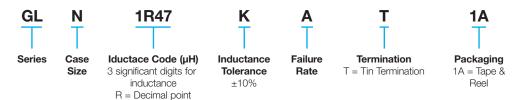
| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| N | 6.223 (0.245) | 3.378 (0.133) | 2.972 (0.117) | 38 | 40 |



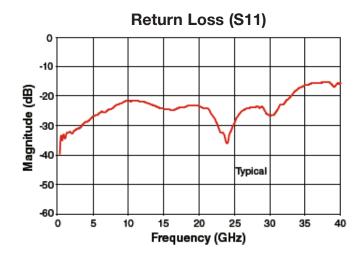












GLN2R0KAT1A



AVX, the industry leader, in introducing the new GLN Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

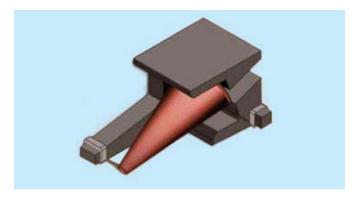
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency: 1.6 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.5 dB, typ.
- Return Loss (shunt mounted: > 17 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 2.00 µH ±10%
- Rated Current (R_{DC} max.): 494 mA*
- Resistance (I_{DC} max.): 0.65 Ω, typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

Notes:

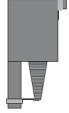
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

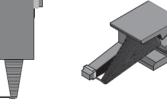
Current Rating: based on a 100°C temperature rise from a 25°C ambient

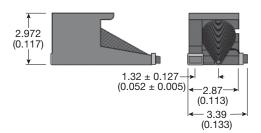
Wire: Copper, plated with gold 20 μ in. $\pm 5 \mu$ in.

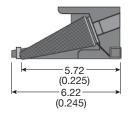
DIMENSIONS mm (inches)

Terminal is configured to facilitate attachment close to inductor tip.

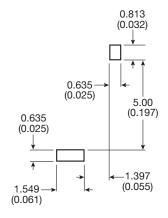








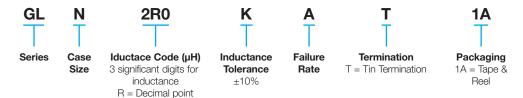
Cu Wire Size Number Width (W) Size Length (L) Height (H) (AWG) of Times 6.223 3.378 2.972 40 48 Ν (0.245)(0.133)(0.117)

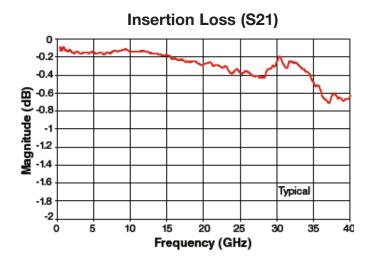
















GLN3R3KAT1A



AVX, the industry leader, in introducing the new GLN Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

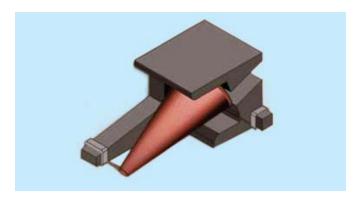
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 1.3 MHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.5 dB, typ.
- Return Loss (shunt mounted: > 17 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 3.30 µH ±10%
- Rated Current (R_{DC} max.): 350 mA*
- Resistance (I_{DC} max.): 1.29 Ω , typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

Notes:

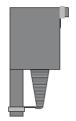
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

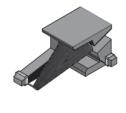
Current Rating: based on a 100°C temperature rise from a 25°C ambient

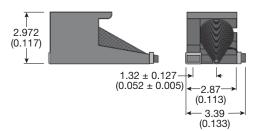
Wire: Copper, plated with gold 20 μ in. $\pm 5~\mu$ in.

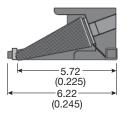
DIMENSIONS mm (inches)

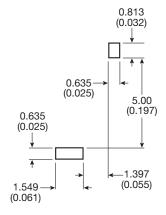
Terminal is configured to facilitate attachment close to inductor tip.









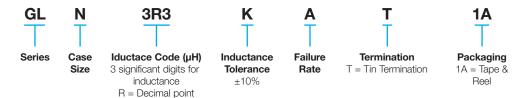


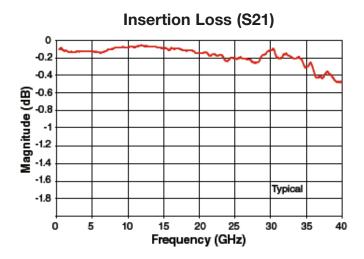
| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| N | 6.223 (0.245) | 3.378 (0.133) | 2.972 (0.117) | 42 | 60 |















GLN6R0KAT1A



AVX, the industry leader, in introducing the new GLN Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

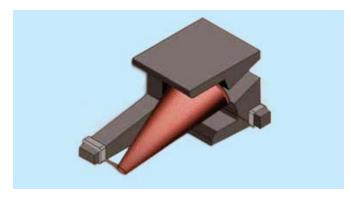
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 700 KHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.4 dB, typ.
- Return Loss (shunt mounted: > 48 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 6.00 µH, typ.
- Rated Current (R_{DC} max.): 236 mA*
- Resistance (I_{DC} max.): 2.85 Ω, typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

Notes:

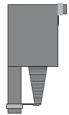
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

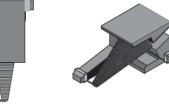
Current Rating: based on a 100°C temperature rise from a 25°C ambient

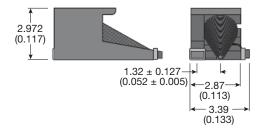
Wire: Copper, plated with gold 20 μ in. $\pm 5~\mu$ in.

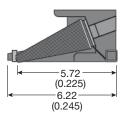
DIMENSIONS mm (inches)

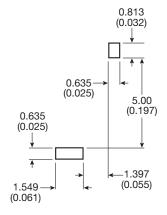
Terminal is configured to facilitate attachment close to inductor tip.









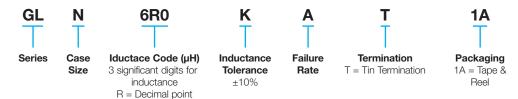


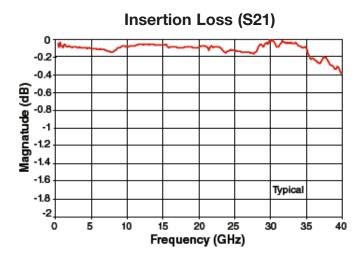
| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| N | 6.223 (0.245) | 3.378 (0.133) | 2.972 (0.117) | 44 | 78 |













GLN10R7KAT1A



AVX, the industry leader, in introducing the new GLN Series High Frequency Ultra-Broadband Inductor (UBL). This unique component provides low insertion loss and an excellent match over multiple octaves of frequency spectrum.

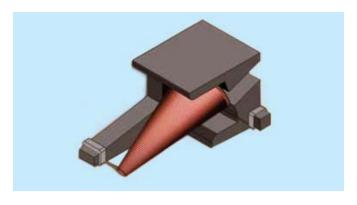
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Operating Frequency:
 400 KHz (-3 dB roll-off) through 40+ GHz typ.
- Insertion Loss (shunt mounted: ≤0.4 dB, typ.
- Return Loss (shunt mounted: > 17 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHs Compliant Terminations

ADVANTAGES

- Ultra-Broadband Performance
- Ultra-Low Insertion Loss
- Flat Frequency Response
- Excellent Return Loss Through 40 GHz
- Unit-to-Unit Performance Repeatability
- Rugged Powdered Iron Core



ELECTRICAL SPECIFICATION

- Inductance: 10.7 µH ±10%
- Rated Current (R_{DC} max.): 150 mA*
- Resistance (I_{DC} max.): 7.10 Ω , typ. at +20°C, 10 mA Current

*Current for 100°C Temperature rise

Notes:

Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

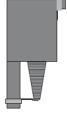
Current Rating: based on a 100°C temperature rise from a 25°C ambient

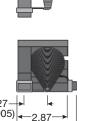
Wire: Copper, plated with gold 20 μ in. $\pm 5~\mu$ in.

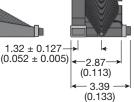
DIMENSIONS mm (inches)

Terminal is configured to facilitate attachment close to inductor tip.

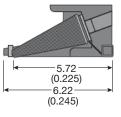
2.972 (0.117)

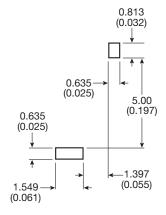










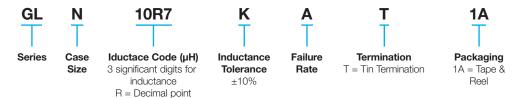


| Size | Length (L) | Width (W) | Height (H) | Cu Wire Size (AWG) | Number of Times |
|------|------------------|------------------|------------------|-----------------------|-----------------|
| Ν | 6.223 (0.245) | 3.378 (0.133) | 2.972 (0.117) | 47 | 110 |















AMERICAS

AVX Greenville, SC Tel: 864-967-2150

AVX Northwest, WA Tel: 360-699-8746

AVX Midwest, IN Tel: 317-861-9184

AVX Mid/Pacific, CA Tel: 408-988-4900

AVX Northeast, MA Tel: 617-479-0345

AVX Southwest, CA Tel: 949-859-9509

AVX Canada Tel: 905-238-3151

AVX South America Tel: +55-11-4688-1960

EUROPE

AVX Limited, England Tel: +44-1276-697000

AVX S.A.S., France Tel: +33-1-69-18-46-00

AVX GmbH, Germany Tel: +49-0811-95949-0

AVX SRL, Italy Tel: +39-02-614-571

AVX Czech Republic Tel: +420-57-57-57-521

AVX/ELCO UK Tel: +44-1638-675000

ELCO Europe GmbH Tel: +49-2741-299-0

AVX S.A., Spain Tel: +34-91-63-97-197

AVX Benelux Tel: +31-187-489-337

ASIA-PACIFIC

AVX/Kyocera (S) Pte Ltd., Singapore

Tel: +65-6286-7555

AVX/Kyocera, Asia, Ltd., Hong Kong

Tel: +852-2363-3303

AVX/Kyocera Yuhan Hoesa, South Korea

Tel: +82-2785-6504

AVX/Kyocera HK Ltd., Taiwan

Tel: +886-2-2656-0258

AVX/Kyocera (M) Sdn Bhd, Malaysia

Tel: +60-4228-1190

AVX/Kyocera International Trading Co. Ltd., Shanghai

Tel: +86-21-3255 1933

AVX/Kyocera Asia Ltd., Shenzen

Tel: +86-755-3336-0615

AVX/Kyocera International Trading Co. Ltd., Beijing

Tel: +86-10-6588-3528

AVX/Kyocera India Liaison Office

Tel: +91-80-6450-0715

ASIA-KED

(KYOCERA Electronic Devices)

KED Hong Kong Ltd. Tel: +852-2305-1080/1223

KED Hong Kong Ltd. Shenzen

Tel: +86-755-3398-9600

KED Company Ltd. Shanghai

Tel: +86-21-3255-1833

KED Hong Kong Ltd. Beijing

Tel: +86-10-5869-4655

KED Taiwan Ltd. Tel: +886-2-2950-0268

KED Korea Yuhan Hoesa, South Korea

Tel: +82-2-783-3604/6126

KED (S) Pte Ltd. Singapore

Tel: +65-6509-0328

Kyocera Corporation Japan

Tel: +81-75-604-3449



