## 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.

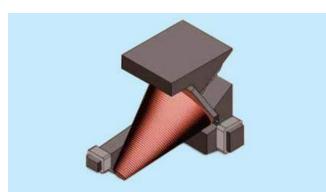
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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<sub>DC</sub> max.): 815 mA\*
- Resistance (I<sub>DC</sub> max.): 0.19  $\Omega$ , typ. at +20°C, 10 mA Current

\*Current for 100°C Temperature rise

#### Notes:

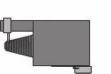
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

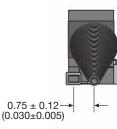
Current Rating: based on a 100°C temperature rise from a 25°C ambient

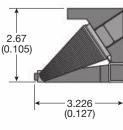
Wire: Copper, plated with gold 20  $\mu$  in.  $\pm 5 \mu$  in.

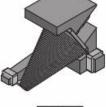
### **DIMENSIONS** mm (inches)

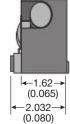
Terminal is configured to facilitate attachment close to inductor tip.



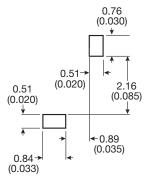








| Size | Length (L)       | Width (W)        | Height (H)       | Cu Wire Size<br>(AWG) | Number<br>of Times |
|------|------------------|------------------|------------------|-----------------------|--------------------|
| М    | 3.226<br>(0.127) | 2.032<br>(0.080) | 2.670<br>(0.105) | 38          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

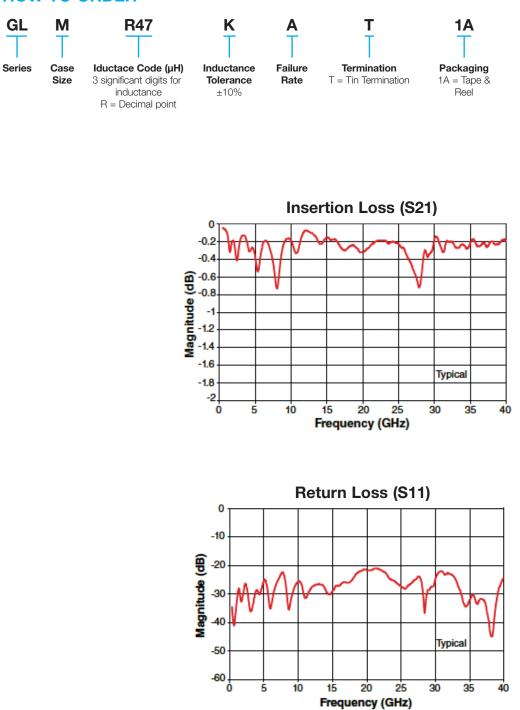




## Ultra-Broadband SMT Inductor GLMR47KAT1A



## HOW TO ORDER



## 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.

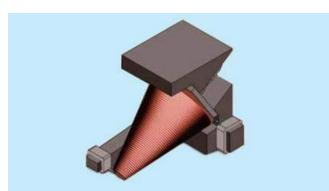
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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<sub>DC</sub> max.): 619 mA\*
- Resistance (I<sub>DC</sub> max.): 0.32  $\Omega$ , typ. at +20°C, 10 mA Current

\*Current for 100°C Temperature rise

#### Notes:

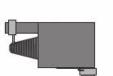
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

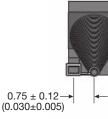
Current Rating: based on a 100°C temperature rise from a 25°C ambient

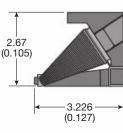
Wire: Copper, plated with gold 20  $\mu$  in.  $\pm 5 \mu$  in.

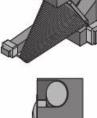
### **DIMENSIONS** mm (inches)

Terminal is configured to facilitate attachment close to inductor tip.





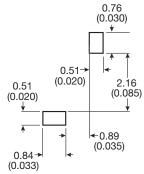






| Size | Length (L)       | Width (W)        | Height (H)       | Cu Wire Size<br>(AWG) | Number<br>of Times |
|------|------------------|------------------|------------------|-----------------------|--------------------|
| М    | 3.226<br>(0.127) | 2.032<br>(0.080) | 2.670<br>(0.105) | 40          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

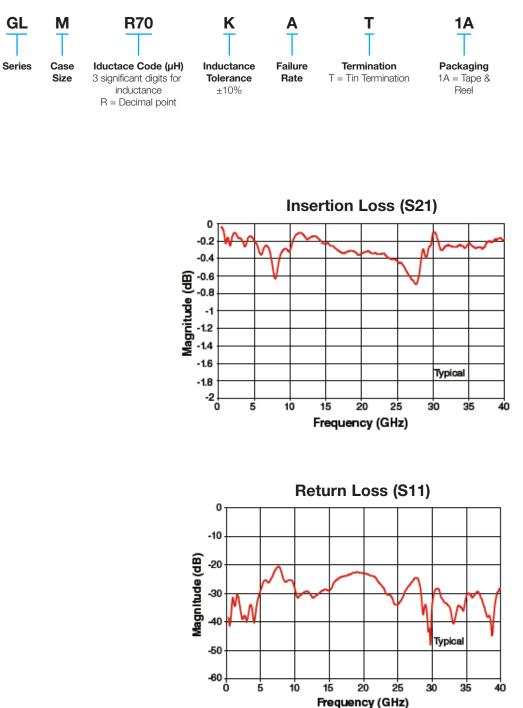
## **RECOMMENDED FOOTPRINT**



## Ultra-Broadband SMT Inductor GLMR70KAT1A



## **HOW TO ORDER**



## 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.

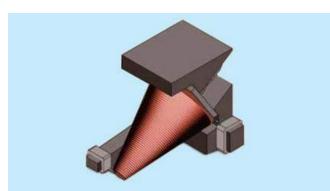
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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  $\mu$ H ±10%
- Rated Current (R<sub>DC</sub> max.): 438 mA\*
- Resistance (I<sub>DC</sub> max.): 0.64  $\Omega$ , typ. at +20°C, 10 mA Current

\*Current for 100°C Temperature rise

#### Notes:

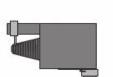
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

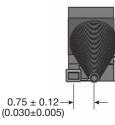
Current Rating: based on a 100°C temperature rise from a 25°C ambient

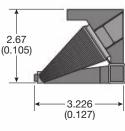
Wire: Copper, plated with gold 20  $\mu$  in.  $\pm 5 \mu$  in.

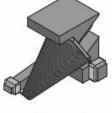
### **DIMENSIONS** mm (inches)

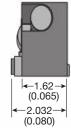
Terminal is configured to facilitate attachment close to inductor tip.



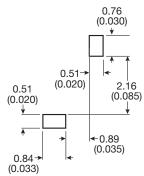








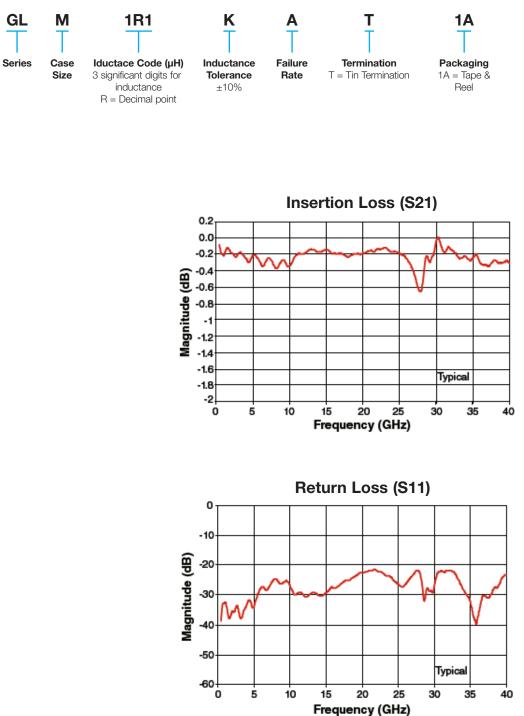
| Size | Length (L)       | Width (W)        | Height (H)       | Cu Wire Size<br>(AWG) | Number<br>of Times |
|------|------------------|------------------|------------------|-----------------------|--------------------|
| М    | 3.226<br>(0.127) | 2.032<br>(0.080) | 2.670<br>(0.105) | 42          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



## Ultra-Broadband SMT Inductor GLM1R1KAT1A



### **HOW TO ORDER**



## 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.

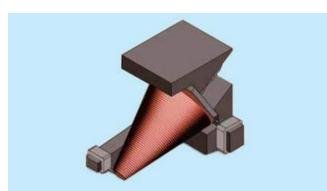
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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  $\mu$ H ±10%
- Rated Current (R<sub>DC</sub> max.): 277 mA\*
- Resistance (I<sub>DC</sub> max.): 1.60  $\Omega$ , typ. at +20°C, 10 mA Current

\*Current for 100°C Temperature rise

#### Notes:

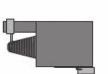
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

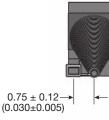
Current Rating: based on a 100°C temperature rise from a 25°C ambient

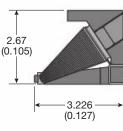
Wire: Copper, plated with gold 20  $\mu$  in.  $\pm 5 \mu$  in.

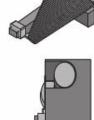
### **DIMENSIONS** mm (inches)

Terminal is configured to facilitate attachment close to inductor tip.



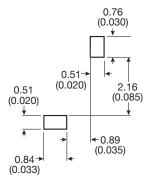






(0.065) (0.080)

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



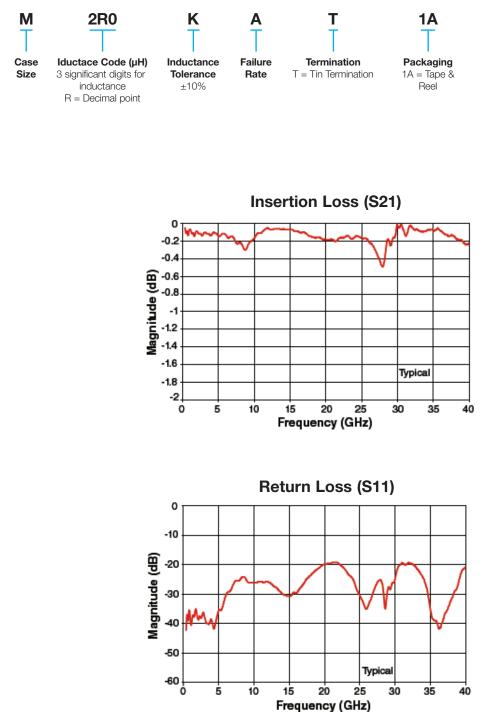


## GLM2R0KAT1A

#### **HOW TO ORDER**

GL

Series



## 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.

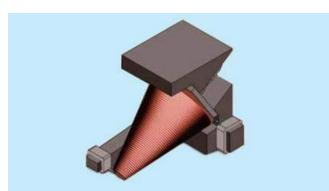
The GLM is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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<sub>DC</sub> max.): 182 mA\*
- Resistance (I<sub>DC</sub> max.): 3.70  $\Omega$ , typ. at +20°C, 10 mA Current

\*Current for 100°C Temperature rise

#### Notes:

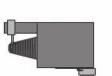
Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyser

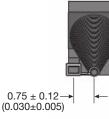
Current Rating: based on a 100°C temperature rise from a 25°C ambient

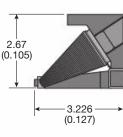
Wire: Copper, plated with gold 20  $\mu$  in.  $\pm 5 \mu$  in.

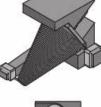
### **DIMENSIONS** mm (inches)

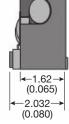
Terminal is configured to facilitate attachment close to inductor tip.



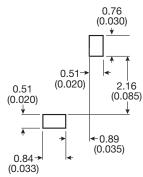








| Size | Length (L)       | Width (W)        | Height (H)       | Cu Wire Size<br>(AWG) | Number<br>of Times |
|------|------------------|------------------|------------------|-----------------------|--------------------|
| М    | 3.226<br>(0.127) | 2.032<br>(0.080) | 2.670<br>(0.105) | 47          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





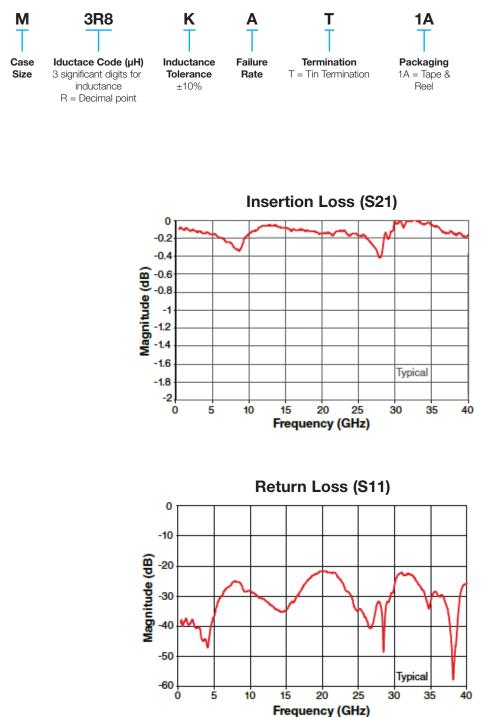
## Ultra-Broadband SMT Inductor GLM3R8KAT1A





GL

Series



## 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.

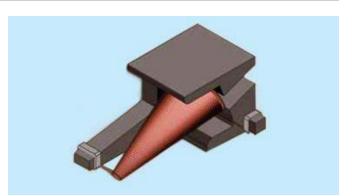
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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  $\mu$ H ±10%
- Rated Current (R<sub>DC</sub> max.): 694 mA\*
- Resistance (I<sub>DC</sub> max.): 0.33  $\Omega$ , typ. at +20°C, 10 mA Current

\*Current for 100°C Temperature rise

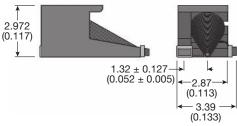
#### Notes:

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

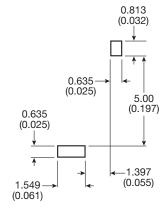
Wire: Copper, plated with gold 20  $\mu$  in.  $\pm 5 \mu$  in.

## DIMENSIONS mm (inches) Terminal is configured to facilitate attachment close to inductor tip.



|      |                  |                  | (01100)          |                       |                    |
|------|------------------|------------------|------------------|-----------------------|--------------------|
| Size | Length (L)       | Width (W)        | Height (H)       | Cu Wire Size<br>(AWG) | Number<br>of Times |
| Ν    | 6.223<br>(0.245) | 3.378<br>(0.133) | 2.972<br>(0.117) | 38                    | 40                 |

## **RECOMMENDED FOOTPRINT**





5.72

(0.225)

6.22

(0.245)

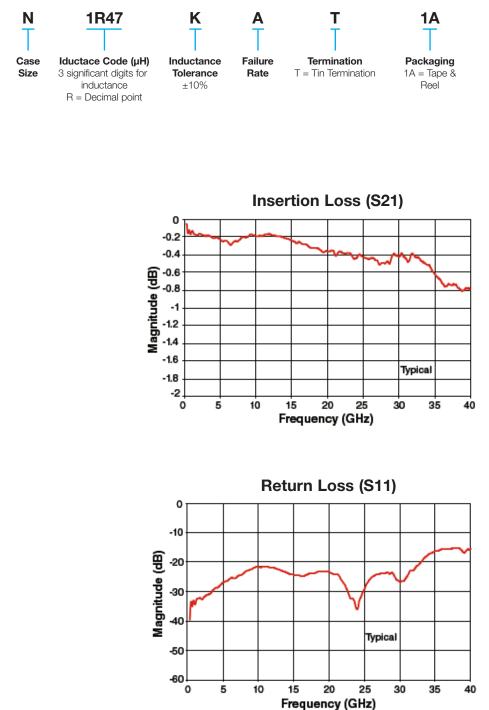


## GLN1R47KAT1A

### **HOW TO ORDER**

GL

Series



## **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.

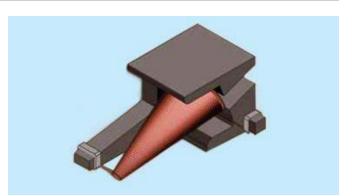
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### 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<sub>DC</sub> max.): 494 mA\*
- Resistance ( $I_{DC}$  max.): 0.65  $\Omega$ , typ. at +20°C, 10 mA Current

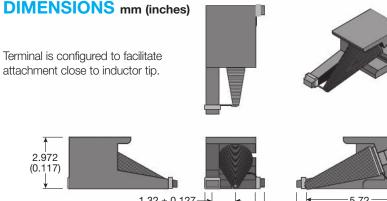
\*Current for 100°C Temperature rise

#### 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

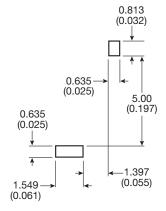
Wire: Copper, plated with gold 20  $\mu$  in.  $\pm 5 \mu$  in.



 $\downarrow$ 1.32 ± 0.127- $(0.052 \pm 0.005)$ -2.87-(0.113) - 3.39 (0.133)

| ₹5.72           |
|-----------------|
| (0.225)         |
| 6.22<br>(0.245) |

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



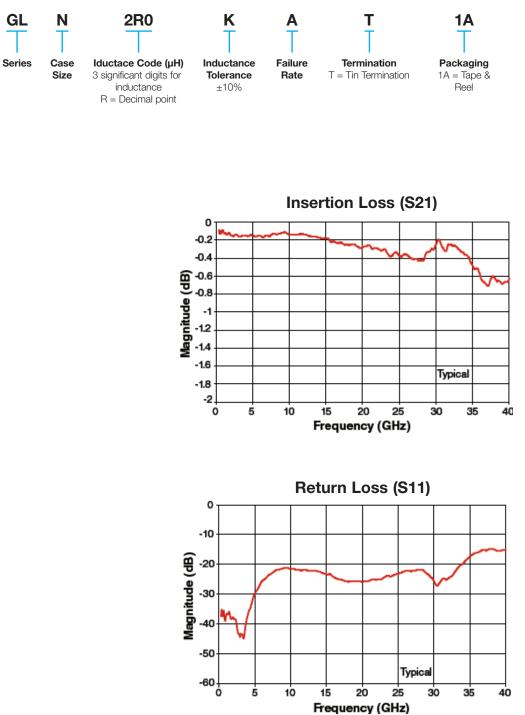




## Ultra-Broadband SMT Inductor GLN2R0KAT1A



#### **HOW TO ORDER**



## 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.

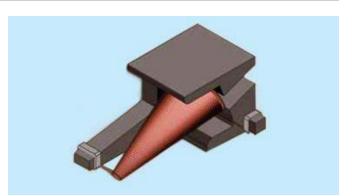
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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  $\mu$ H ±10%
- Rated Current (R<sub>DC</sub> max.): 350 mA\*
- Resistance (I<sub>DC</sub> max.): 1.29  $\Omega$ , typ. at +20°C, 10 mA Current

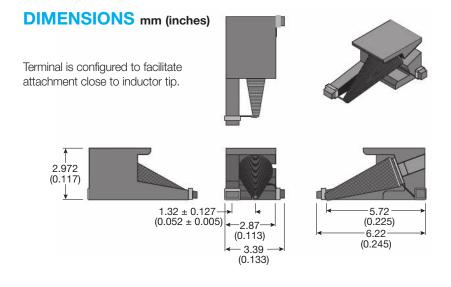
\*Current for 100°C Temperature rise

#### Notes:

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

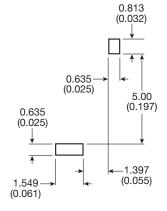
Current Rating: based on a 100°C temperature rise from a 25°C ambient

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



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



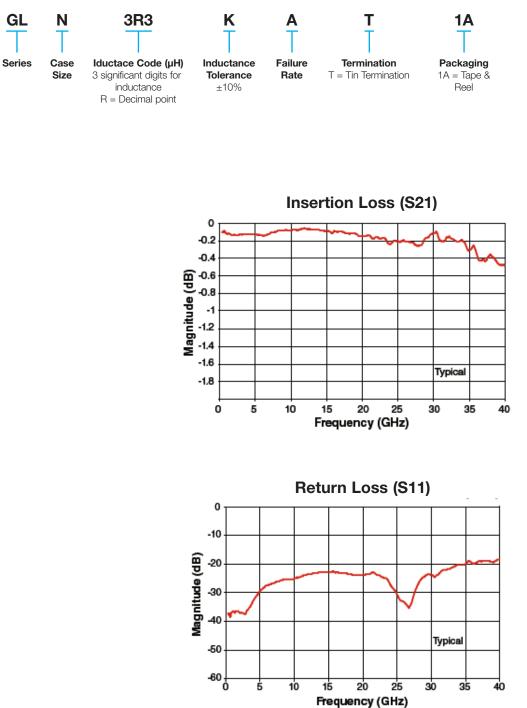


## **Ultra-Broadband SMT Inductor GLN3R3KAT1A**



#### **HOW TO ORDER**

GL



## 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.

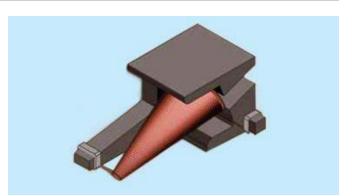
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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<sub>DC</sub> max.): 236 mA\*
- Resistance (I<sub>DC</sub> max.): 2.85  $\Omega$ , typ. at +20°C, 10 mA Current

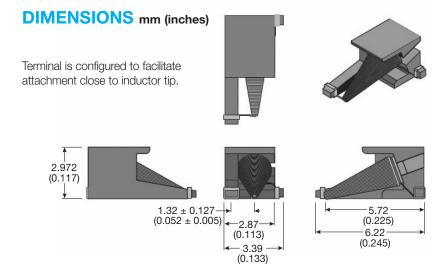
\*Current for 100°C Temperature rise

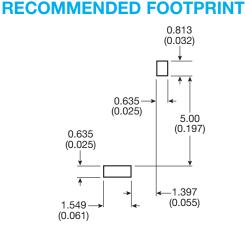
#### Notes:

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  $\mu$  in.  $\pm 5 \mu$  in.





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

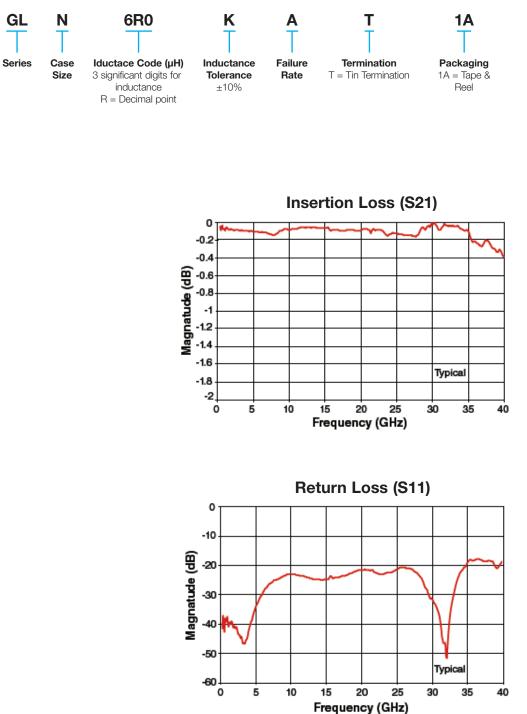


## **Ultra-Broadband SMT Inductor GLN6R0KAT1A**



### **HOW TO ORDER**

GL



## 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.

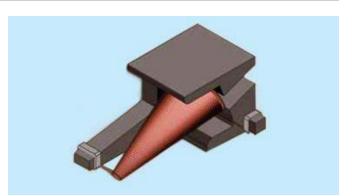
The GLN is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

### **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<sub>DC</sub> max.): 150 mA\*
- Resistance (I<sub>DC</sub> max.): 7.10  $\Omega$ , typ. at +20°C, 10 mA Current

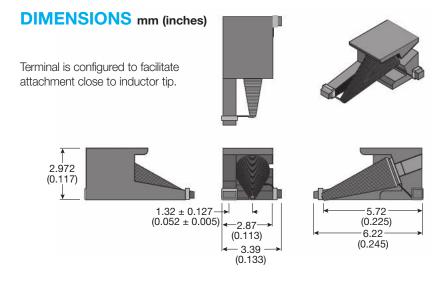
\*Current for 100°C Temperature rise

#### Notes:

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

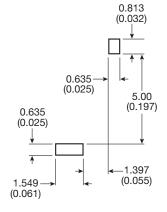
Current Rating: based on a 100°C temperature rise from a 25°C ambient

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



| Size | Length (L)       | Width (W)        | Height (H)       | Cu Wire Size<br>(AWG) | Number<br>of Times |
|------|------------------|------------------|------------------|-----------------------|--------------------|
| Ν    | 6.223<br>(0.245) | 3.378<br>(0.133) | 2.972<br>(0.117) | 47                    | 110                |
|      | (0.240)          | (0.100)          |                  |                       |                    |







## GLN10R7KAT1A

### **HOW TO ORDER**

GL

Series

