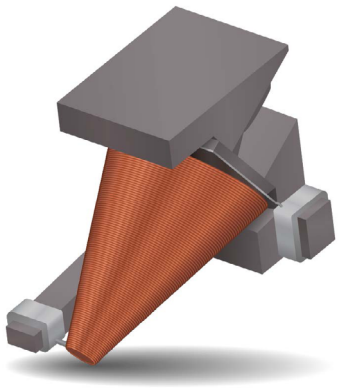
Ultra-Broadband SMT Inductor

506WLS Series

General Information



UBL TECHNOLOGY

KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

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

HOW TO ORDER

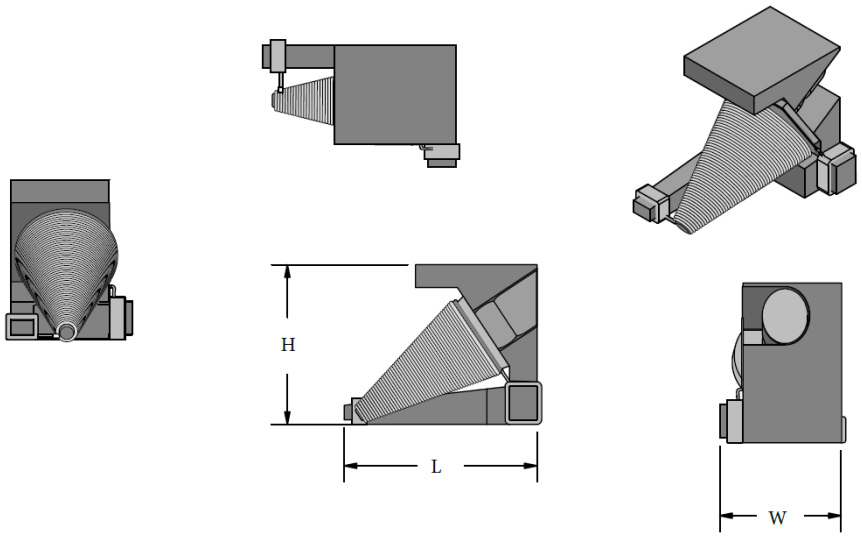
506WLS	M	XXXX	K	T	XXX	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance**	**T = Tin Termination**	**Current (mA)** See table	**Packaging** T = Tape and Reel

RoHS COMPLIANT

Part Number	Inductance (µH)	Operating Frequency Range	Insertion Loss** typ.	Return Loss** typ.	DC Resistance Ω typ. 2	DC Current (DC max.)***
506WLSM0R47KT815T	0.47	9.5 MHz to 40+ GHz	< 0.5 dB	> 20 dB	0.19	815 mA
506WLSM0R70KT619T	0.7	5.6 MHz to 40+ GHz	< 0.5 dB	> 20 dB	0.32	619 mA
506WLSM1R10KT438T	1.1	3.3 MHz to 40+ GHz	< 0.6 dB	> 22 dB	0.64	438 mA
506WLSM2R00KT277T	2	2.1 MHz to 40+ GHz	< 0.4 dB	> 20 dB	1.60	277 mA
506WLSM3R80KT182T	3.8	1.1 MHz to 40+ GHz	< 0.4 dB	> 25 dB	3.70	182 mA
506WLSN1R47KT694T	1.47	2.8 MHz to 40+ GHz	< 0.4 dB	> 17 dB	0.33	694 mA
506WLSN2R00KT494T	2	1.6 MHz to 40+ GHz	< 0.5 dB	> 17 dB	0.65	494 mA
506WLSN3R30KT350T	3.3	1.3 MHz to 40+ GHz	< 0.5 dB	> 17 dB	1.15	350 mA
506WLSN6R00KT236T	6	700 KHz to 40+ GHz	< 0.4 dB	> 18 dB	2.85	236 mA
506WLSN10R7KT150T	10.7	400 KHz to 40+ GHz	< 0.4 dB	> 17 dB	7.10	150 mA

*Lower -3 dB roll-off frequency
**Shunt Mounted
***Current for 100 °C temperature rise

OUTLINE DIMENSIONS inches (mm)

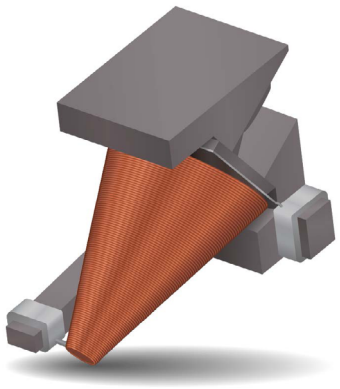


Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

Part Number	Size	Length (L)	Width (W)	Height (H)	Cu Wire Size (AWG)	Number of Turns
506WLSM0R47KT815T	M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	38	22
506WLSM0R70KT619T	M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	40	27
506WLSM1R10KT438T	M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	42	34
506WLSM2R00KT277T	M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	44	45
506WLSM3R80KT182T	M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	47	60
506WLSN1R47KT694T	N	0.245 (6.223)	0.133 (3.378)	0.117 (2.972)	38	40
506WLSN2R00KT494T	N	0.245 (6.223)	0.133 (3.378)	0.117 (2.972)	40	48
506WLSN3R30KT350T	N	0.245 (6.223)	0.133 (3.378)	0.117 (2.972)	42	60
506WLSN6R00KT236T	N	0.245 (6.223)	0.133 (3.378)	0.117 (2.972)	44	78
506WLSN10R7KT150T	N	0.245 (6.223)	0.133 (3.378)	0.117 (2.972)	47	110

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.

Ultra-Broadband SMT Inductor
506WLSM0R47KT815T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 0.47 µH
- 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

HOW TO ORDER

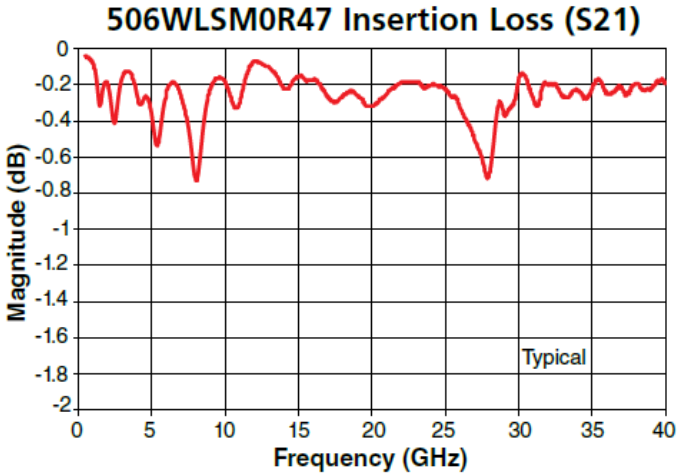
506WLS	M	0R47	K	T	815	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance**	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

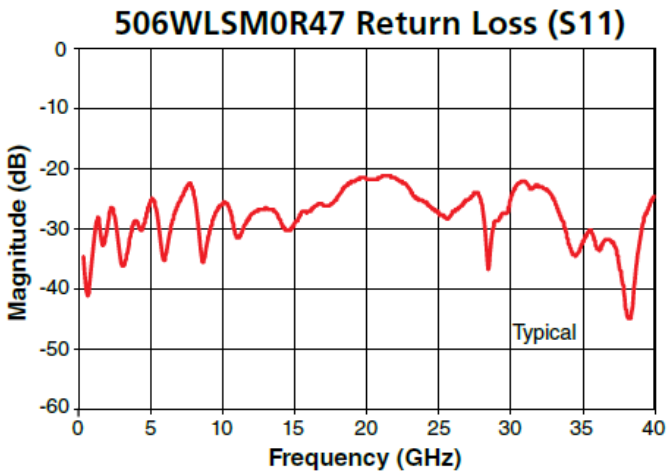
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size M, 0.47 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 815 mA, tape and reel packaging.

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

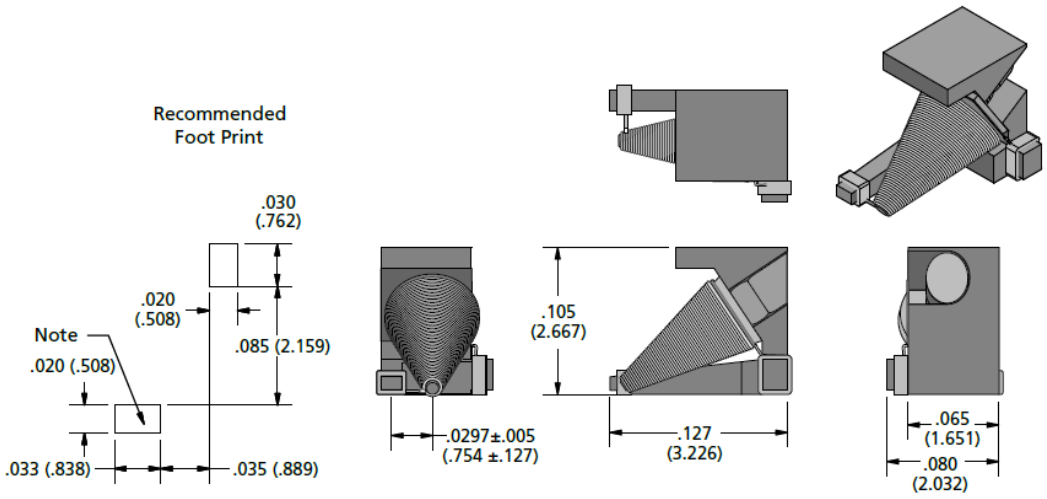
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

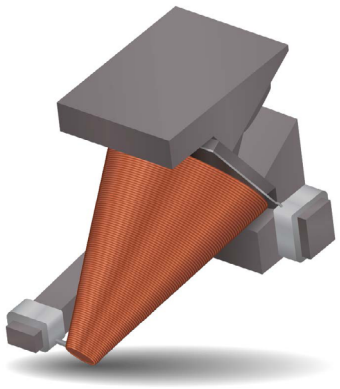
MECHANICAL CONFIGURATIONS

Size	Length (L)	Width (W)	Height (H)	Cu Wire Size (AWG)	Number of Turns
M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	38	22

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSM0R70KT619T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 0.70 µH
- Operating Frequency: 5.6 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

HOW TO ORDER

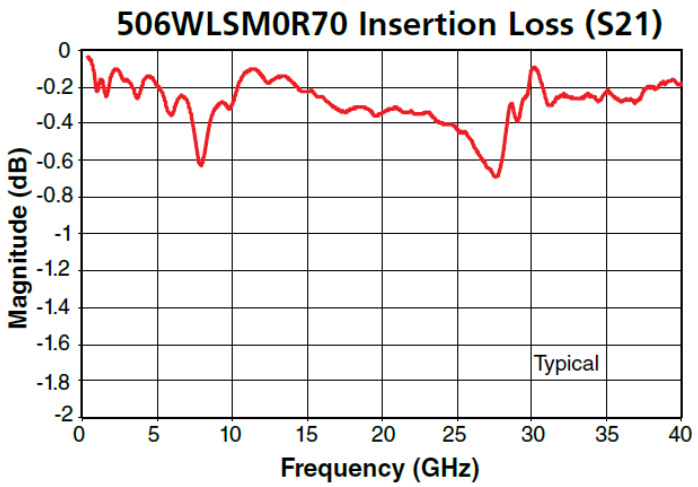
506WLS	M	0R70	K	T	619	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

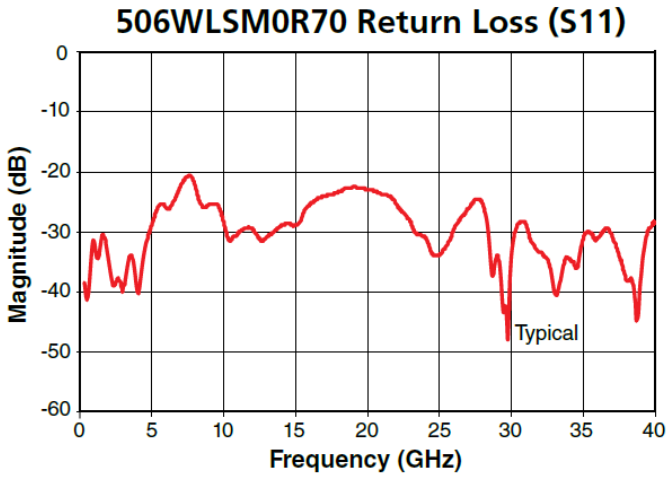
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size M, 0.70 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 619 mA, tape and reel packaging.

ELECTRICAL SPECIFICATIONS
- Inductance: 0.7 µH ±10%*
- Rated DC Current (I_{DC} max.): 619 mA**
- DC Resistance (R_{DC} typ.): 0.32 Ω, typ. at +20°C, 10 mA current.

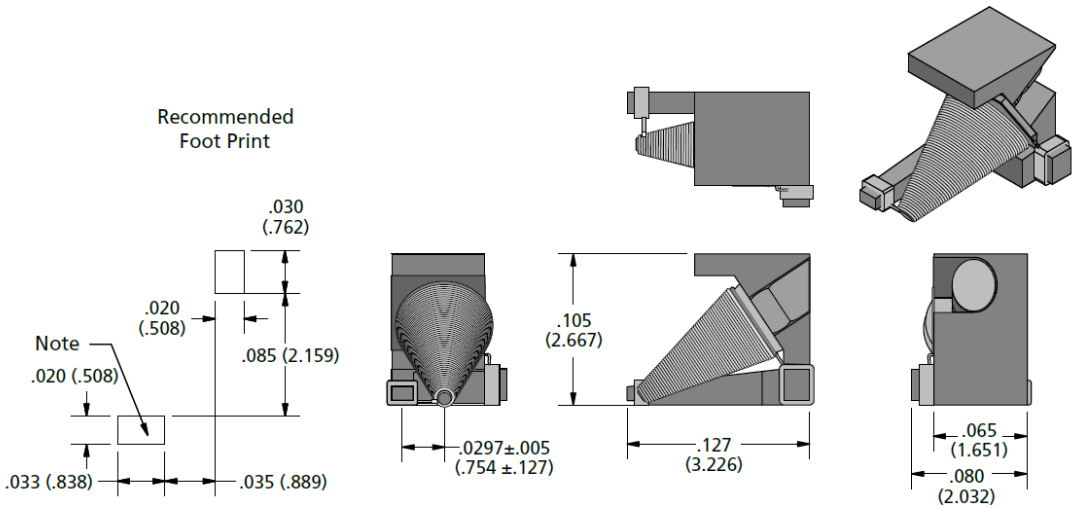
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

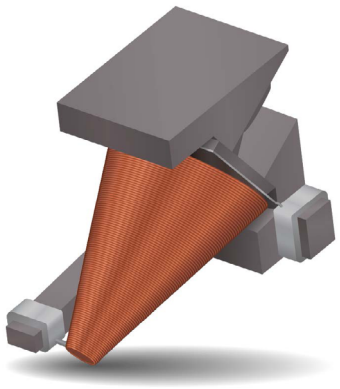
MECHANICAL CONFIGURATIONS

Size	Length (L)	Width (W)	Height (H)	Cu Wire Size (AWG)	Number of Turns
M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	40	27

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSM1R10KT438T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 1.10 µH
- 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

HOW TO ORDER

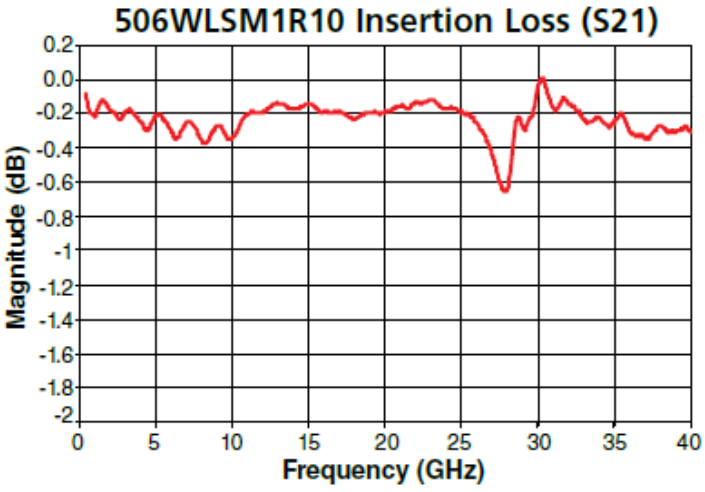
506WLS	M	1R10	K	T	438	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

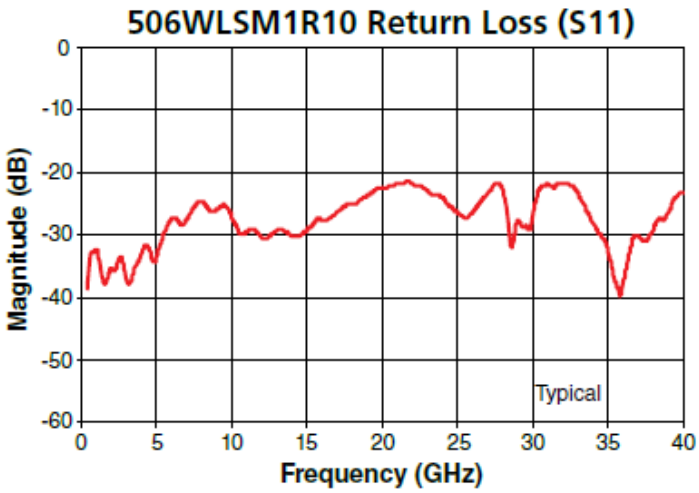
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size M, 1.10 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 438 mA, tape and reel packaging.

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

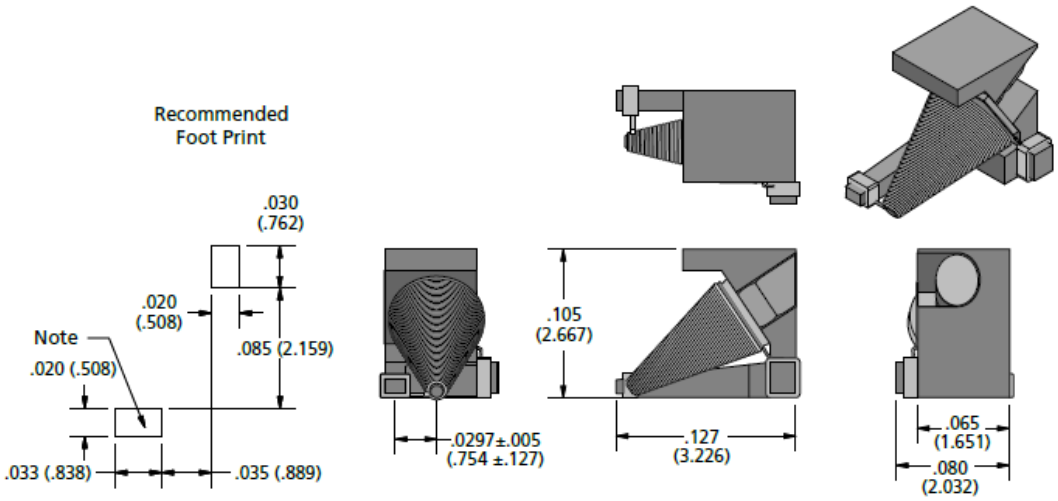
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

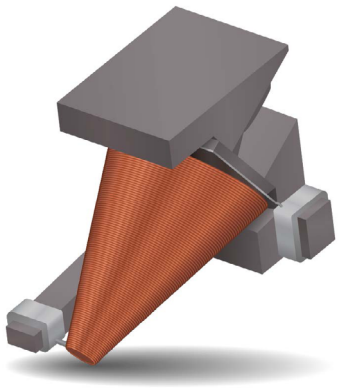
MECHANICAL CONFIGURATIONS

Size	Length (L)	Width (W)	Height (H)	Cu Wire Size (AWG)	Number of Turns
M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	42	34

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSM2R00KT277T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 2.00 µH
- 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

HOW TO ORDER

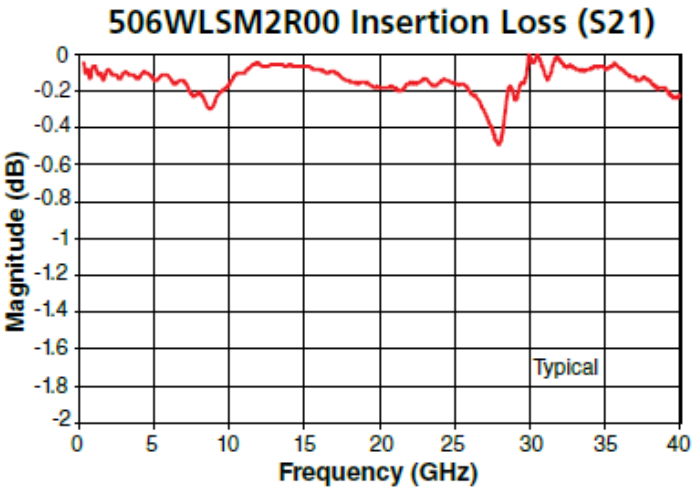
506WLS	M	2R00	K	T	277	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

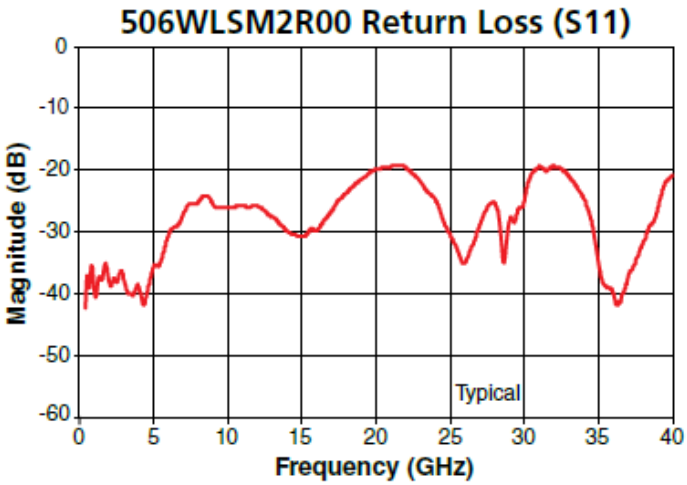
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size M, 2.00 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 277 mA, tape and reel packaging.

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

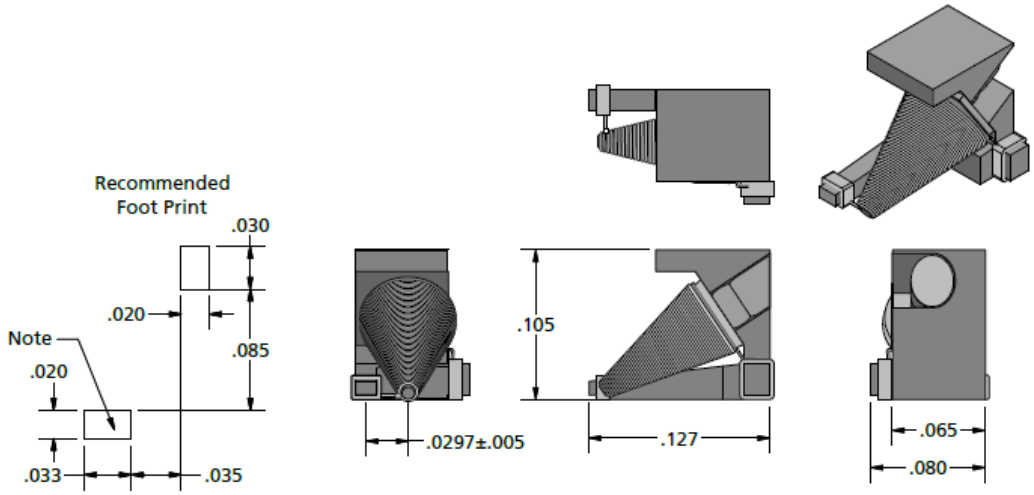
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

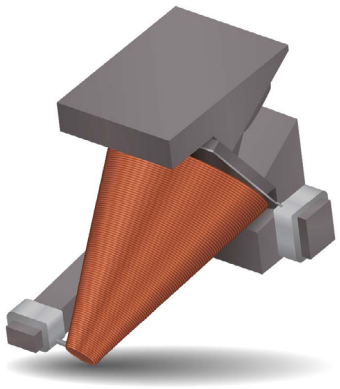
MECHANICAL CONFIGURATIONS

Size	Length (L)	Width (W)	Height (H)	Cu Wire Size (AWG)	Number of Turns
M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	44	45

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSM3R80KT182T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 3.80 µH
- 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

HOW TO ORDER

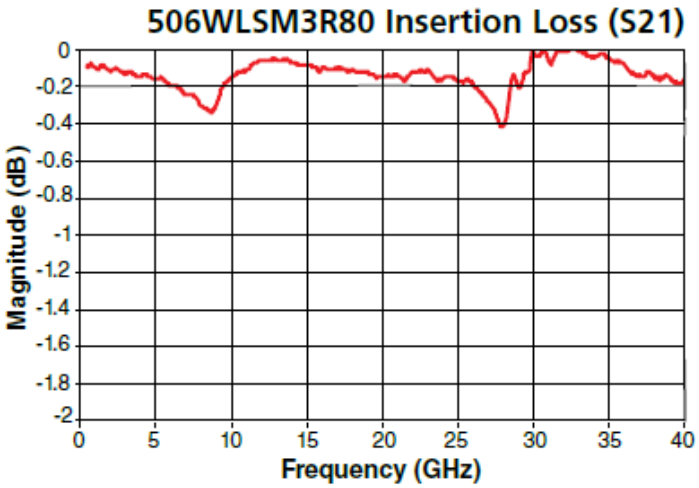
506WLS	M	3R80	K	T	182	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

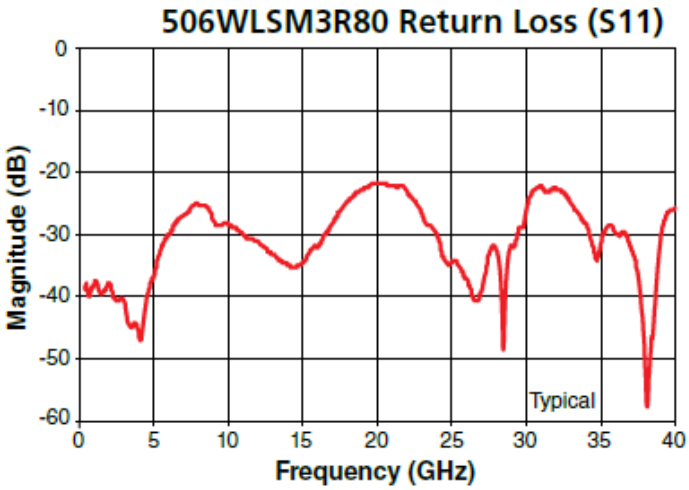
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size M, 3.80 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 182 mA, tape and reel packaging.

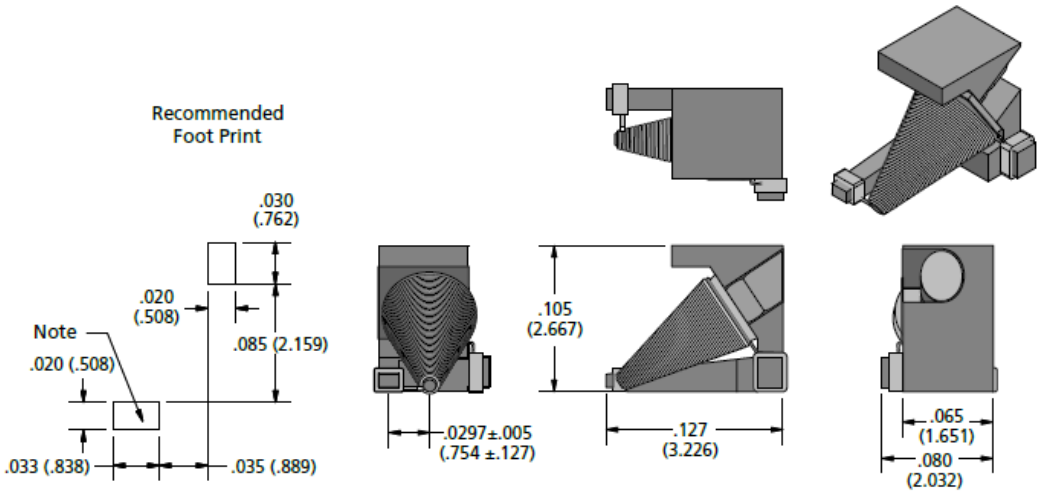
ELECTRICAL SPECIFICATIONS
- Inductance: 3.80 µH ±10%*
- Rated DC Current (I_{DC} max.): 182 mA**
- DC Resistance (R_{DC} typ.): 3.70 Ω, typ. at +20°C, 10 mA current.

*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

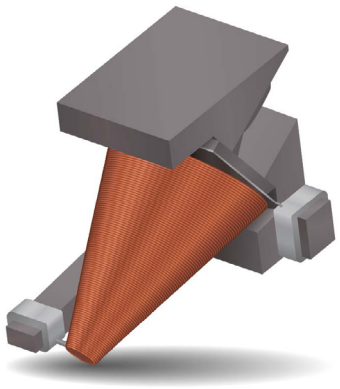
MECHANICAL CONFIGURATIONS

Size	Length (L)	Width (W)	Height (H)	Cu Wire Size (AWG)	Number of Turns
M	0.127 (3.226)	0.08 (2.032)	0.105 (2.667)	47	60

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSN1R47KT694T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 1.47 µH
- 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

HOW TO ORDER

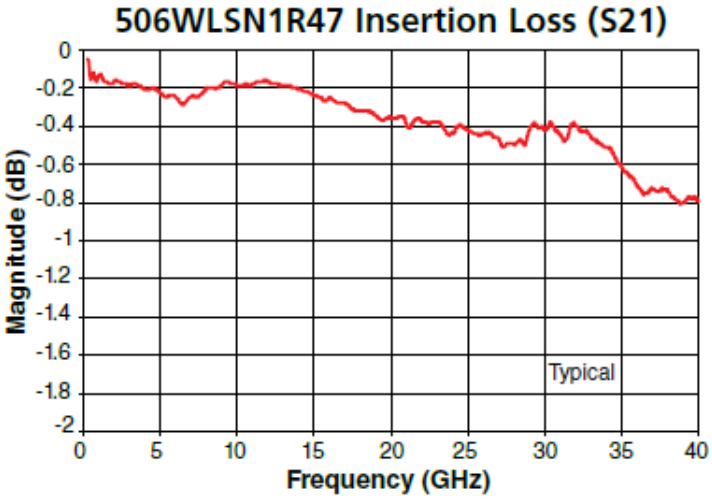
506WLS	N	1R47	K	T	694	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

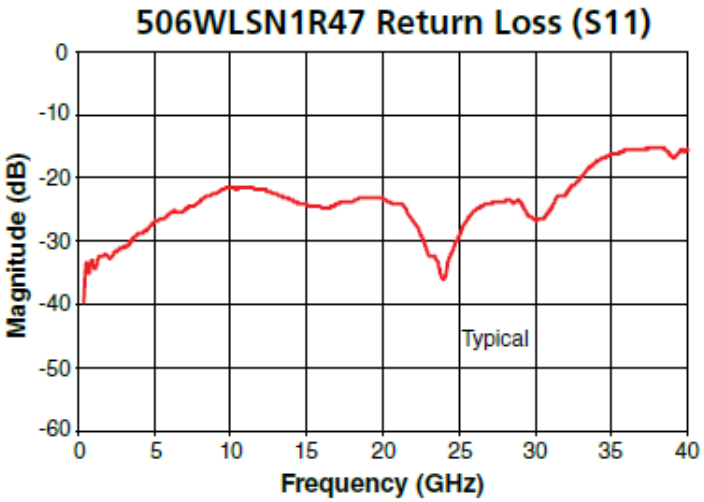
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size N, 1.47 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 694 mA, tape and reel packaging.

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

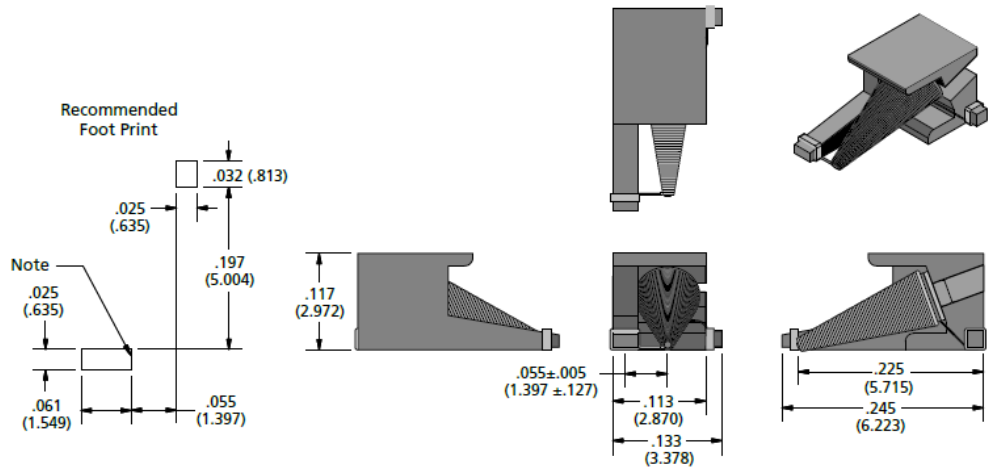
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

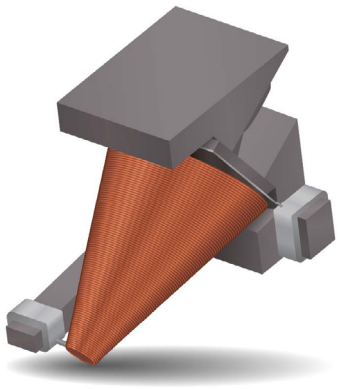
MECHANICAL CONFIGURATIONS

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

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSN2R00KT494T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 2.00 µH
- 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

HOW TO ORDER

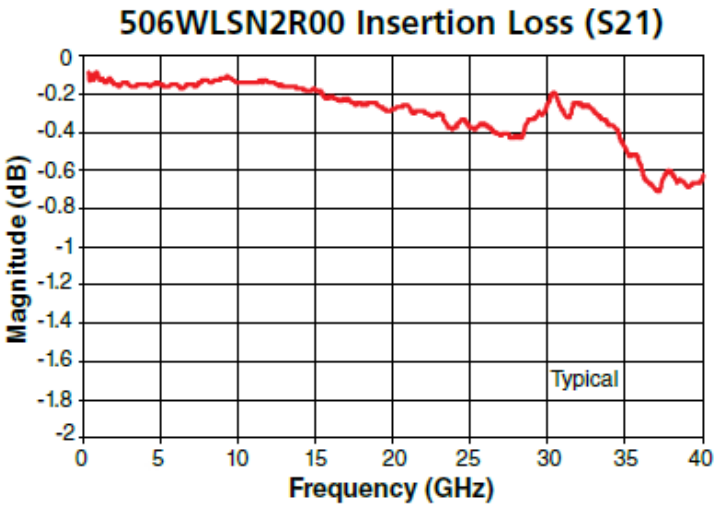
506WLS	N	2R00	K	T	494	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

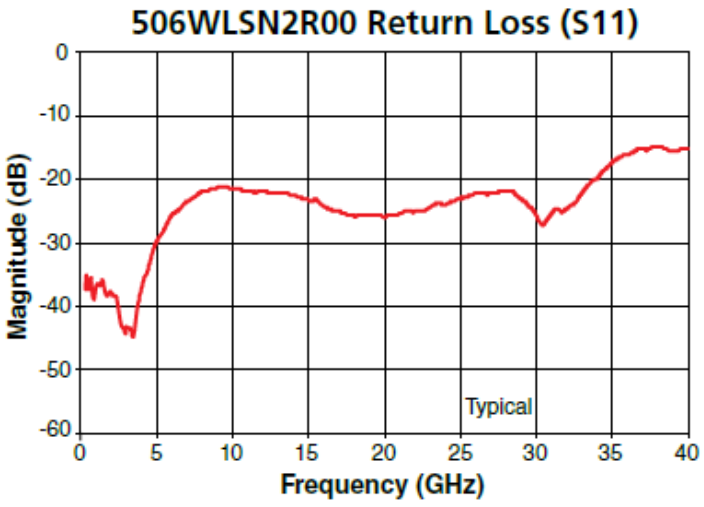
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size N, 2.00 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 494 mA, tape and reel packaging.

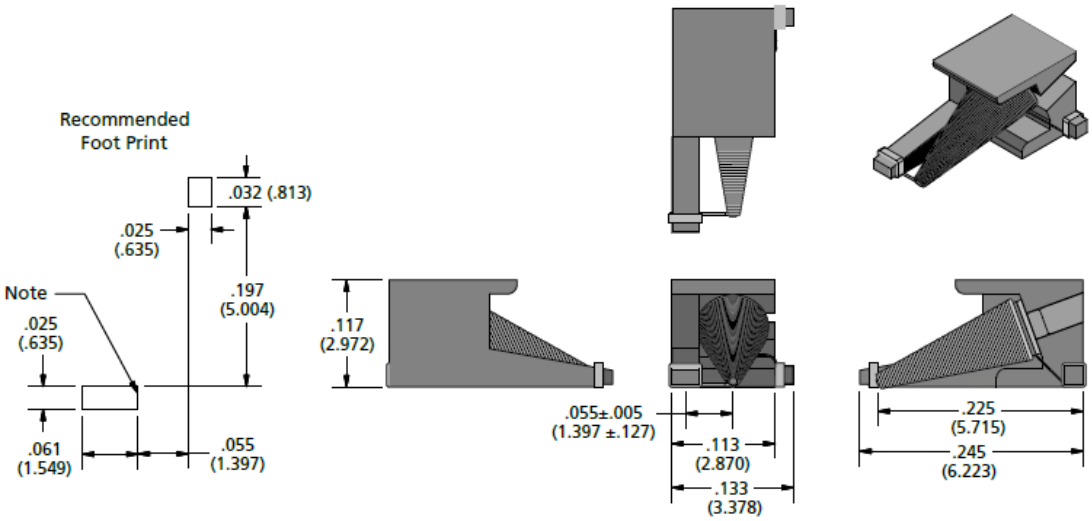
ELECTRICAL SPECIFICATIONS
- Inductance: 2.00 µH ±10%*
- Rated DC Current (I_{DC} max.): 494 mA**
- DC Resistance (R_{DC} typ.): 0.65 Ω, typ. at +20°C, 10 mA current.

*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

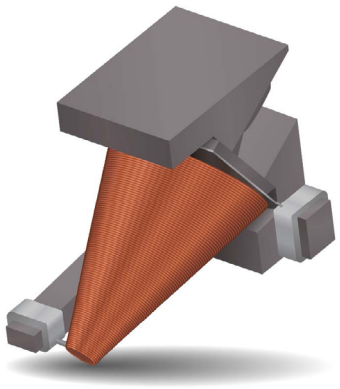
MECHANICAL CONFIGURATIONS

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

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSN3R30KT350T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 3.30 µH
- 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

HOW TO ORDER

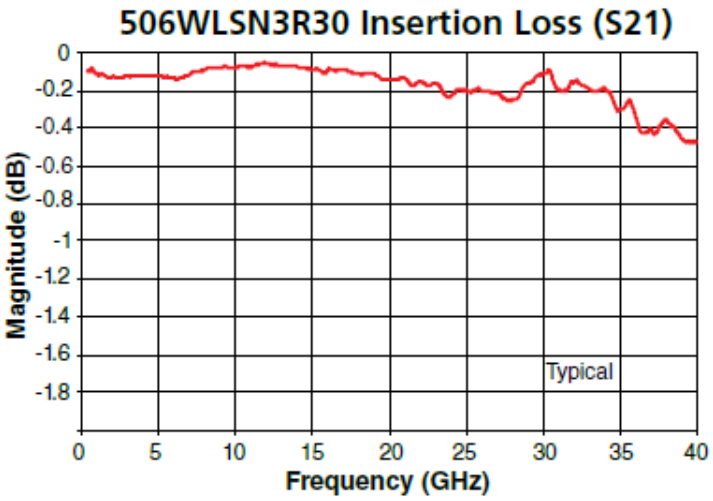
506WLS	N	3R30	K	T	350	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

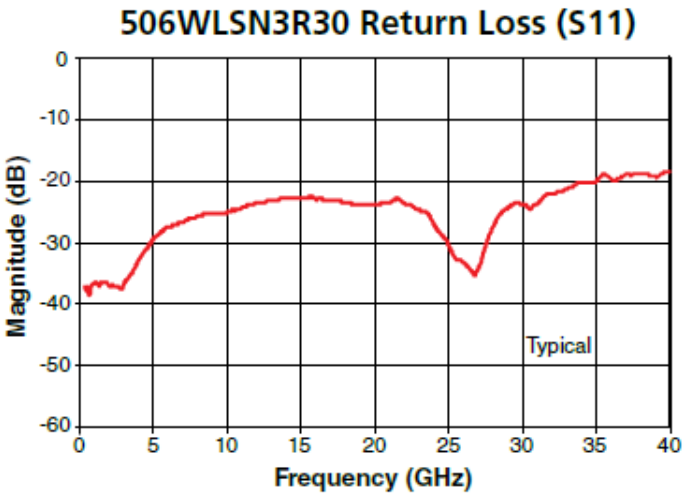
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size N, 3.30 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T),350 mA, tape and reel packaging.

ELECTRICAL SPECIFICATIONS
- Inductance: 3.30 µH ±10%*
- Rated DC Current (I_{DC} max.): 350 mA**
- DC Resistance (R_{DC} typ.): 1.15 Ω, typ. at +20°C, 10 mA current.

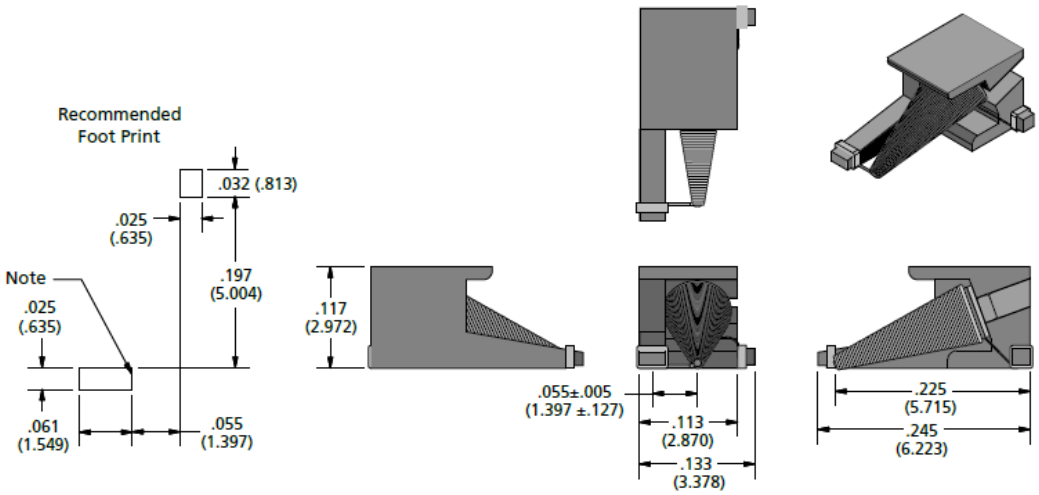
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

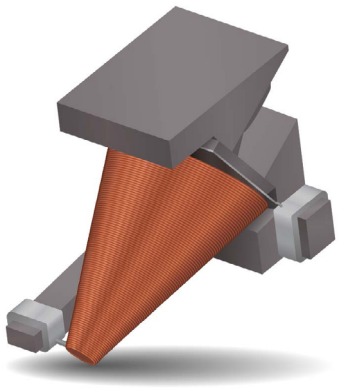
MECHANICAL CONFIGURATIONS

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

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor
506WLSN6R00KT236T
General Information



UBL TECHNOLOGY
KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES
- Inductance: 6.00 µH
- Operating Frequency: 700 KHz (-3 dB roll-off) through 40+ GHz, typ.
- Insertion Loss (shunt mounted): <0.4 dB, typ.
- Return Loss (shunt mounted): >18 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHS Compliant Terminations

HOW TO ORDER

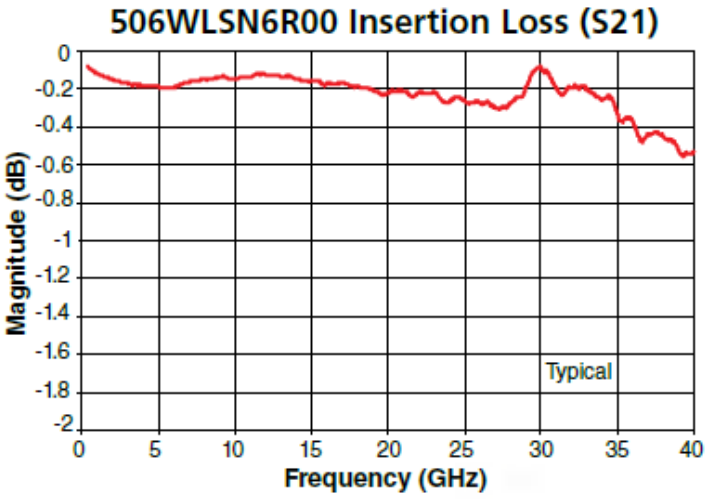
506WLS	N	6R00	K	T	236	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

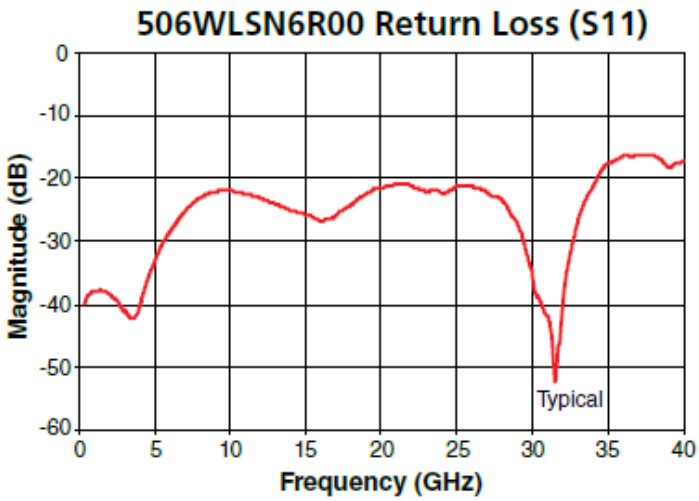
RoHS COMPLIANT

The above part number refers to a 506WLS Series, Case Size N, 6.00 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 236 mA, tape and reel packaging.

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

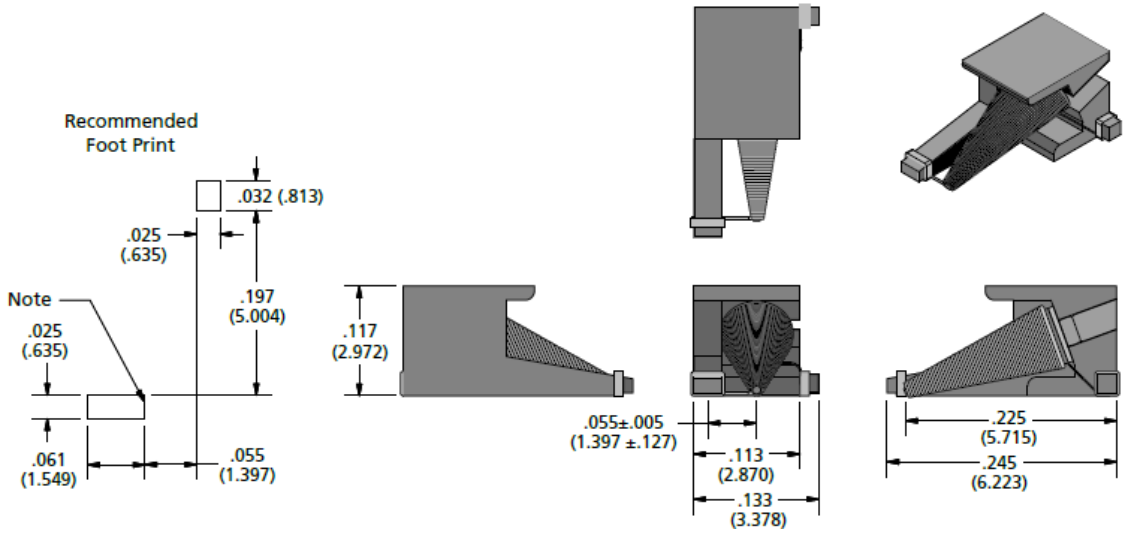
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

MECHANICAL CONFIGURATIONS

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

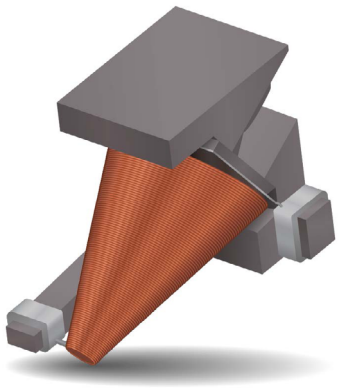
Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.

Ultra-Broadband SMT Inductor

506WLSN10R7KT150T

General Information



UBL TECHNOLOGY

KYOCERA AVX, the industry leader, is introducing the new 506WLS 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 506WLS is ideal for ultra-broadband DC decoupling networks and bias tee applications in optical communications systems and equipment using high-speed digital logic.

FEATURES

- Inductance: 10.7 µH
- 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

HOW TO ORDER

506WLS	N	10R7	K	T	150	T
Series	**Case Size**	**Inductance Code (µH)** 3 significant digits for inductance R = Decimal point	**Induction Tolerance** (±10%)	**T = Tin Termination**	**Current (mA)**	**Packaging** T = Tape and Reel

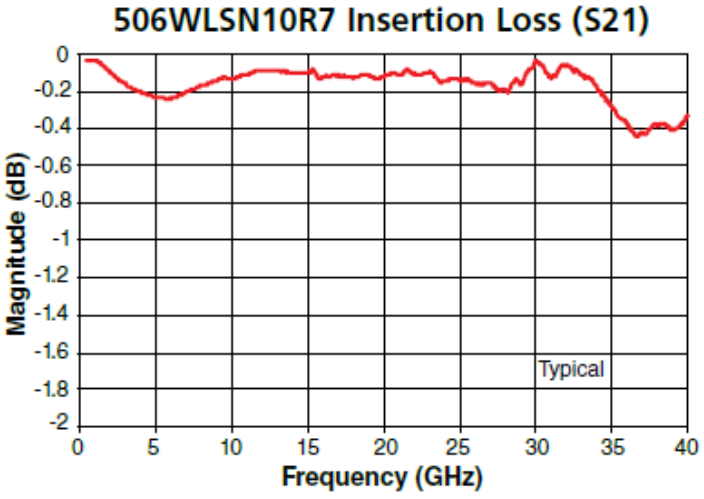
RoHS COMPLIANT

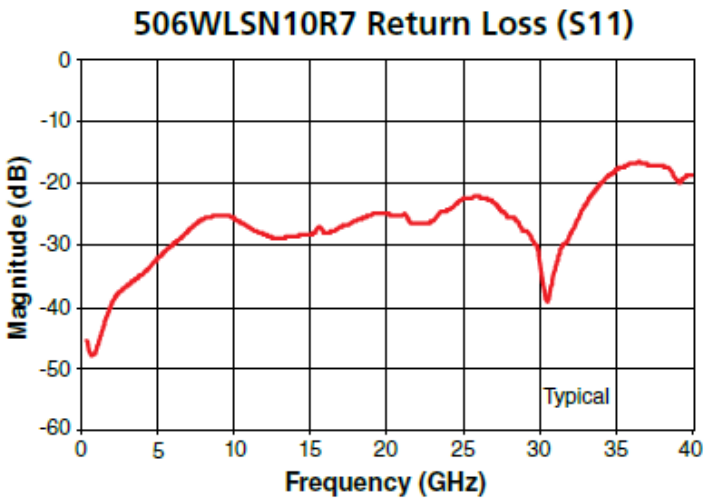
The above part number refers to a 506WLS Series, Case Size N, 10.7 µH inductor, K tolerance (±10%, typ.), with Tin Termination (T), 150 mA, tape and reel packaging.

ELECTRICAL SPECIFICATIONS

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

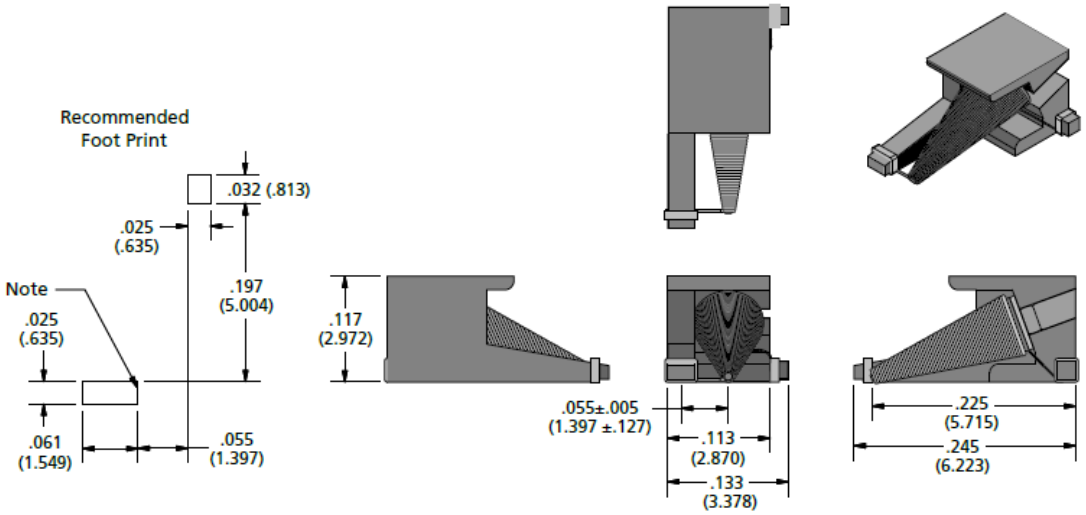
*Inductance: measured at 1 MHz, 0.1 Vrms, 0 mA dc with HP4291A impedance analyzer
** Current Rating: based on a 100°C temperature rise from a 25°C ambient.





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.

OUTLINE DIMENSIONS inches (mm)



Note: Terminal is configured to facilitate attachment close to inductor tip.
Wire is copper plated with gold 20 µ in. ±5 µ in.

MECHANICAL CONFIGURATIONS

Size	Length (L)	Width (W)	Height (H)	Cu Wire Size (AWG)	Number of Turns
N	0.245 (6.223)	0.133 (3.378)	0.117 (2.972)	47	110

Unless noted otherwise, all dimensions are held to ±0.10 (.254) inches (mm)

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.