

ATC 506WLSN3R30KT350T Ultra-Broadband SMT Inductor

Features:

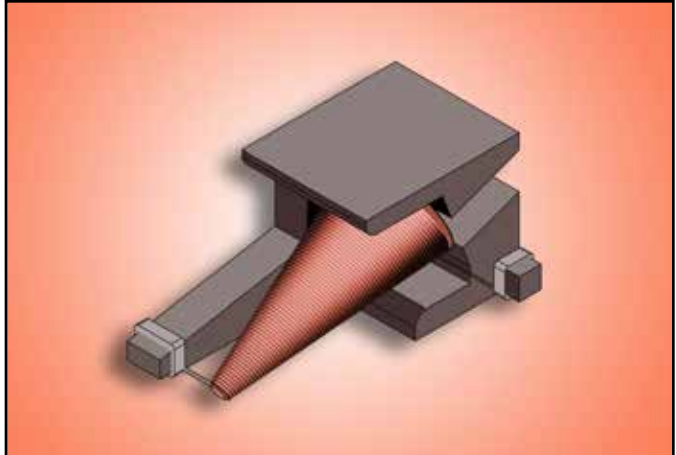
- Inductance: 3.30 μ H
- Operating Frequency: 1.3 MHz (-3 dB roll-off) through 40+ GHz, typ.
- Insertion Loss (shunt mounted): <0.5 dB, typ.
- Return Loss (shunt mounted): >17 dB, typ.
- Operating Temperature Range: -55°C to +125°C
- Lead-Free, RoHS Compliant Terminations

ATC, 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.

Electrical Specifications:

- Inductance: 3.30 μ H \pm 10%*
- Rated DC Current (I_{DC} max.): 350 mA**
- DC Resistance (R_{DC} typ.): 1.15 Ω , typ. at +20°C, 10 mA current.

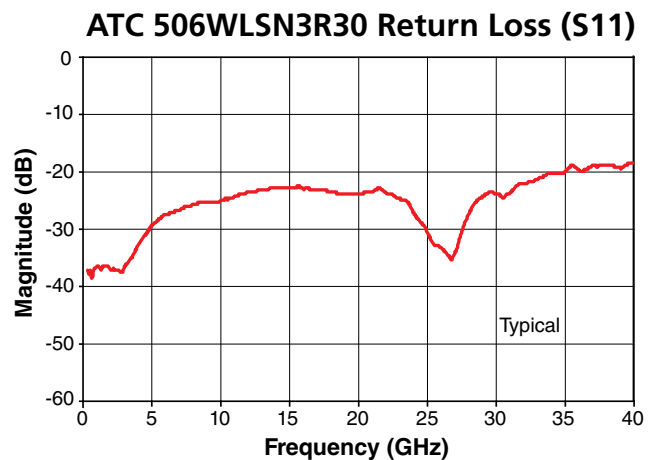
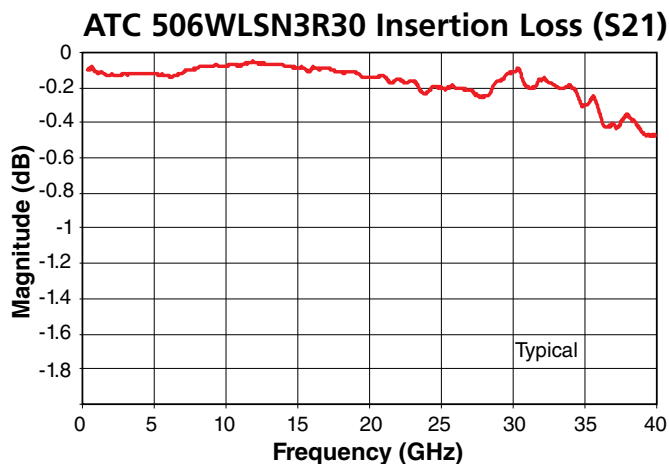


Advantages:

- 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

*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.



AMERICAN

ATC North America
sales@atceramics.com

TECHNICAL

ATC Europe
saleseur@atceramics.com

CERAMICS

ATC Asia
sales@atceramics-asia.com

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www.atceramics.com

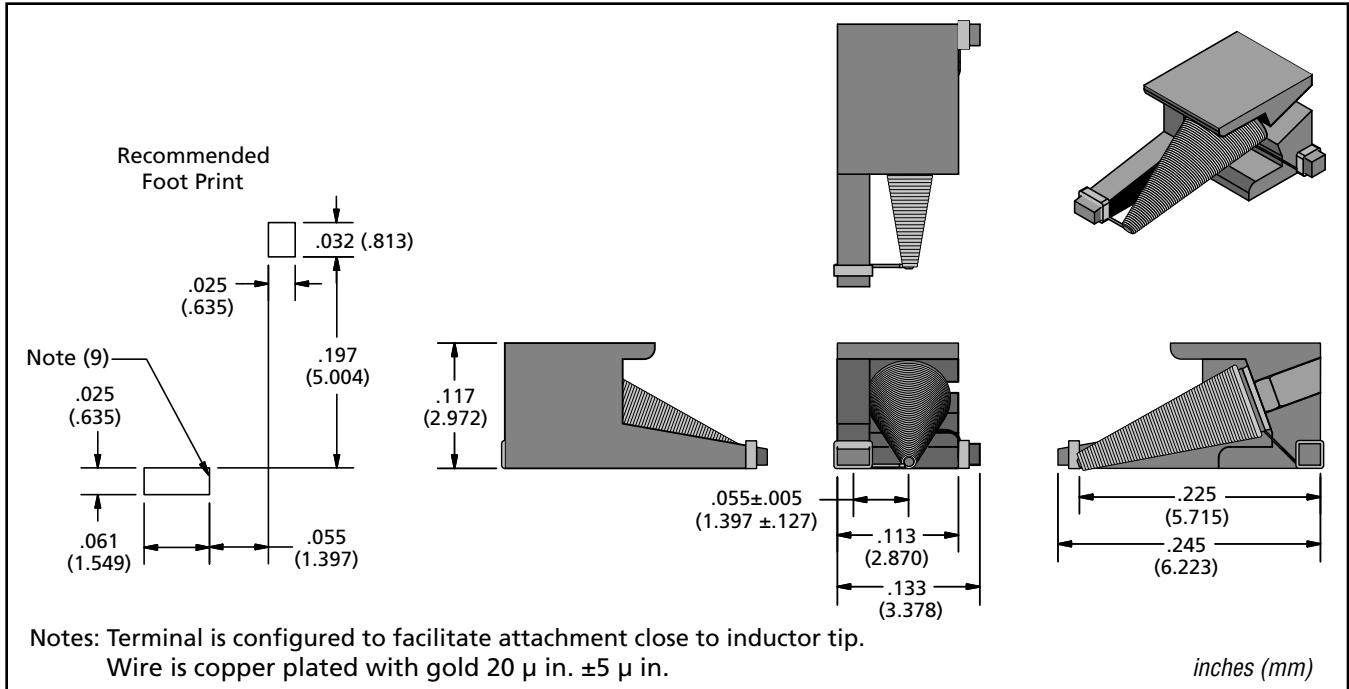


ISO 9001 REGISTERED
COMPANY

ATC # 001-1120
Rev. F; 12/15

ATC 506WLS SERIES UBL SMT INDUCTORS

Outline Dimensions



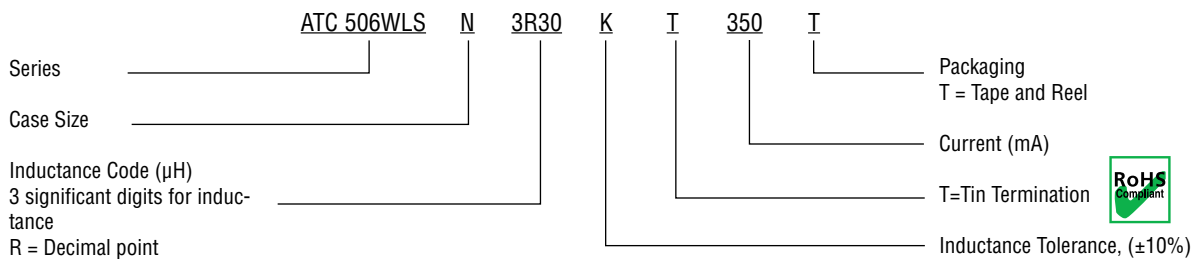
Mechanical Configurations

| 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)

ATC PART NUMBER CODE



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.

ATC accepts orders for our parts using designations **with** or **without** the "ATC" prefix.

Consult factory for additional performance data.

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AMERICAN
ATC North America
sales@atceramics.com

TECHNICAL
ATC Europe
saleseur@atceramics.com

CERAMICS
ATC Asia
sales@atceramics-asia.com



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www.atceramics.com