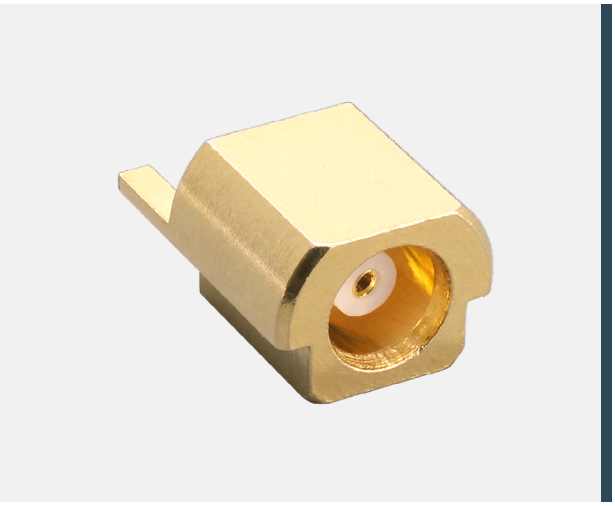


CONMCX013

MCX Jack PCB Cutout Edge Mount Connector

The Linx ANT-W63WS1 series antenna is a compact dipole blade-style antenna designed for superior performance in the 2.4 GHz, 5 GHz and 6 GHz bands supporting both WiFi 6 and WiFi 6E. The W63WS1 provides a ground plane independent dipole antenna solution in a very compact package. The hinged rotating design allows for the antenna to be positioned for optimum performance and reduces the potential for damage from impact compared to a fixed whip design. The antenna is available with an SMA plug (male pin) or RP-SMA plug (female socket) connector for FCC Part 15 compliant applications.

FEATURES

- 0 to 8.5 GHz operation
- MCX (female socket) connection
  - Gold plated brass connector body
  - Gold plated beryllium copper center contact
- Direct surface-mount PCB attachment
- Reflow- or hand-solder assembly

ELECTRICAL SPECIFICATIONS

Impedance	50 Ω	
Frequency Range	0 to 8.5 GHz	
Insulation Resistance	1000 MΩ Min.	
Voltage Rating	750 V RMS	
Contact Resistance	Center: ≤ 5.0 mΩ Outer: ≤ 1.0 mΩ	
Selected Frequencies	6 GHz	8.5 GHz
Insertion Loss (dB max)	-0.51	-0.77
VSWR (max)	1.2	1.4

ORDERING INFORMATION

Part Number	Description
CONMCX013	MCX jack (female socket), PCB cutout edge mount connector in trays (100 per tray)
CONMCX013-T	MCX jack (female socket), PCB cutout edge mount connector in tape and reel (1000 per reel)

Available from Linx Technologies and select distributors and representatives.

PRODUCT DIMENSIONS

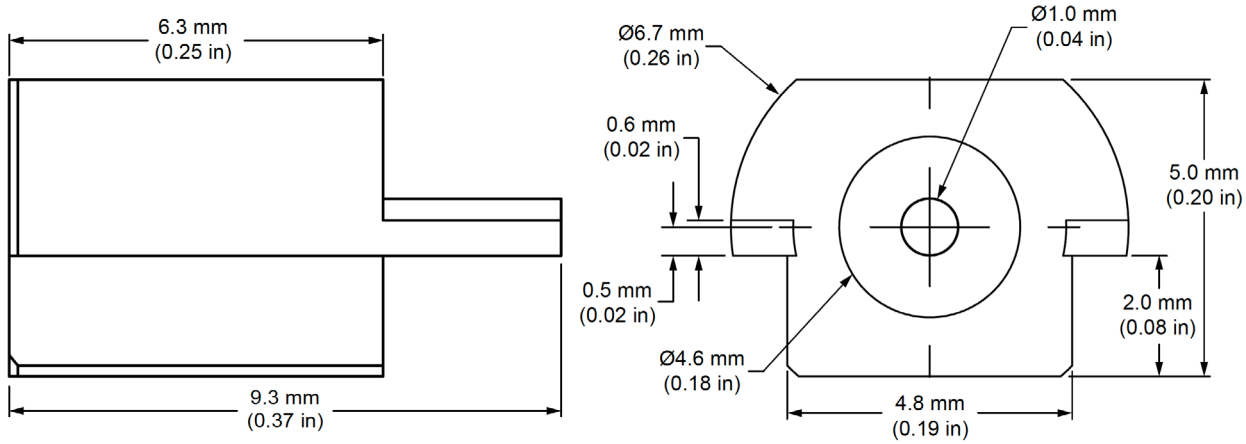


Figure 1. Product Dimensions for the CONMCX013 Connector

CONNECTOR COMPONENTS

	CONMCX013	
Connector Part	Material	Finish
Connector Body	Brass	Gold
Center Contact (fem. socket)	Berylium Copper	Gold
Insulator	PTFE	–

RECOMMENDED PCB FOOTPRINT

Figure 2 shows the recommended PCB footprint and PCB cutout dimensions.

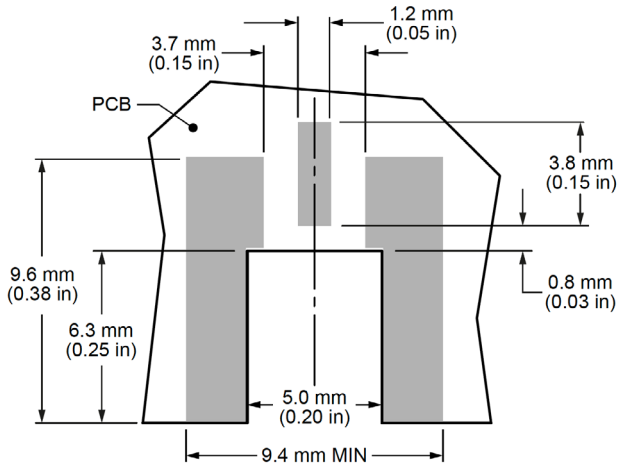


Figure 2. Recommended PCB Footprint for the CONMCX013 Connector

MECHANICAL SPECIFICATIONS

	CONMCX013
Mounting Type	PCB board edge
Fastening Type	Snap-on coupling
Connector Durability	500 cycles min.
Interface in Accordance with	CECC 22220
Weight	1.2 g (0.04 oz)

INSERTION LOSS

Figure 3 shows the Insertion Loss for the CONMCX013 connector. Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line.

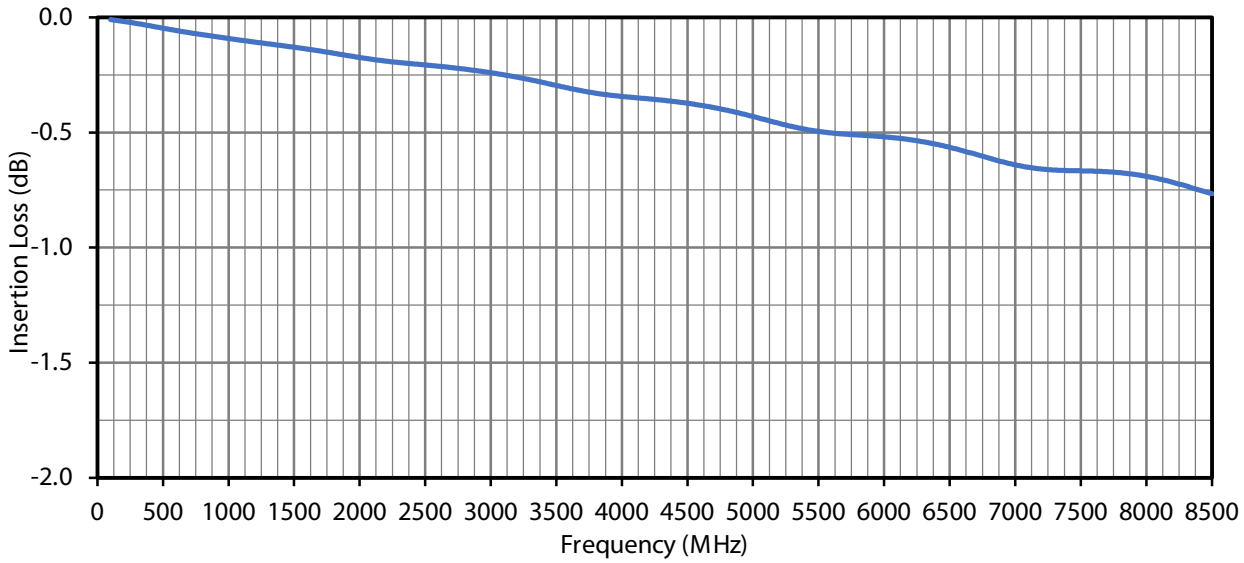


Figure 3. Insertion Loss for the CONMCX013 Connector

VSWR

Figure 4 provides the voltage standing wave ratio (VSWR) across the connector's bandwidth. VSWR describes how efficiently power is transmitted through the connector. A lower VSWR value indicates better performance at a given frequency.

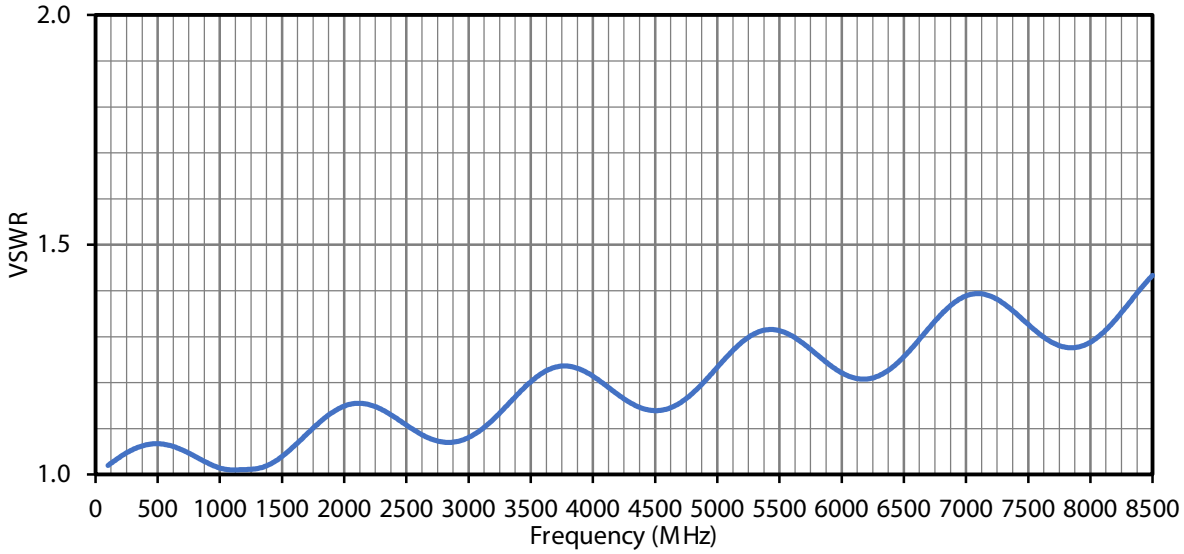


Figure 4. VSWR for the CONMCX013 Connector

ENVIRONMENTAL SPECIFICATIONS

MIL-STD/Method/Test Condition	
Corrosion (Salt spray)	ASTM B-117
Thermal Shock	MIL-STD-202 Method 107 test condition F
Vibration	MIL-STD-202 Method 204 test condition B
Mechanical Shock	MIL-STD-202 Method 213 test condition B
Temperature Range	-65 °C to +165 °C
Environmental Compliance	RoHS

REFLOW SOLDER PROFILE

Figure 5 shows the temperature and time data for reflow soldering the connector to a printed circuit board.

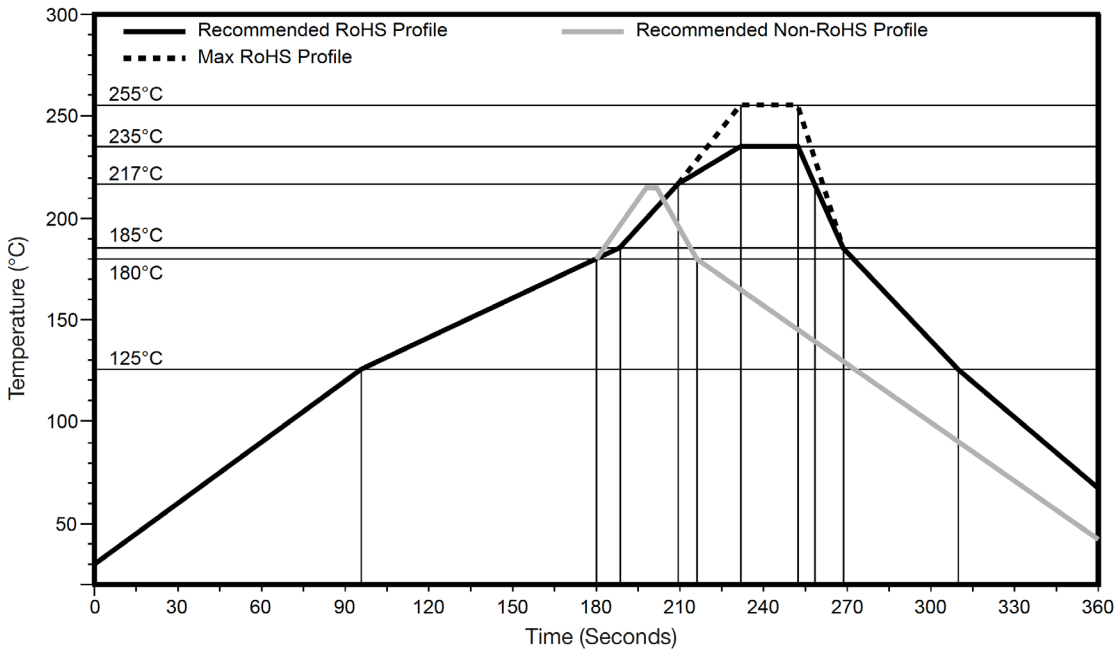


Figure 5. Recommended Reflow Solder Profile

PACKAGING INFORMATION

Figure 6 shows the dimensions of the tape in which the CONMCX013-T connectors are packaged. Reel dimensions are provided in Figure 7.

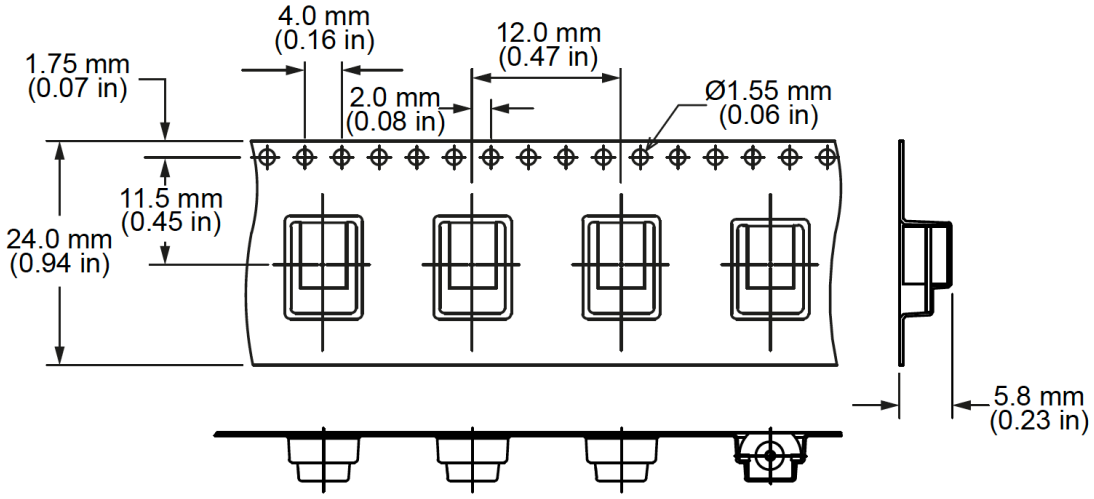
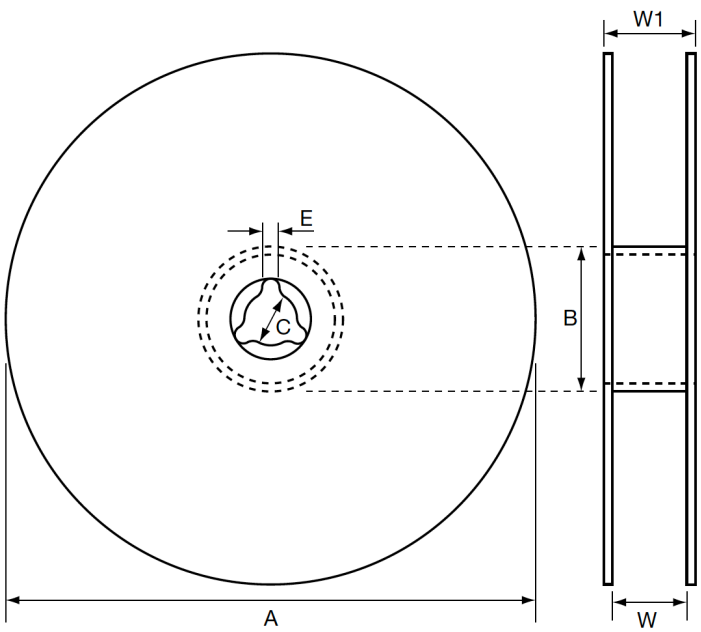


Figure 6. Tape Specifications for the CONMCX013-T Connector



Reel Dimensions		
Symbol	Qty	Unit
QTY per reel	1000	pcs
Tape width	24.00	mm
A	Ø 330 ±1	mm
B	Ø 100 ±0.5	mm
C	Ø 13.00 ±0.2	mm
E	2.2 ±0.5	mm
W	24 ±0.5	mm
W1	28.4 ±0.2	mm

Figure 7. Reel Specifications for the CONMCX013-T Connector

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