

CONSMP001-SMD-G-T SMP Plug PCB Surface Mount Connector

The CONSMP001-SMD-G-T is an SMP plug limited detent PCB surface mount connector designed for reflow-solder mounting directly to a printed circuit board. Operating from 0 GHz to 26.5 GHz, the CONSMP001-SMD-G-T combines superior performance, compact size, and a convenient snap-on mating interface to provide a reliable, easy-to-use connector. Linx SMP connectors are ideal for making board-to-board connections. Additionally, all Linx connectors meet RoHS lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock.



Features

- 0 to 26.5 GHz operation
- SMP plug (male pin) connection
 - Gold plated beryllium copper center contact
 - Limited detent
- Ideal for board-to-board connections
- Direct PCB attachment
- Reflow- or hand-solder assembly

Applications

- Cellular IoT
 - LTE-M (Cat-M1), NB-IoT
- Cellular
 - 5G/4G LTE/3G/2G
 - 5G mmWave
- GNSS
 - GPS, Galileo, GLONASS, BeiDou, QZSS
- Radar, Satellite Communications, Experimental

Table 1. Electrical Specifications

Impedance	50 Ω	
Frequency Range	0 to 26.5 GHz	
Voltage Rating	500 V RMS	
Contact Resistance	Center: ≤ 6.0 m Ω Outer: ≤ 2.0 m Ω	
Select Frequencies	400 MHz to 960 MHz	12 GHz to 26.5 GHz
Insertion Loss (dB max.)	0.02	0.36
VSWR (max.)	1.1	1.8

Ordering Information

Part Number	Description
CONSMP001-SMD-G-T	SMP plug (male pin) limited detent PCB surface mount connector

Available from Linx Technologies and select distributors and representatives.

Product Dimensions

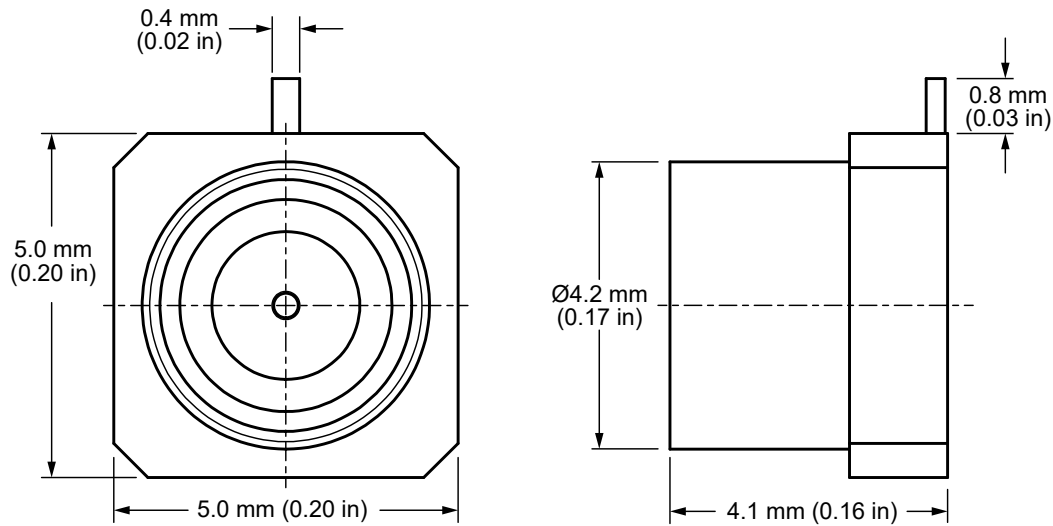


Figure 1. Product Dimensions for the CONSMP001-SMD-G-T Connector

Table 2. Connector Components

Model	CONSMP001-SMD-G-T	
Connector Part	Material	Finish
Connector Body	Brass	Gold
Base	Brass	Gold
Center Contact (male pin)	Brass	Gold
Insulator	LCP	–

Recommended PCB Footprint

Figure 2 shows the connectors recommended PCB footprint.

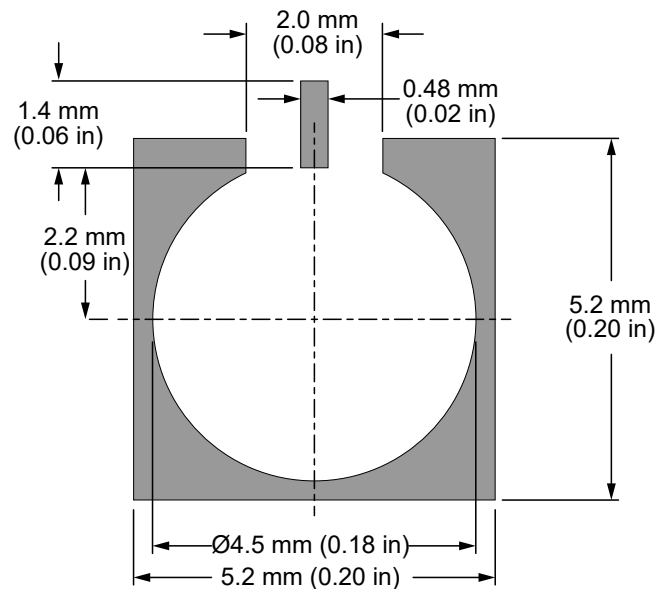


Figure 2. Recommended PCB Dimensions for the CONSMP001-SMD-G-T

Connector Performance

Table 3 shows insertion loss and VSWR values for the CONSMP001-SMD-G-T connector at commonly used frequencies.

Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line. VSWR describes how efficiently power is transmitted through the connector. A lower VSWR value indicates better performance at a given frequency.

Table 3. Insertion Loss and VSWR for the CONSMP001-SMD-G-T Connector

Band	Low-Band Cellular/ ISM/LPWA	GNSS, Midband Cellular, Wifi	WiFi 6E	Ku/K
Frequency Range	400 MHz to 960 MHz	1.1 GHz to 5 GHz	5 GHz to 7.125 GHz	12 GHz to 26.5 GHz
Insertion Loss (dB max.)	0.02	0.02	0.05	0.36
VSWR (max.)	1.1	1.2	1.3	1.8

Table 4. Mechanical Specifications

Model	CONSMP001-SMD-G-T
Mounting Type	PCB Surface Mount
Fastening Type	Snap-on Coupling
Interface in Accordance with	MIL-STD-348B
Connector Durability	100 cycles min.
Weight	0.31 g (0.01 oz)

Table 5. Environmental Specifications

MIL-STD, Method, Test Condition	
Corrosion (Salt spray)	MIL-STD-202 Method 101 test condition B
Thermal Shock	MIL-STD-202 Method 107 test condition C
Vibration	MIL-STD-202 Method 204 test condition B
Mechanical Shock	MIL-STD-202 Method 213 test condition B
Moisture Resistance	MIL-STD-202 Method 106 test condition D
Temperature Range	-65 °C to +155 ° C
Environmental Compliance	RoHS

Reflow Solder Profile

Figure 3 shows the time and temperature data for reflow soldering the connector to a PCB.

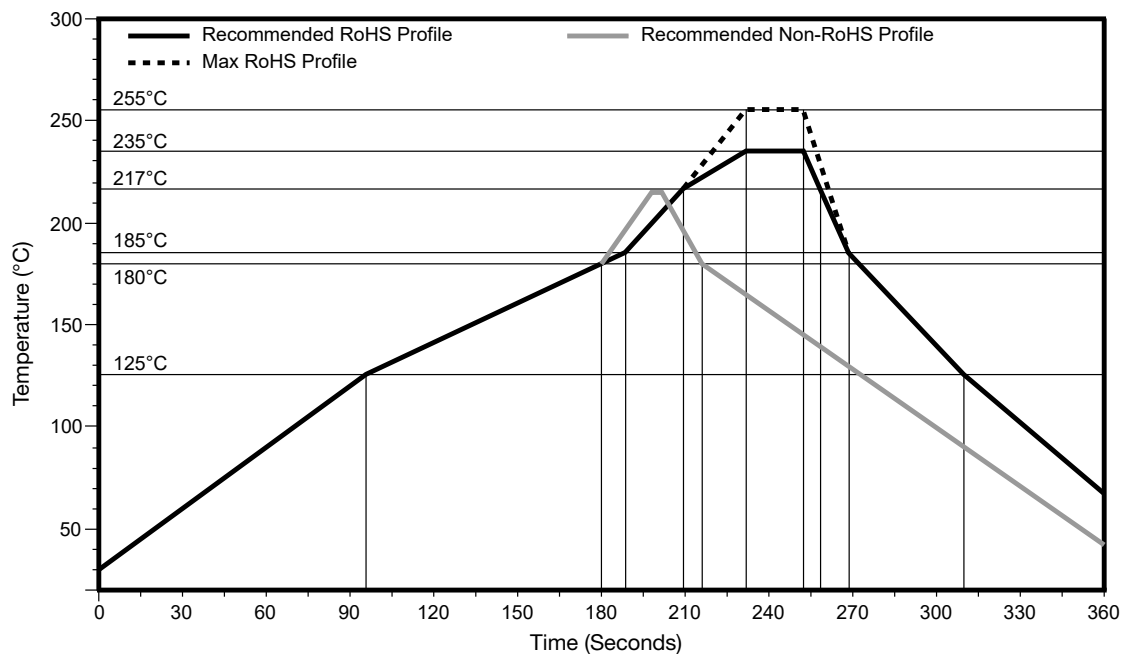


Figure 3. Recommended Reflow Solder Profile

Packaging Information

Figure 4 shows the tape dimensions for the CONSMP001-SMD-G-T connector. The reel specifications are provided in Figure 5.

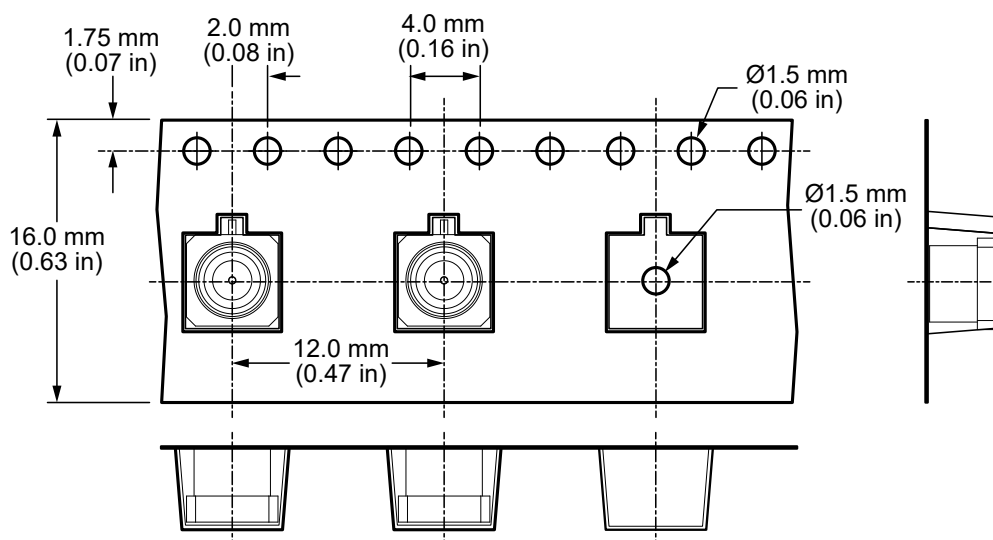
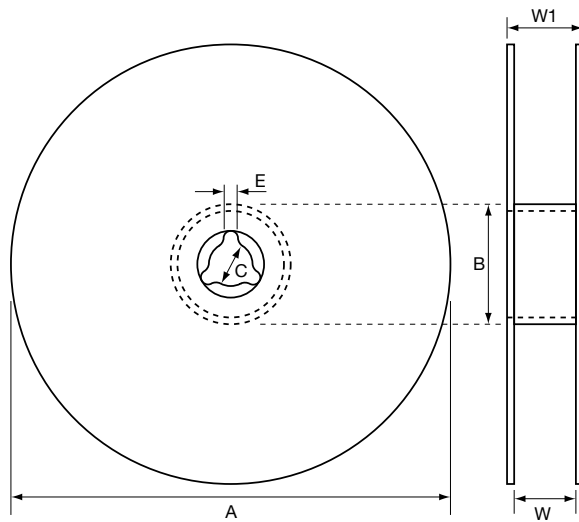


Figure 4. Tape Specifications for the CONSMP001-SMD-G-T Connector

Packaging Information (Continued)



Reel Dimensions		
Symbol	Qty	Unit
QTY per reel	1,300	pcs
Tape width	16.00	mm
A	$\varnothing 330 \pm 1$	mm
B	$\varnothing 100 \pm 0.5$	mm
C	$\varnothing 13.00 \pm 0.2$	mm
E	2.2 ± 0.5	mm
W	16 ± 0.5	mm
W1	19.4 ± 0.2	mm

Figure 5. Reel Specifications for the CONSMP001-SMD-G-T Connector

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