

RF PCB Connector, SMA, Female, Up to 18 GHz, Edge Mount, Straight, 0.083 inch PCB Thickness, 0.020 inch pin diameter



RFPCB-SMA-FS18G-63

Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- Edge Mount Interface Type
- Solder Attachment

Features

- Max. Operating Frequency 18 GHz
- Good VSWR of 1.2:1
- Gold Plated Beryllium Copper Alloy Contact
- 0.020 inch pin diameter

Applications

- General Purpose Test
- PCB Applications

Description

RFPCB-SMA-FS18G-63 SMA female PCB connector available from L-com has a 50 Ohm impedance. This RF connector has an edge mount connector mount interface and is designed for a wide variety of Printed-Circuit Board (PCB) applications in RF and microwave systems. This SMA female connector uses solder as an attachment method. Our SMA female PCB connector provides a minimum frequency of DC and a maximum frequency of 18 GHz. The SMA connector is available in a 0.52-inch length and 0.32-inch width. The L-com SMA female PCB connector has a PTFE dielectric type and a VSWR of 1.2:1. This SMA PCB connector has a brass body with gold plating. Our RFPCB-SMA-FS18G-63 SMA connector uses beryllium copper alloy contacts and gold plating material. This SMA female PCB radio frequency connector is RoHS and REACH compliant.

This L-com SMA female connector will ship the same day as purchased. Our SMA female connector is part of over 40,000 RF, microwave, and millimeter wave components in stock for worldwide shipment. We also build SMA custom connector cable assemblies that will ship the same day as well.

The SMA female connector with 50 Ohm impedance has a weight of 0.004894 lbs. This RF connector has a high-quality construction. The female coaxial connector is capable of operating at temperatures ranging from -55 deg C to 125 deg C. We currently have a variety of antenna, audio/video, Ethernet, fiber optic, and USB connectors in our portfolio that are ready to ship today. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the high-quality RF that meets your requirements.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.2:1	
Insertion Loss			0.3	dB
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2.5	mOhms
Insulation Resistance	5,000			MOhms
RF Leakage	-90			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RF PCB Connector, SMA, Female, Up to 18 GHz, Edge Mount, Straight, 0.083 inch PCB Thickness, 0.020 inch pin diameter RFPCB-SMA-FS18G-63](#)

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Mechanical Specifications

Size

Length	0.52 in [13.21 mm]
Width	0.32 in [8.13 mm]
Height	0.40 in [10.16 mm]
Weight	0.00 lbs [2.18 g]
Mating Cycles	500 Cycles
Mating Torque	0.9 to 1.13 in-lbs 0.10 to 0.13 Nm

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Brass	Nickel
Body	Brass	Gold

Environmental Specifications

Temperature

Operating Range	-55deg C to +125deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

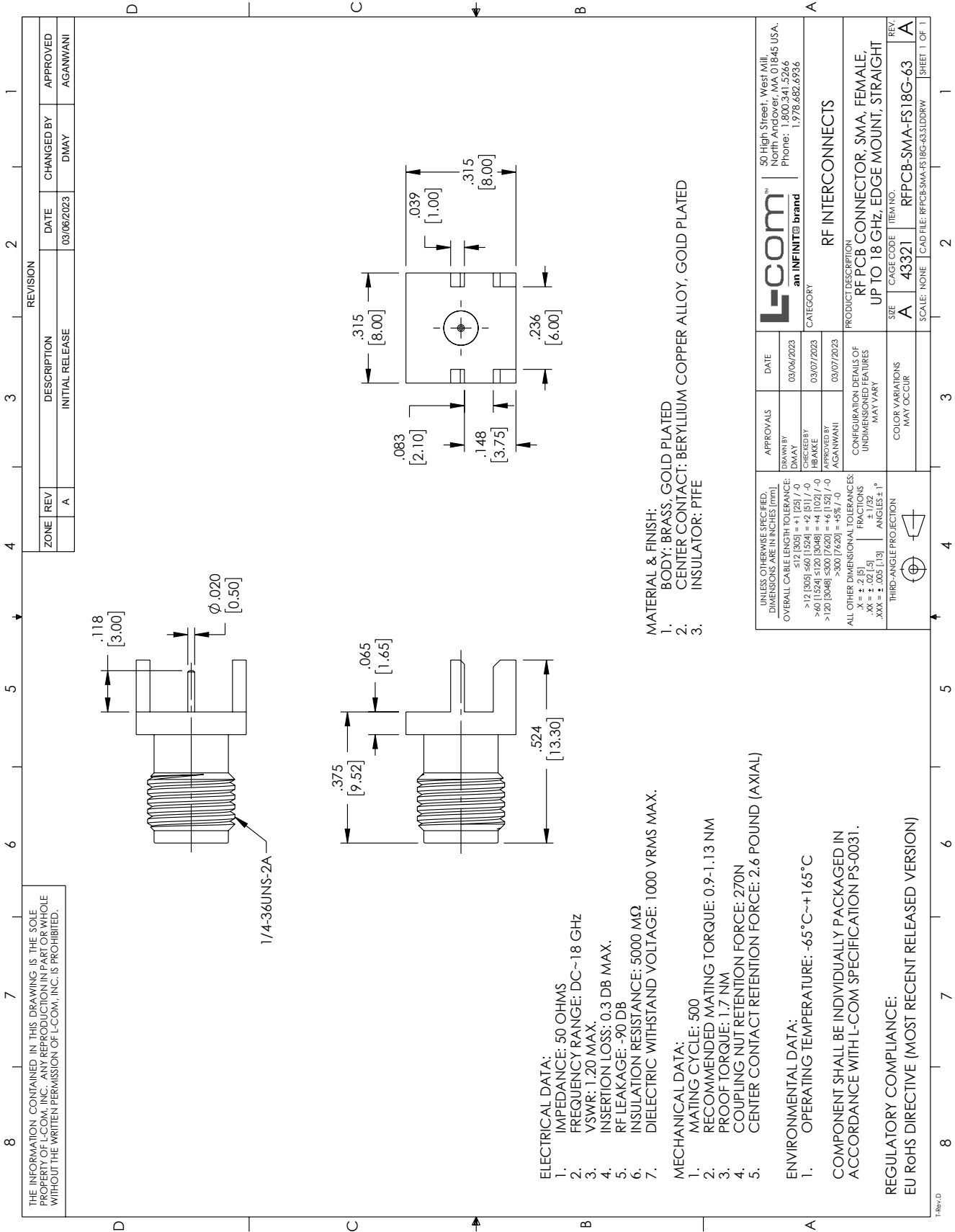
RF PCB Connector, SMA, Female, Up to 18 GHz, Edge Mount, Straight, 0.083 inch PCB Thickness, 0.020 inch pin diameter from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components. Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: RF PCB Connector, SMA, Female, Up to 18 GHz, Edge Mount, Straight, 0.083 inch PCB Thickness, 0.020 inch pin diameter RFPCB-SMA-FS18G-63

URL: <https://www.l-com.com/rf-pcb-connector-sma-female-up-18-ghz-edge-mount-straight-rfpcb-sma-fs18g-63-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

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L-com CAD Drawing



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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	03/06/2023	DMAY	AGANWANI

REVISION

DATE

CHANGED BY

APPROVED

AGANWANI

1/4-36UNS-2A
 .118 [3.00]
 .020 [0.50]

.375 [9.52]
 .065 [1.65]
 .524 [13.30]

.083 [2.10]
 .148 [3.75]
 .315 [8.00]
 .236 [6.00]
 .039 [1.00]

ELECTRICAL DATA:

1. IMPEDANCE: 50 OHMS
2. FREQUENCY RANGE: DC~18 GHz
3. VSWR: 1.20 MAX.
4. INSERTION LOSS: 0.3 DB MAX.
5. RF LEAKAGE: -90 DB
6. INSULATION RESISTANCE: 5000 MΩ
7. DIELECTRIC WITHSTAND VOLTAGE: 1000 VRMS MAX.

MECHANICAL DATA:

1. MATING CYCLE: 500
2. RECOMMENDED MATING TORQUE: 0.9-1.13 NM
3. PROOF TORQUE: 1.7 NM
4. COUPLING NUT RETENTION FORCE: 270N
5. CENTER CONTACT RETENTION FORCE: 2.6 POUND (AXIAL)

ENVIRONMENTAL DATA:

1. OPERATING TEMPERATURE: -65°C~+165°C
- COMPONENT SHALL BE INDIVIDUALLY PACKAGED IN ACCORDANCE WITH L-COM SPECIFICATION PS-0031.

REGULATORY COMPLIANCE:

EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

MATERIAL & FINISH:

1. BODY: BRASS; GOLD PLATED
2. CENTER CONTACT: BERYLLIUM COPPER ALLOY, GOLD PLATED
3. INSULATOR: PTFE

APPROVALS	DATE	DESCRIPTION
DRAWN BY: DMAY	03/06/2023	INITIAL RELEASE
CHECKED BY: HPAKKE	03/07/2023	
APPROVED BY: AGANWANI	03/07/2023	

UNLESS OTHERWISE SPECIFIED: OVERALL DIMENSIONS ARE IN INCHES (mm)	RF INTERCONNECTS
>12 [305] = +1 [25] / -0	
>60 [1524] = +0 [152] / -0	
>120 [3048] = +0 [152] / -0	
>300 [7620] = +5% / -0	
ALL OTHER DIMENSIONAL TOLERANCES:	
XX = ± .015 [0.38]	
XXX = ± .005 [0.13]	
FRACTIONS	
ANGLES ± °	
THIRD-ANGLE PROJECTION	
COLOR VARIATIONS MAY OCCUR	
SCALE: NONE	
CAGE CODE: 43321	
ITEM NO: RFPCB-SMA-FS18G-63	
PRODUCT DESCRIPTION: RF PCB CONNECTOR, SMA, FEMALE, UP TO 18 GHz, EDGE MOUNT, STRAIGHT	
REV: A	
SHEET 1 OF 1	

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