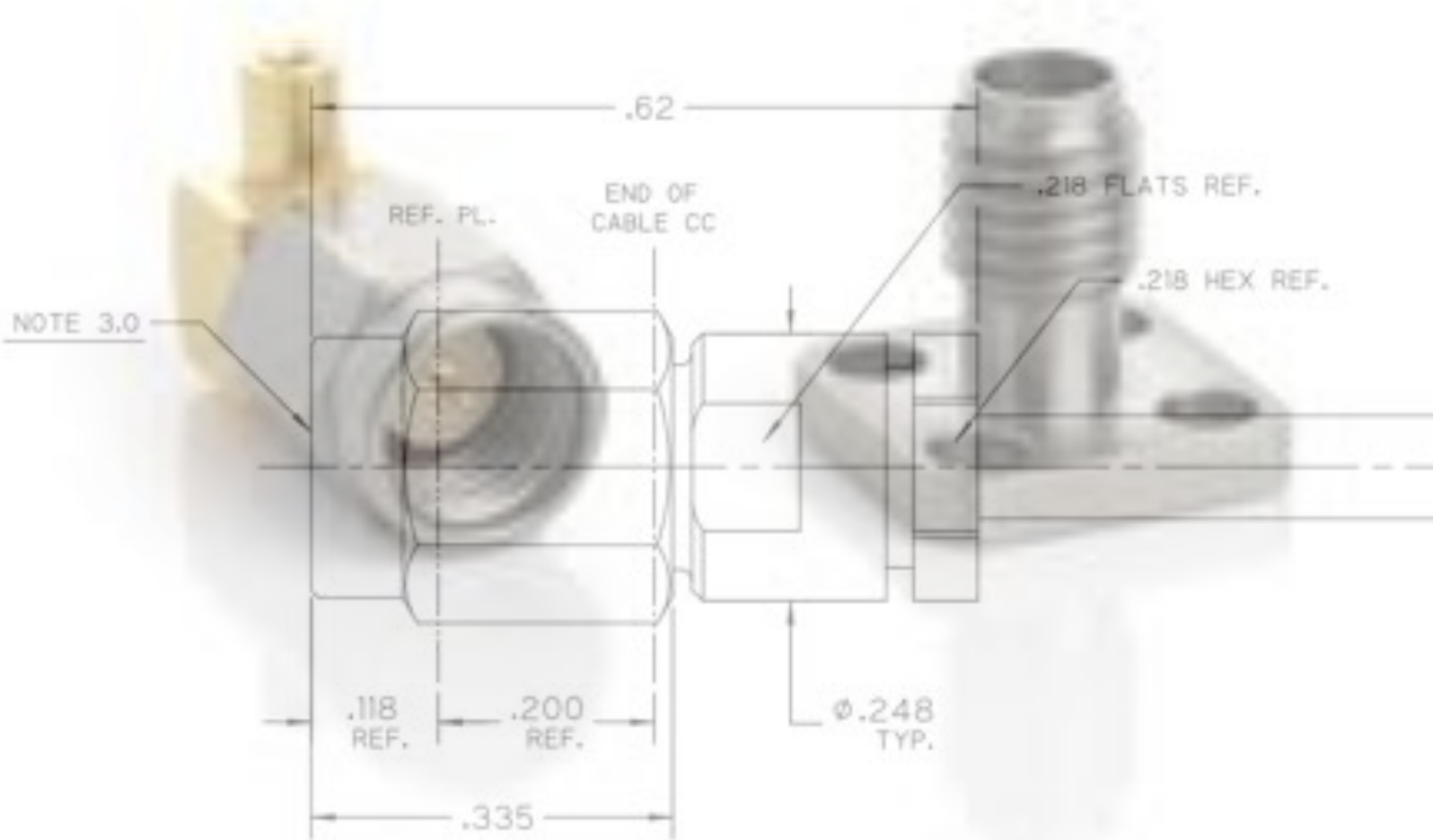


# SSMA

## Precision 40GHz Connectors



# SSMA Precision Connectors

## DESCRIPTION

SSMA connectors are 50ohm precision connectors designed to perform mode free to 35GHz. Optimized extended range versions are also available up to 40GHz. Typically used for applications where reduced size and higher package density are required along with higher frequency requirements. The standard SSMA interface utilizes a PTFE & PEI dielectric materials. ConductRF offers SSMA connectors for semi-rigid and low loss flexible cable, receptacles and precision adapters. Custom designs to suit customer applications are also available on request.

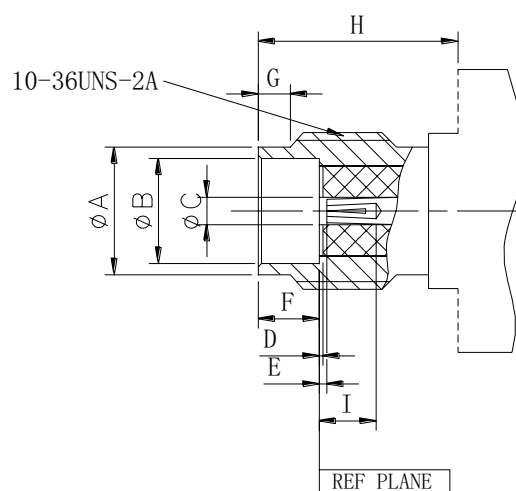
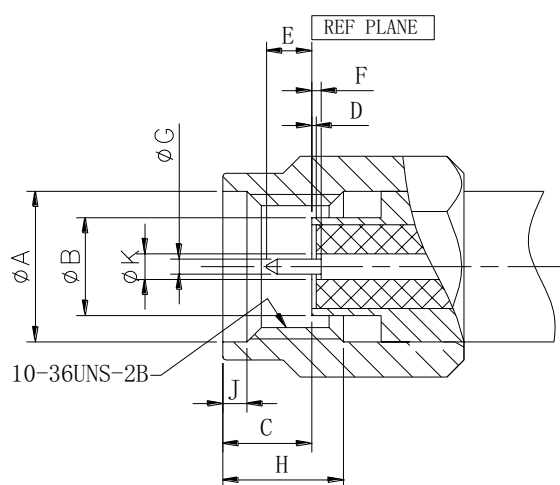
## SSMA Design Features

- Excellent performance up to 40GHz
- Low VSWR and insertion loss
- Rugged construction for reliability
- Small overall package size

## CONTENTS

1. Description & Features
2. SSMA Interface Details
3. SSMA Technical Data
4. Cable Configurations
5. Receptacles Accepting Pins
7. Receptacles for Through Wall

# SSMA INTERFACE



SSMA Male				
	mm		Inch	
	Min	Max	Min	Max
A	4.98	5.13	0.196	0.202
B	3.15	3.22	0.124	0.1268
C	2.54	3.38	0.100	0.133
D	0.00	0.25	0.000	0.010
E	1.27	1.65	0.050	0.065
F	0.00	0.25	0.000	0.010
G	0.50	0.53	0.0195	0.0208
H	3.30	—	0.130	—
J	0.38	1.14	0.015	0.045
K	0.85	0.88	0.0335	0.0348

SSMA Female				
	mm		Inch	
	Min	Max	Min	Max
A	3.89	4.06	0.153	0.160
B	3.23	3.30	0.127	0.130
C	0.851	0.884	0.0335	0.0348
D	0.00	0.25	0.000	0.010
E	0.00	0.25	0.000	0.010
F	1.90	1.96	0.075	0.077
G	0.51	1.02	0.020	0.040
H	5.84	—	0.230	—
I	1.91	—	0.075	—

Interface dimensions conformable to the standards: IEEE STD 287-2007

# TECHNICAL DATA

ELECTRICAL DATA	
Impedance	50 Ohm
Frequency range	DC — 40GHz
Dielectric withstanding voltage	750V
Insulation resistance	≥ 1000 MΩ
Contact resistance	Inner contact ≤ 5 mΩ Outter contact ≤ 2.5 mΩ
VSWR max.	1.20 : 1

MECHANICAL DATA	
Base material	
Center Contact	Copper Beryllium Alloy, Gold-pated
Body	Stainless Steel, Passivated
Insulator	PEI, PTFE
Durability(matings)	≥ 500

ENVIRONMENTAL	
Temperature Range	-55 °C to + 165 °C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion	Saltspray test acc.to MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D

# Cable Configurations

## Description

### SSMA JACKS

BULHEAD JACK, DIRECT SOLDER FOR RG-405 CABLE

## ConductRF #

PHF31A-A28S01

### SSMA PLUGS

PLUG, DIRECT SOLDER FOR RG-405 CABLE

PLUG, DIRECT SOLDER, W/WRENCH FLATS FOR RG-405 CABLE

PLUG, SOLDER CLAMP FOR HARBOUR SS402 CABLE

PLUG, DIRECT SOLDER FOR STORM SF047 CABLE

PLUG, SOLDER CLAMP FOR STORM SF086 CABLE

RT. ANGLE PLUG, DIRECT SOLDER FOR STORM SF086 CABLE

PHM11A-A28S01

PHM11B-A28S01

PHM12A-A29S01

PHM12A-A33S01

PHM12B-A28S01

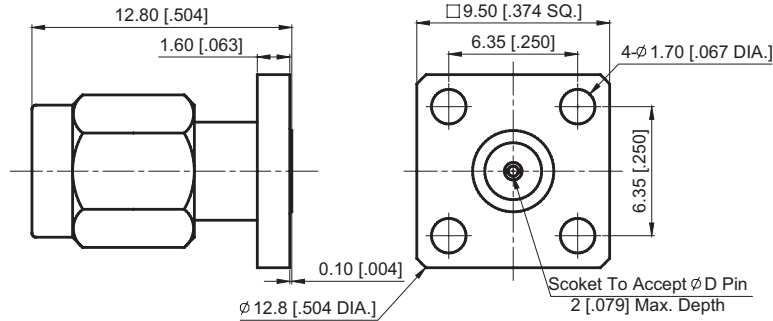
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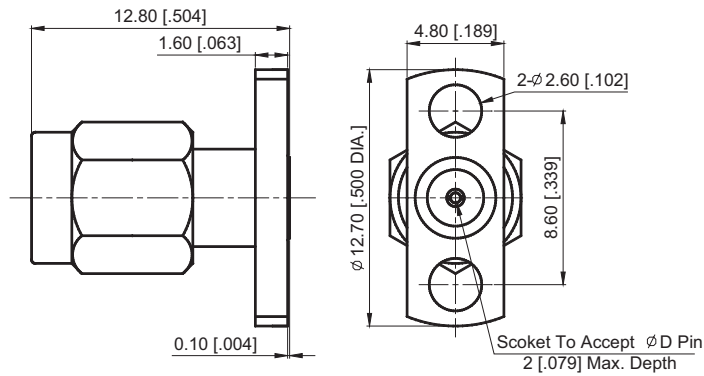
# RECEPTACLES ACCEPTING PINS

Receptacles, plugs (male), Flange Mount

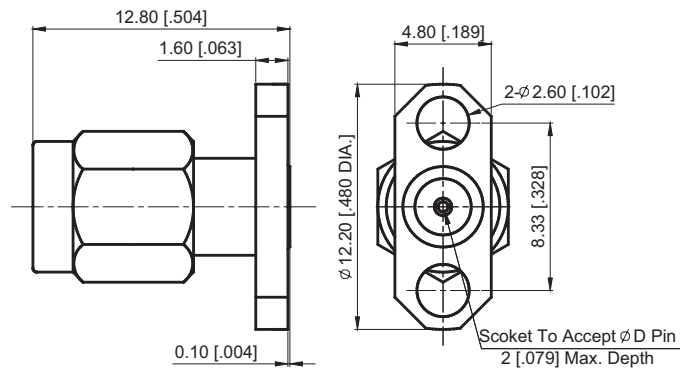
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PHM41A-4HLS01	0.23 [.009]
PHM42A-4HLS01	0.30 [.012]
PHM43A-4HLS01	0.38 [.015]
PHM44A-4HLS01	0.46 [.018]
PHM45A-4HLS01	0.51 [.020]



Part Number	D
PHM41A-2HLS01	0.23 [.009]
PHM42A-2HLS01	0.30 [.012]
PHM43A-2HLS01	0.38 [.015]
PHM44A-2HLS01	0.46 [.018]
PHM45A-2HLS01	0.51 [.020]



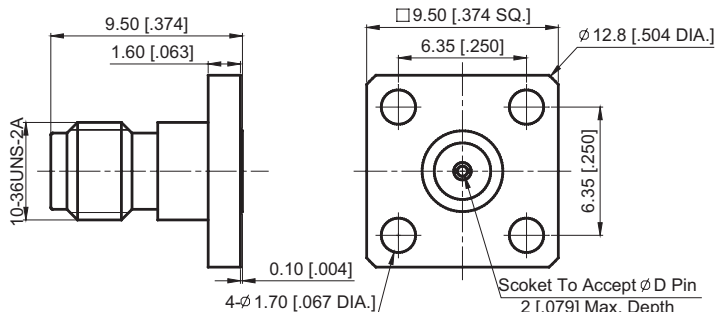
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PHM45B-2HLS01	0.51 [.020]



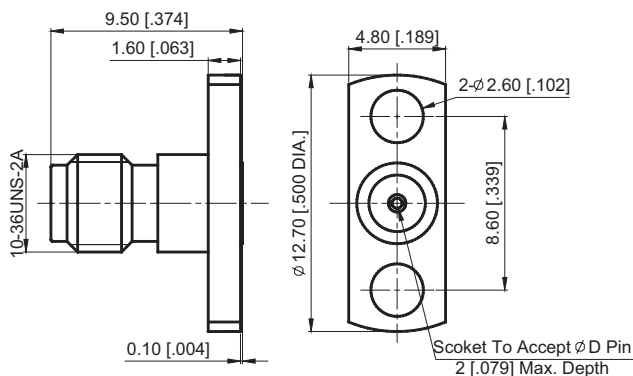
# RECEPTACLES ACCEPTING PINS

## Receptacles, jacks (female), Flange Mount

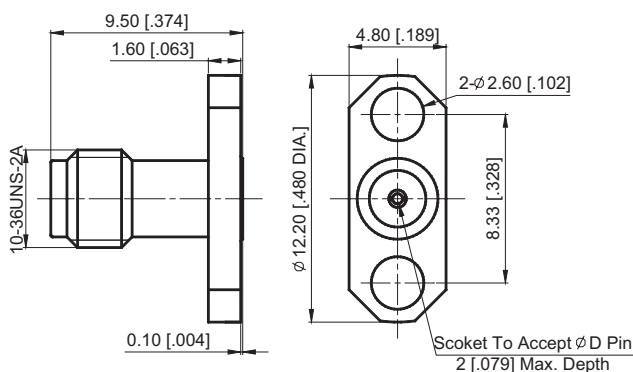
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PHF44A-4HLS01	0.46 [.018]
PHF45A-4HLS01	0.51 [.020]



Part Number	D
PHF41A-2HLS01	0.23 [.009]
PHF42A-2HLS01	0.30 [.012]
PHF43A-2HLS01	0.38 [.015]
PHF44A-2HLS01	0.46 [.018]
PHF45A-2HLS01	0.51 [.020]



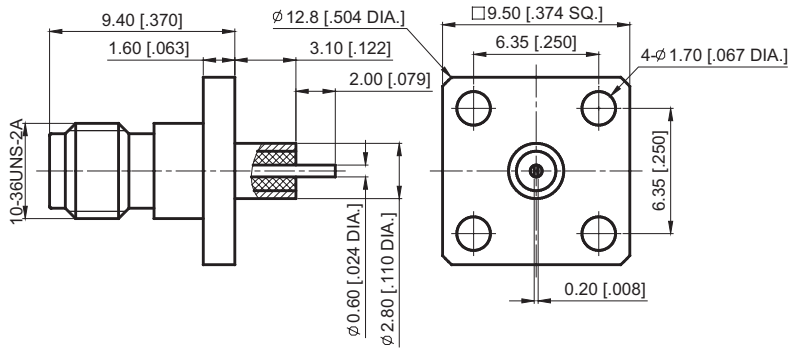
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PHF42B-2HLS01	0.30 [.012]
PHF43B-2HLS01	0.38 [.015]
PHF44B-2HLS01	0.46 [.018]
PHF45B-2HLS01	0.51 [.020]



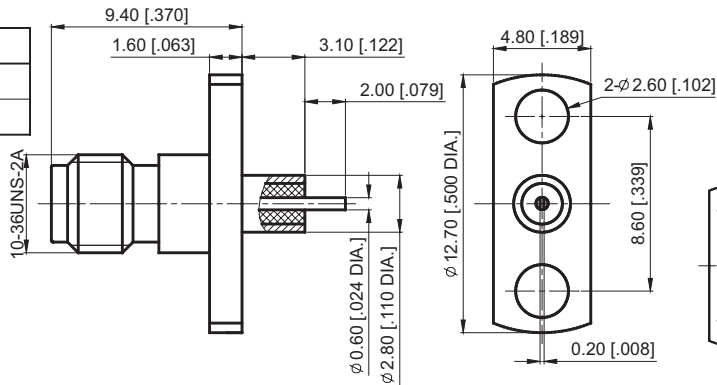
# RECEPTACLES THROUGH WALL

Receptacles, jacks (female), Flange Mount

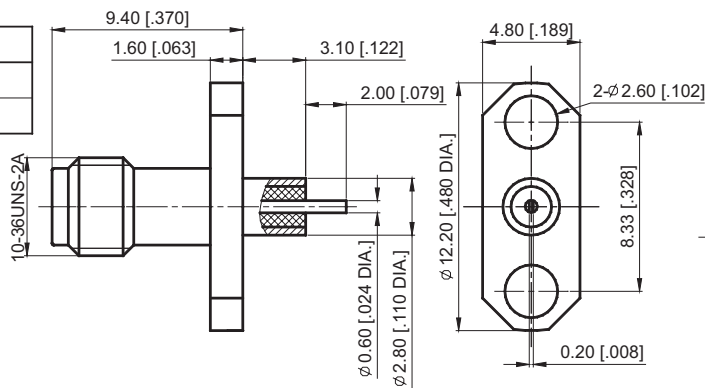
Part Number
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Part Number	Figure
PHF41C-2HLS01	Fig. 1
PHF42C-2HL-S01	Fig. 2



Part Number	Figure
PHF41D-2HLS01	Fig. 1
PHF42D-2HLS01	Fig. 2





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