



PRODUCT CATALOG

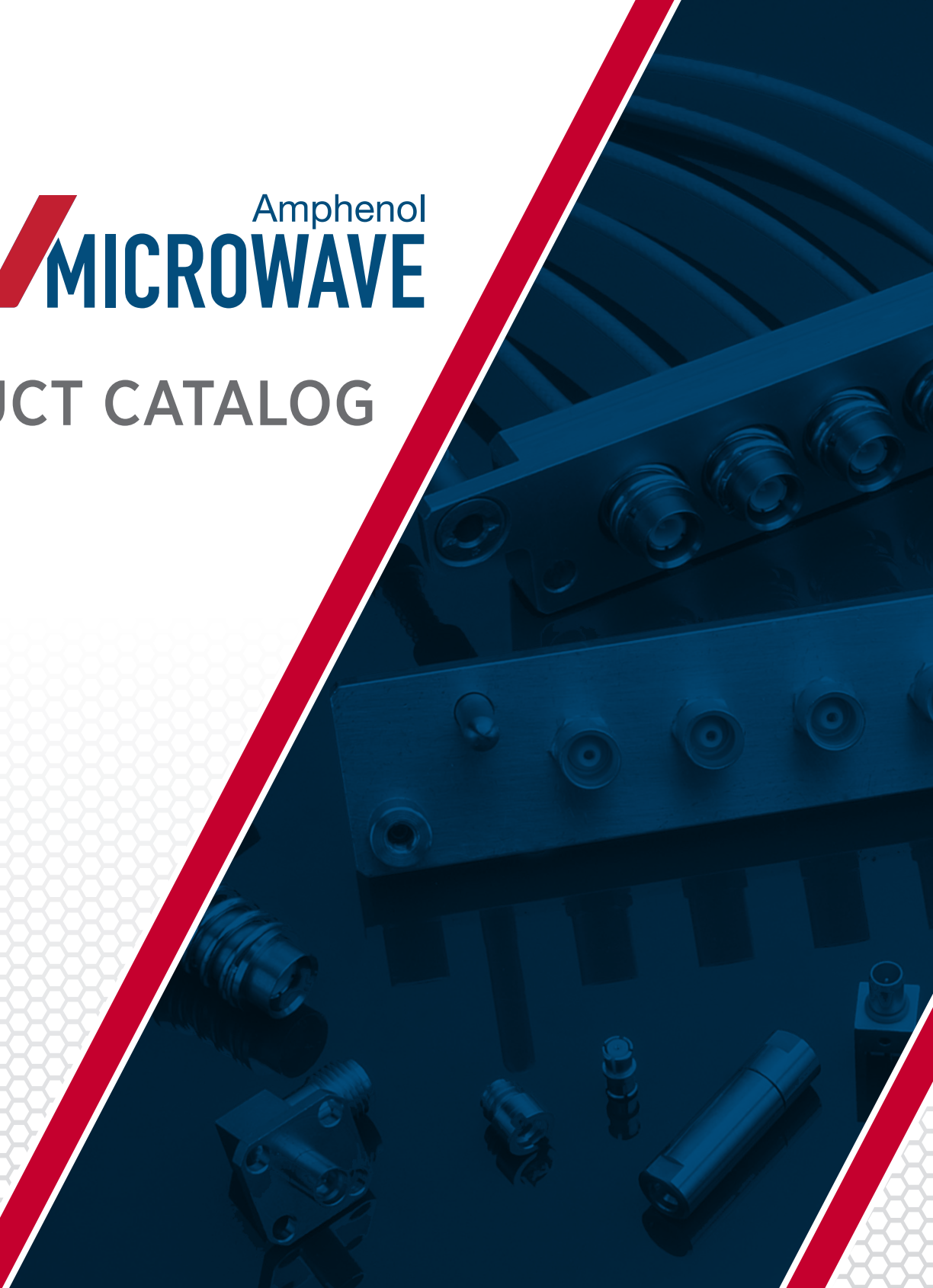


Table of Contents

SV Microwave - About Us

SV Microwave is a world leader in the RF/Microwave industry with over 40 years of proven performance. We design and manufacture RF/Microwave coaxial connectors, cable assemblies and passive components for military, satellite, aerospace, commercial and telecommunications applications.

We specialize in customized application specific solutions, but also offer a wide range of Commercial Off The Shelf (COTS) products shown in this catalog. When it comes to the design and manufacture of precision products, SV Microwave has set the standard.

SV Microwave is committed to helping our customers meet their RF/Microwave performance goals with our highly talented engineering team, outstanding customer service and precision manufacturing capabilities.

Product Series

BMA	Page 4
Coaxial Contacts	Page 12
SMA	Page 16
2.92mm	Page 34
2.4mm	Page 42
1.85mm	Page 50
SMP	Page 56
SMPM	Page 68
SMPS	Page 82
TNC	Page 90
PTNC	Page 95
Type N	Page 96
PN	Page 98

Appendix

SMP / SMPM / SMPS Applications	Page 100
SMP Misalignment Performance Measurements	Page 102
SMPM Misalignment Performance Measurements	Page 103
SMPS Misalignment Performance Measurements	Page 104
Board Mount Connector Footprint Design Process	Page 106
Board Mount Specific Application Connector Request	Page 108
Frequency Chart	Page 110
Index	Page 111

Rev. 1 (01/15)

BMA SERIES

BMA Interface at a Glance

Government designation BMA (Blindmate A) was developed in the 1980's. The originally designated OSP™ connector by M/A-Com has excellent electrical performance up to 22 GHz in a compact size. SV Microwave offers extended frequencies on most BMA connector designs up to 26.5 GHz. With a slide-on interface and a connector durability of 5000 cycles, the BMA blindmate is suitable for high performance microwave applications.

Electrical Specifications

Impedance	50Ω
Frequency	22 GHz
VSWR	1.02 + .008 f
Insertion Loss	.03 √ f
Shielding Effectiveness	≥ -90 - f dB
Dielectric Withstanding Voltage	1000 VRMS

Mechanical Specifications

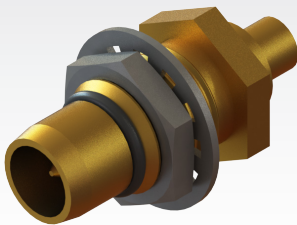
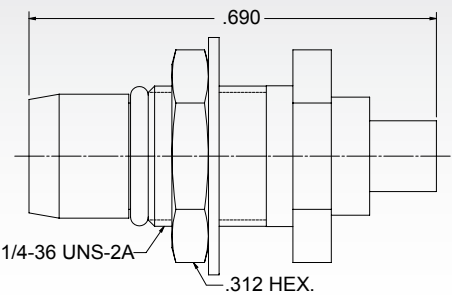
Mating Cycles	5000
Insertion Force	3.0 lbs
Withdrawal Force	1.5 lbs
Axial Float (Spring Loaded)	.060"
Radial Float (Spring Loaded)	.020"

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +125°C
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

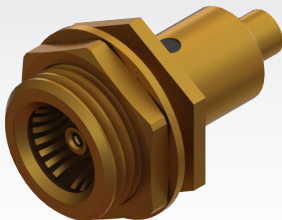
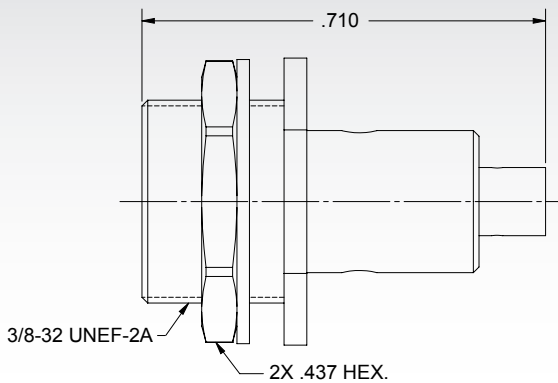
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Male Bulkhead Cable Connector



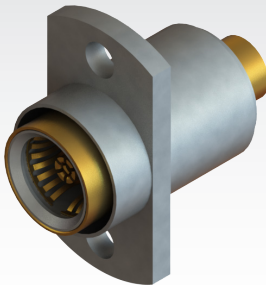
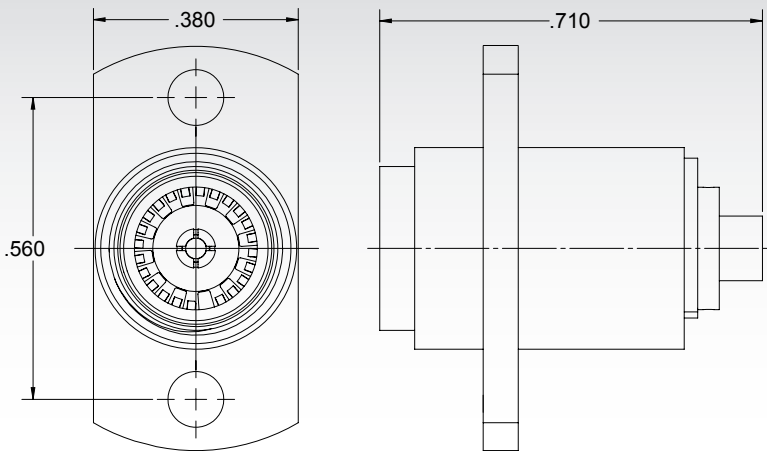
Cable	P/N
.085	1708-0001
.141	1709-6002

Female Bulkhead Cable Connector



Cable	P/N
.085	1733-6008
.141	1732-6012

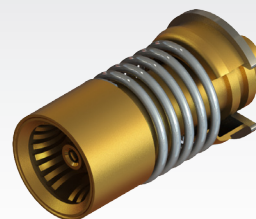
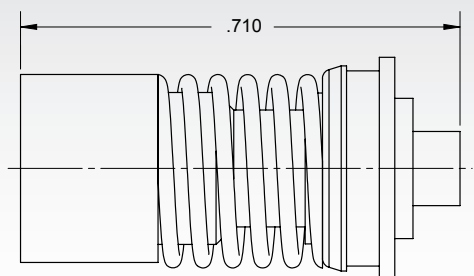
Female Flange Mount Cable Connector, 2 Hole



Cable	P/N
.085	SF1733-6006
.141	SF1732-6004

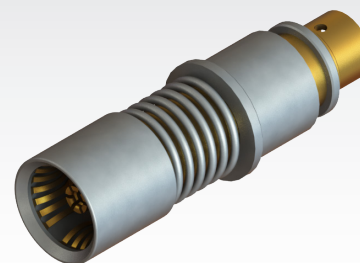
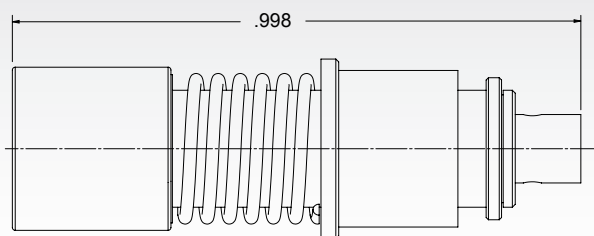
BMA SERIES

Female Snap-In Float Mount Cable Connector



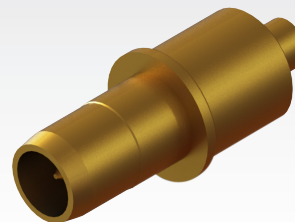
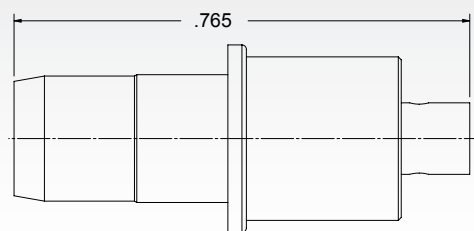
Cable	P/N
.085	1740-6001
.141	1742-6002

Socket D38999 Cable Contact (Size 8)



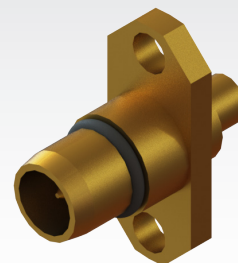
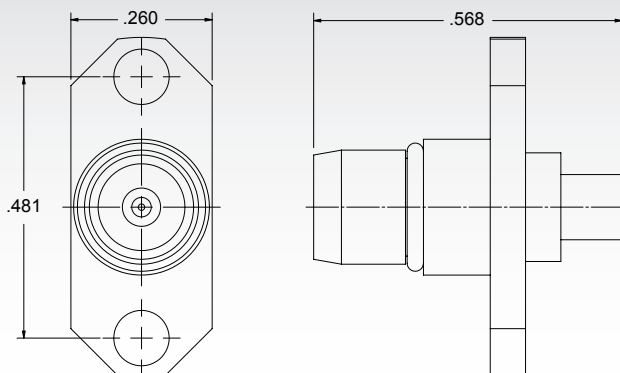
Cable	P/N
.085	SF9411-6000
.141	SF9411-6001

Pin D38999 Cable Contact (Size 8)



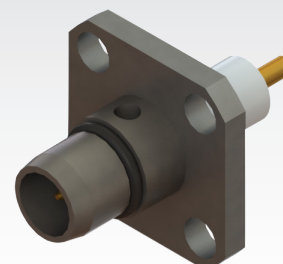
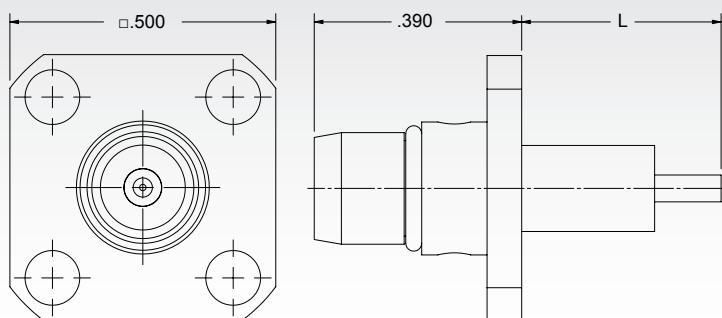
Cable	P/N
.085	SF9421-6000
.141	SF9421-6001

Male Flange Mount Cable Connector, 2 Hole



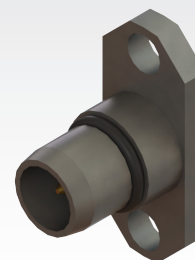
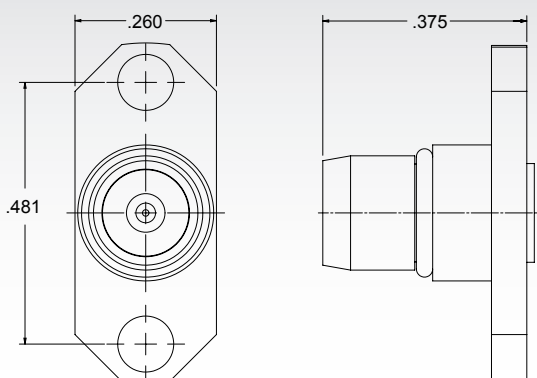
Cable	P/N
.085	1711-60008

Male Flange Mount Connector, 4 Hole (Candlestick)



P/N	L
SF1755-6104	.488"
SF1755-6105	.375"

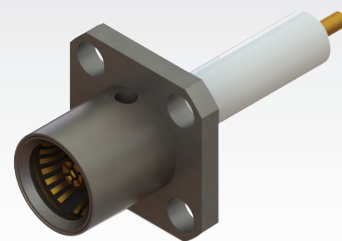
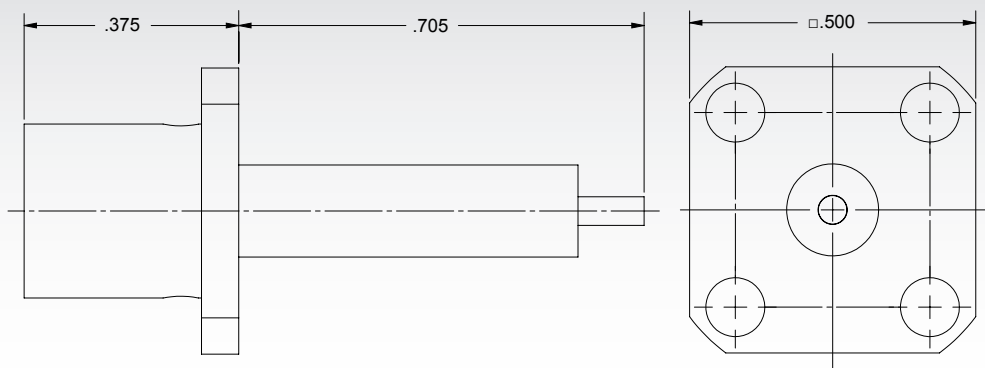
Male Flange Mount Connector, 2 Hole (Accepts Ø.018" Pin)



P/N
SF1711-60013

BMA SERIES

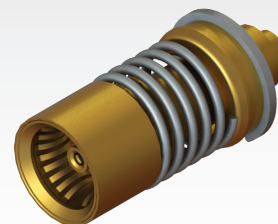
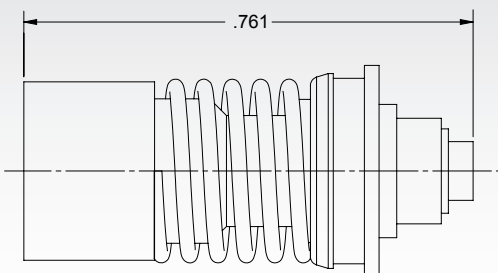
Female Flange Mount Connector, 4 Hole (Candlestick)



P/N

SF1750-6101

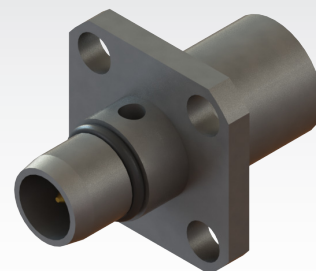
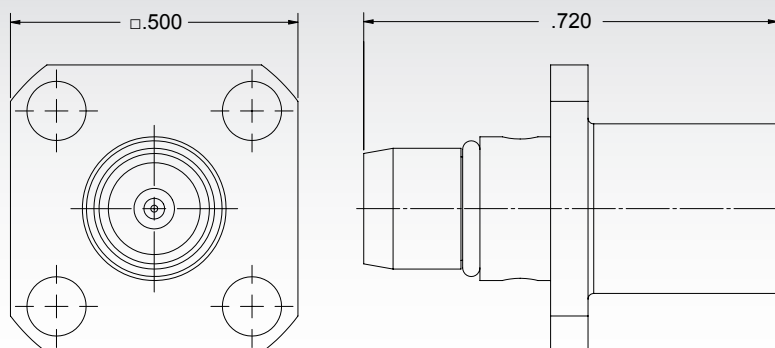
Female Termination



P/N

8017-6002

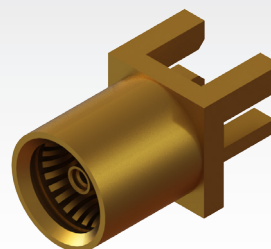
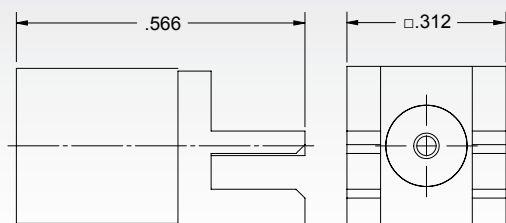
Male Flange Mount Termination, 4 Hole



P/N

SF8017-6001

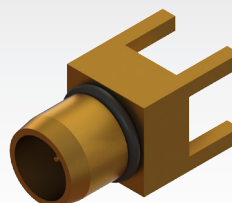
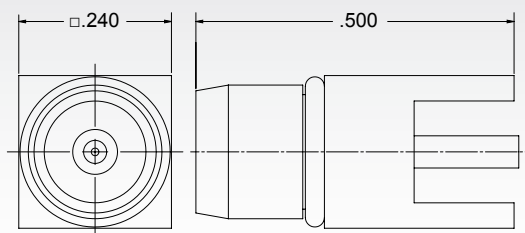
Female Edge Launch Connector



Contact SV directly to access our database of recommended PCB layouts

P/N
1785-0003

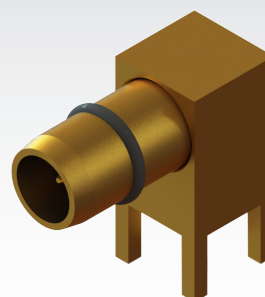
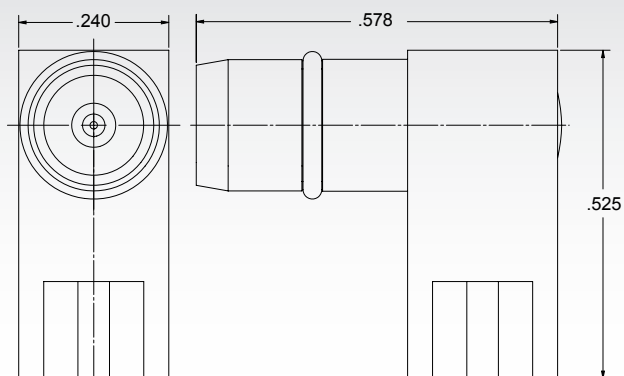
Male PCB Thru-Hole Connector



Contact SV directly to access our database of recommended PCB layouts

P/N
1785-6001

Male PCB Thru-Hole Connector, R/A

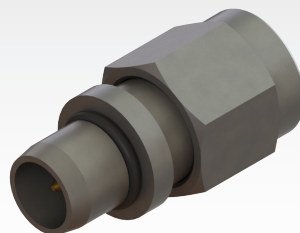
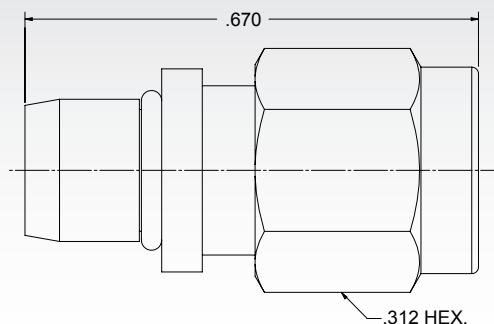


Contact SV directly to access our database of recommended PCB layouts

P/N
1789-6001

BMA SERIES

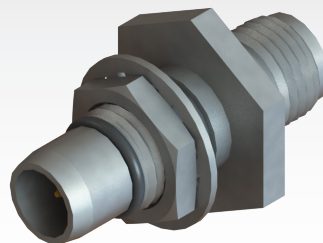
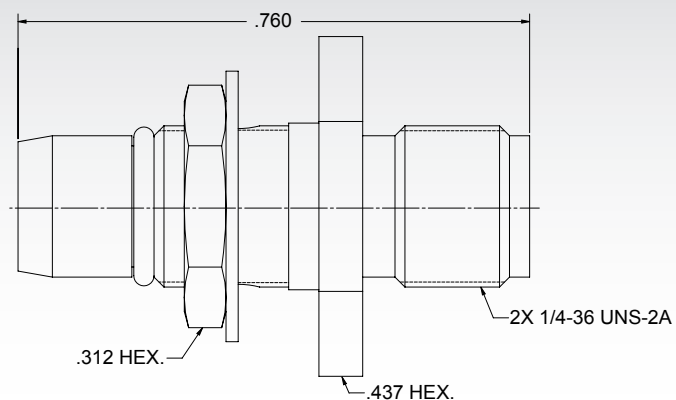
BMA Male to SMA Male Adapter



P/N

SF1117-6018

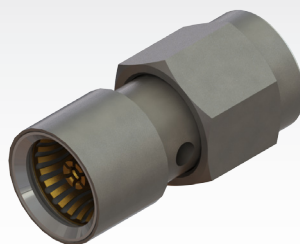
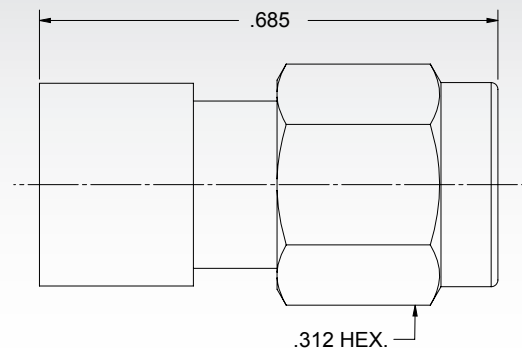
BMA Male to SMA Female Adapter



P/N

SF1158-6001

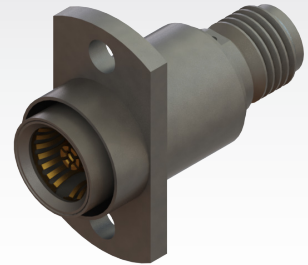
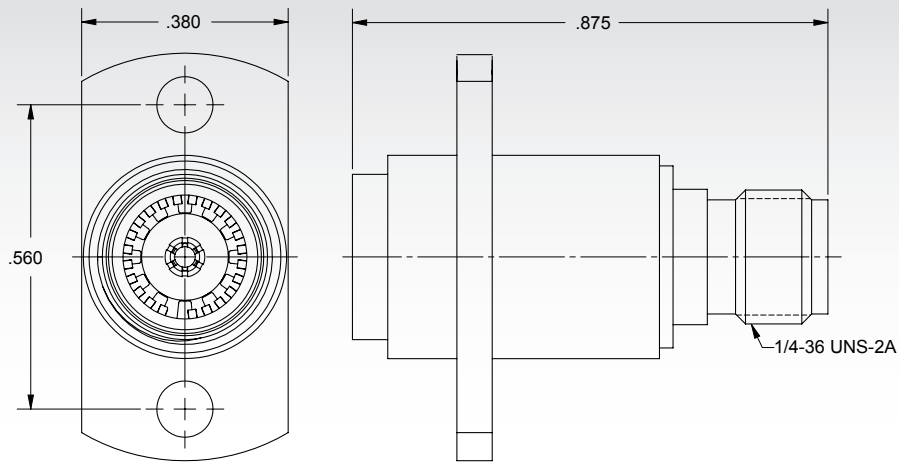
BMA Female to SMA Male Adapter



P/N

SF1157-6013

BMA Female to SMA Female Adapter , 2 Hole



P/N
SF1157-6009

COAXIAL CONTACTS

Coaxial Contacts Interface at a Glance

System design and platform needs have required smaller packaging with RF, D/C signal and power all in close proximity. Our proven designs and blindmate technology have enabled the integration of multiport RF signals into single housings for gang mating capability. Various existing form factors such as D38999, ARINC, Micro-D and D-Sub have provided standard components and familiar shell sizes. Hybrid technology fuses RF and D/C contacts into a single connector simplifying design and installation while eliminating discrete wiring.

Electrical Specifications

Impedance	50Ω
Frequency	3 GHz
VSWR	1.20 + .04 f
Insertion Loss	.11 √ f
Shielding Effectiveness	≥ -80 dB
Dielectric Withstanding Voltage	250 - 1000 VRMS

Mechanical Specifications

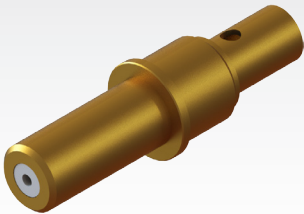
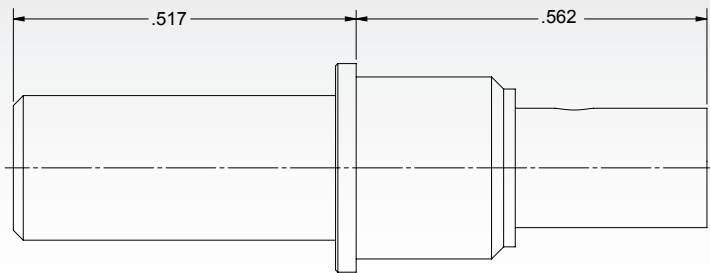
Mating Cycles	500
Insertion Force	30 oz
Withdrawal Force	2 oz

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +125°C
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

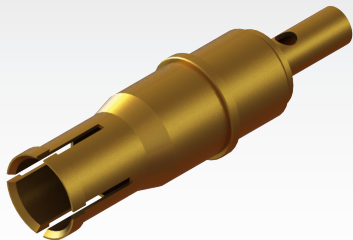
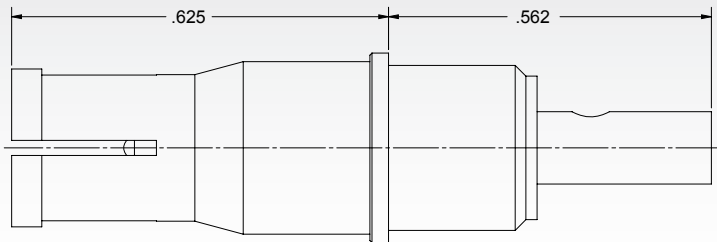
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Pin D38999 Cable Contact (Size 8)



Cable	P/N
.085	8001-4107
.141	8001-4101

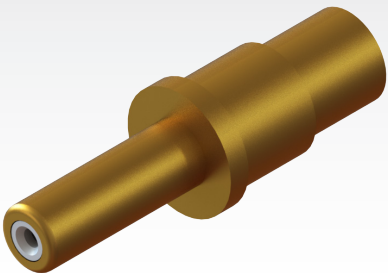
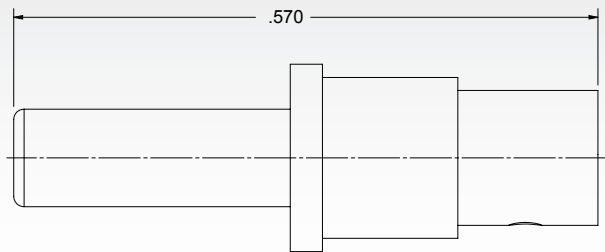
Socket D38999 Cable Contact (Size 8)



Cable	P/N
.085	8001-4108
.141	8001-4103

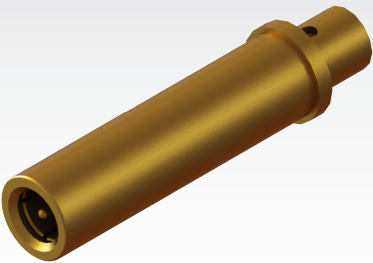
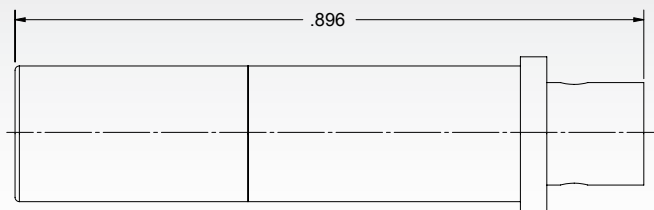
COAXIAL CONTACTS

Pin D38999 Cable Contact (Size 12)



Cable	P/N
.085	8001-4102

Socket D38999 Cable Contact (Size 12)



Cable	P/N
.085	8001-4104

SMA SERIES

SMA Interface at a Glance

SMA is an acronym for SubMiniature version A and was developed in the 1960's. Using a threaded interface, 50 Ohm SMA connectors are precision subminiature units that provide excellent electrical performance from DC to 26.5 GHz. These high-performance connectors are compact in size and mechanically have outstanding durability. Built in accordance with MIL-PRF-39012 and CECC 22110/111, SMA connectors can be mated with all connectors that meet these spec mating diameters regardless of manufacturer.

Electrical Specifications

Impedance	50Ω
Frequency	18 GHz (select models to 26.5 GHz)
VSWR	1.05 + .005 f
Insertion Loss	.03 √ f
Shielding Effectiveness	≥ -90 - f dB
Dielectric Withstanding Voltage	1000 VRMS

Mechanical Specifications

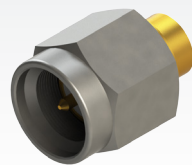
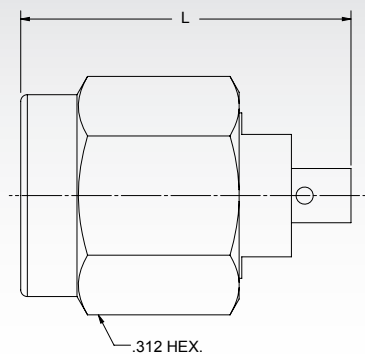
Mating Cycles	500
Mating Torque	7 - 10 in - lbs

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +125°C
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

Note: Specifications, dimensions and images are typical for the series and may vary by part number

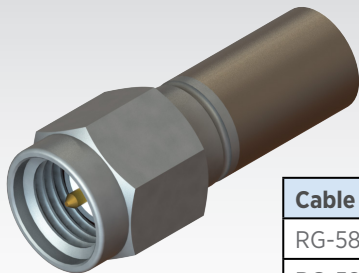
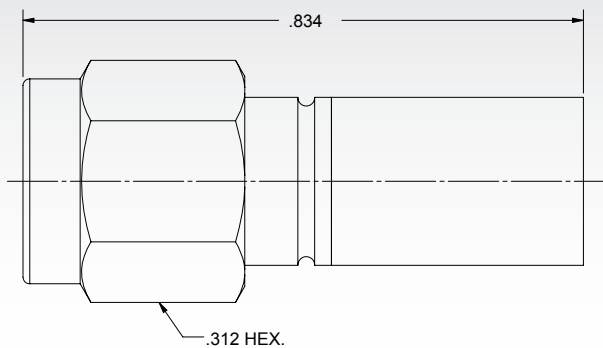
Male Cable Connector



Cable	P/N	L
.047	SF2911-60172	.499"
.085	2906-6002	.442"
.085	SF2906-6002	.442"
.085	M39012/79B3101	.449"
.141	SF2902-6005	.499"
.141	SF2902-6001	.330"

'SF' denotes passivated Stainless Finish

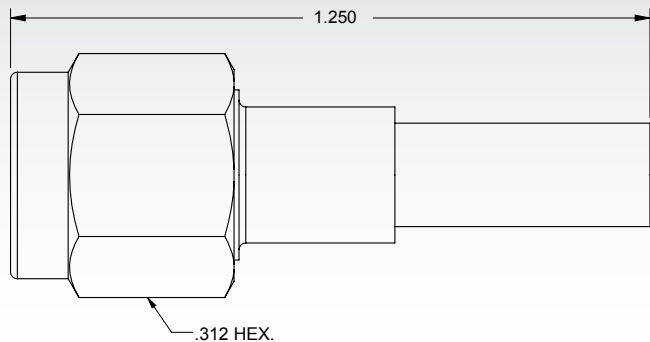
Male Cable Connector



Cable	P/N
RG-58	2900-6001
RG-58	SF2900-6001
RG-58	M39012/55B3115
RG-174	2903-6001
RG-174	M39012/55-3126
RG-174	M39012/55-3128

'SF' denotes passivated Stainless Finish

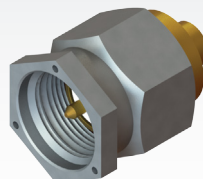
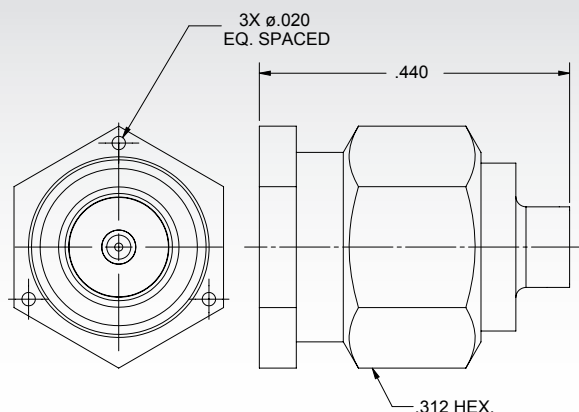
Male Cable Connector



Cable	P/N
RG-174	M39012/55B3112

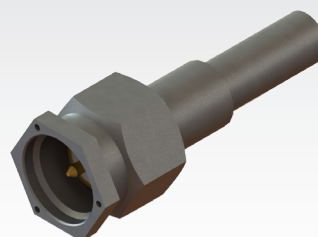
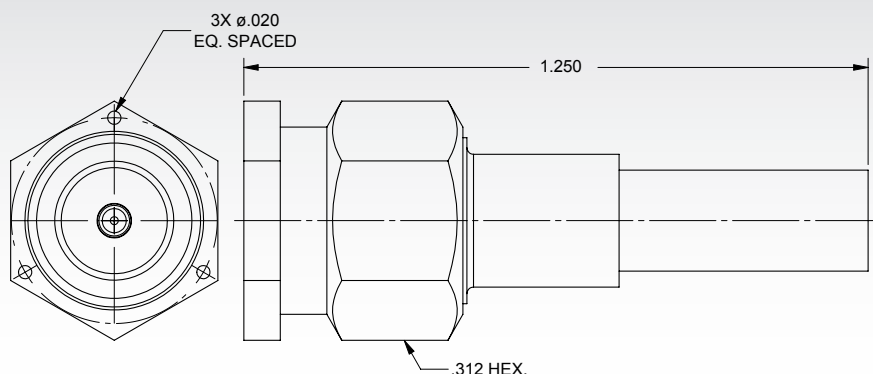
SMA SERIES

Male Cable Connector, Lockwire Holes



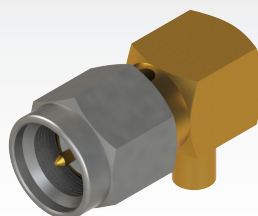
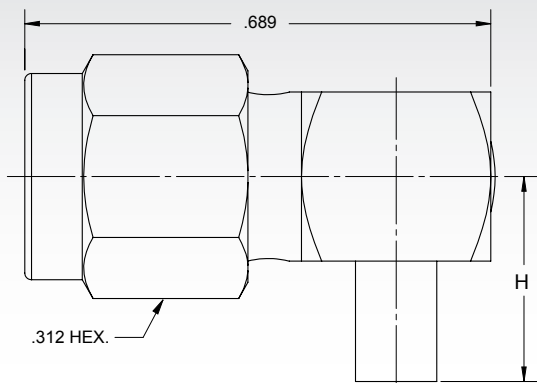
Cable	P/N
.085	M39012/79B3001
.085	M39012/79-3007

Male Cable Connector, Lockwire Holes



Cable	P/N
RG-58	M39012/55B3015
RG-174	M39012/55B3012
M17-152-00001	M39012/55-3030

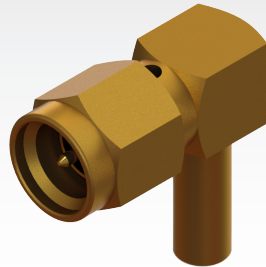
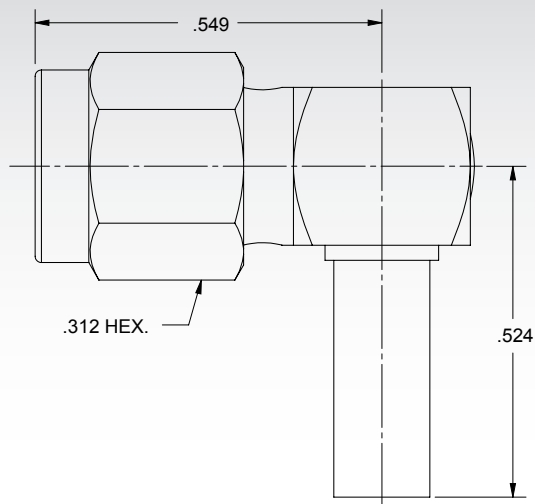
Male Cable Connector, R/A



Cable	P/N	H
.085	SF2915-6001	.312"
.085	M39012/80B3101	.310"
.085	M39012/80-3107	.625"
.141	2912-6001	.312"
.141	SF2912-6001	.312"
.141	M39012/80-3106	.625"
.141	M39012/80-3108	.625"
RG-58	M39012/56-3109	.524"
RG-174	M39012/56-3107	1.125"
RG-178	M39012/56-3106	.524"

'SF' denotes passivated Stainless Finish

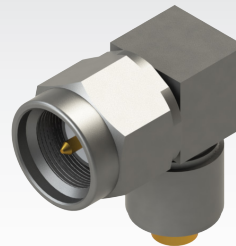
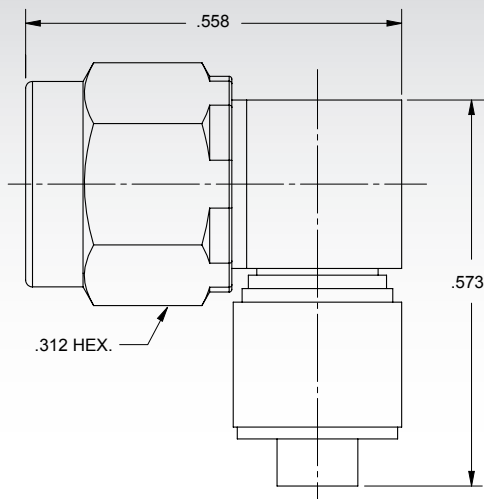
Male Cable Connector, R/A



Cable	P/N
RG-58	2910-6001
RG-58	M39012/56B3114
RG-58	M39012/56B3116
RG-58	M39012/56B3117
RG-58	M39012/56-3128
RG-174	2913-6001
RG-174	SF2913-6001
RG-174	M39012/56B3119
RG-178	M39012/56-3125

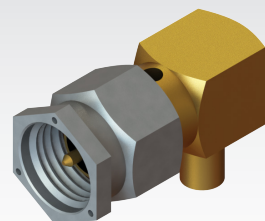
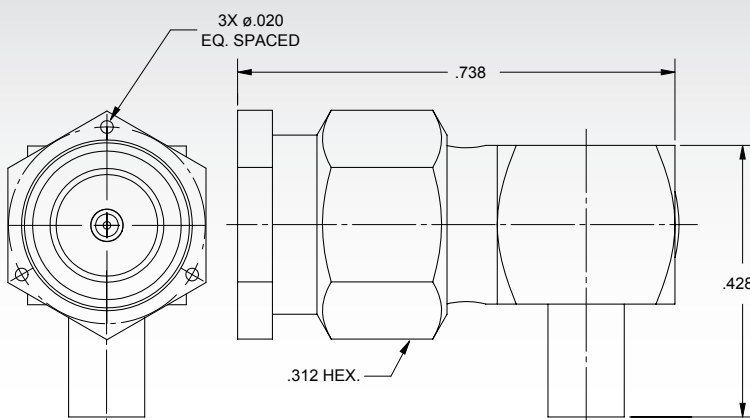
'SF' denotes passivated Stainless Finish

Male Cable Connector, Swept R/A



Cable	P/N
.047	SF2912-60955
.085	SF2915-6605
.141	SF2912-6605

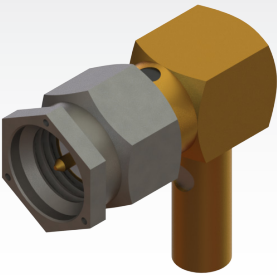
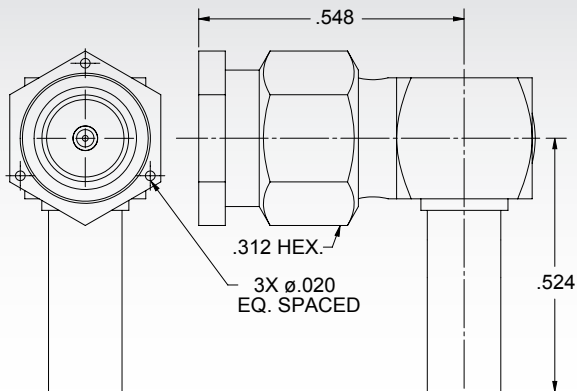
Male Cable Connector, Lockwire Holes, R/A



Cable	P/N
.085	M39012/80-3005
.141	M39012/80-3006
.141	M39012/80-3008
M17/152-00001	M39012/56-3030

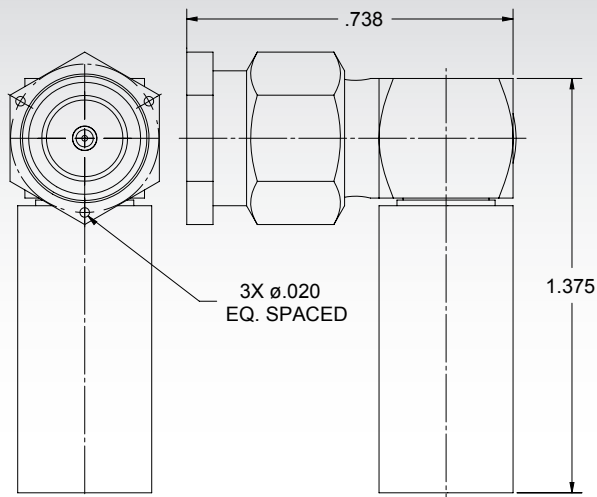
SMA SERIES

Male Cable Connector, Lockwire Holes, R/A



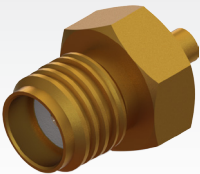
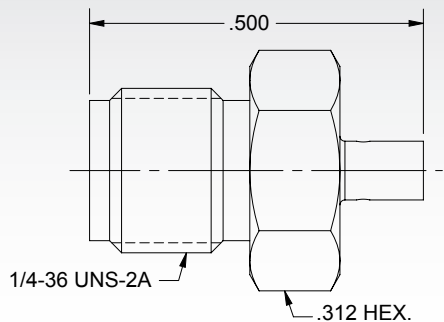
Cable	P/N
RG-174	M39012/56-3007

Male Cable Connector, Lockwire Holes, R/A



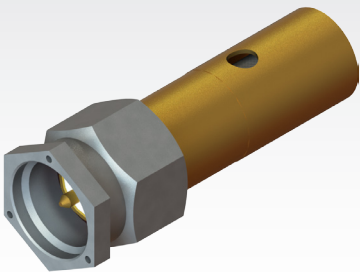
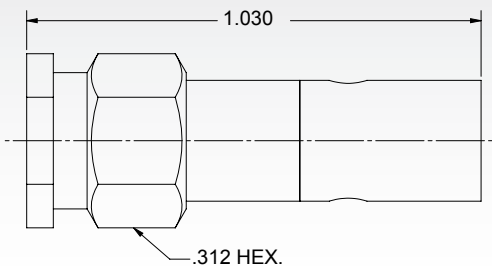
Cable	P/N
RG-58	M39012/56B3014
RG-58	M39012/56B3016
RG-58	M39012/56B3017
RG-58	M39012/56B3022
RG-58	M39012/56-3028
RG-174	M39012/56B3019
RG-174	M39012/56-3026
RG-178	M39012/56-3006
RG-178	M39012/56B3011

Female Cable Connector



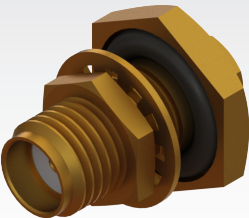
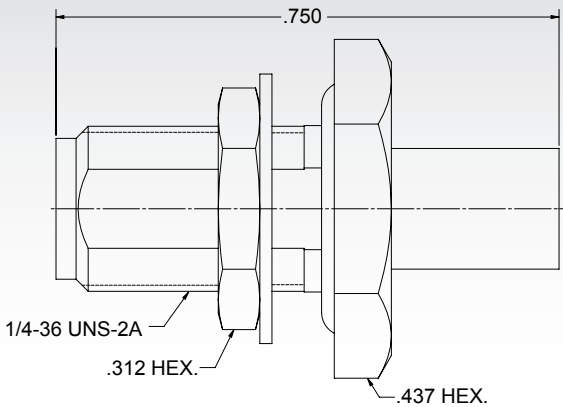
Cable	P/N
.047	2926-6015
.085	2921-6002
.141	2922-6007

Female Cable Connector, Lockwire Holes



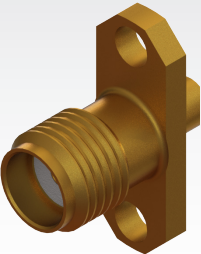
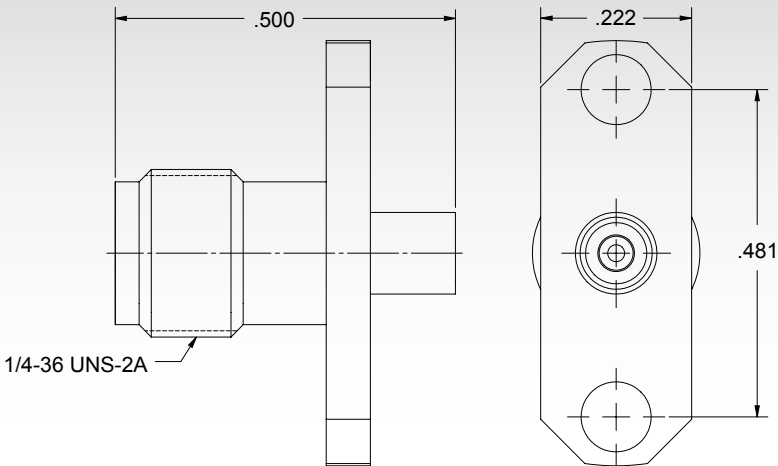
Cable	P/N
RG-58	M39012/55-3009

Female Bulkhead Cable Connector



Cable	P/N
.047	2944-6001
.085	2946-6012
.141	2942-6045

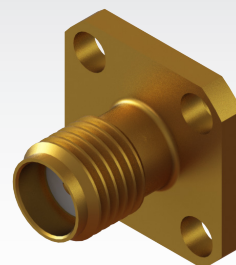
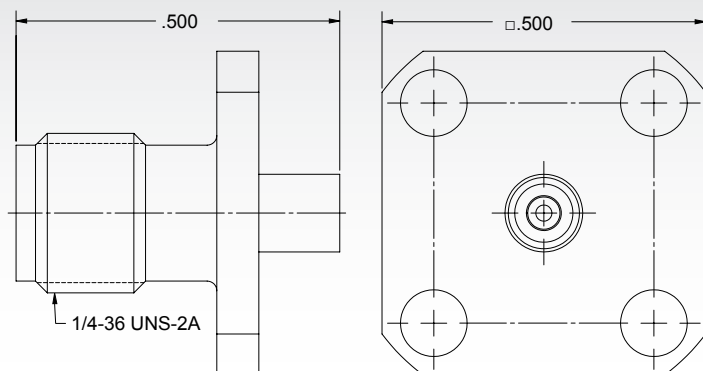
Female Flange Mount Cable Connector, 2 Hole



Cable	P/N
.085	2933-6001

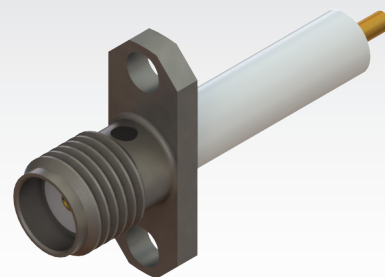
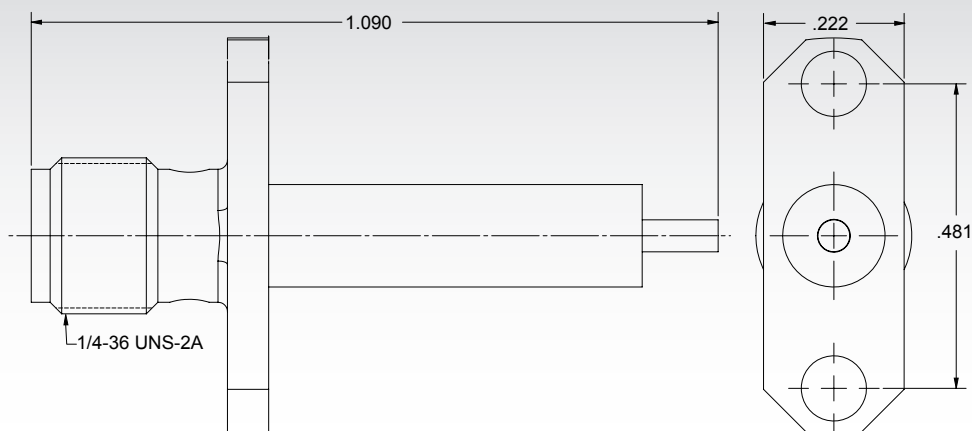
SMA SERIES

Female Flange Mount Cable Connector, 4 Hole



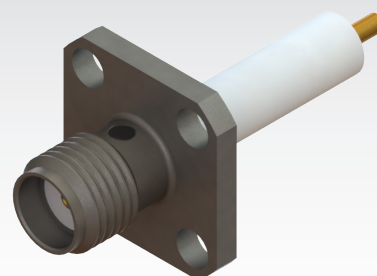
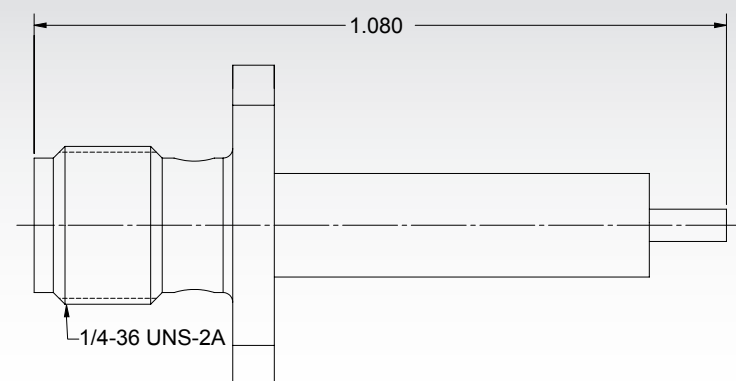
Cable	P/N
.085	2933-6004

Female Flange Mount Connector, 2 Hole (Candlestick)



P/N
SF2950-6200

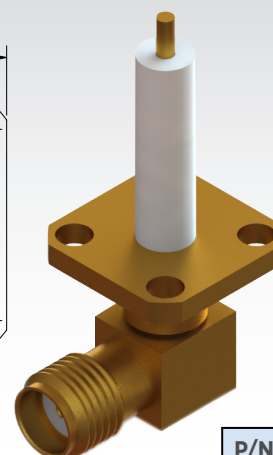
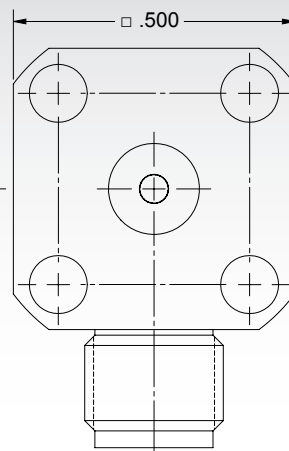
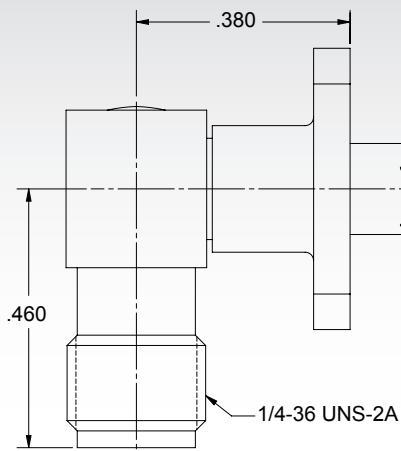
Female Flange Mount Connector, 4 Hole (Candlestick)



P/N
2950-6061
SF2950-6061

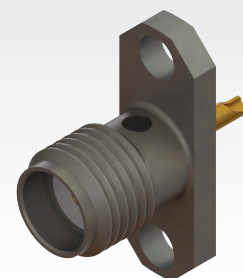
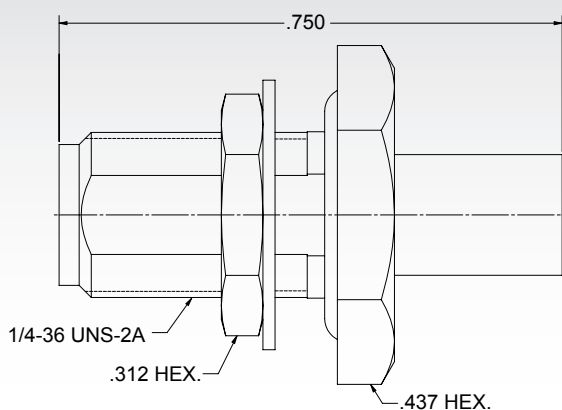
'SF' denotes passivated Stainless Finish

Female Flange Mount Connector, 4 Hole, R/A (Candlestick)



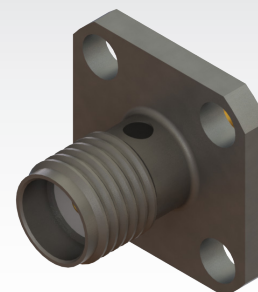
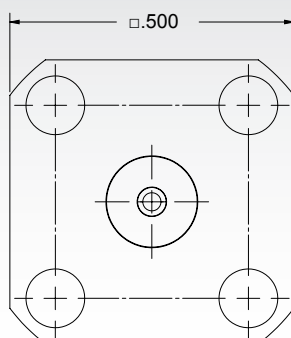
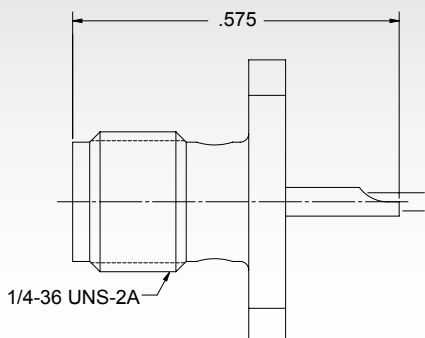
P/N
2960-6025

Female Flange Mount Connector, 2 Hole (Solder Pot)



P/N
SF2950-6062

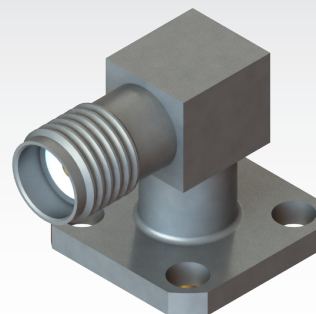
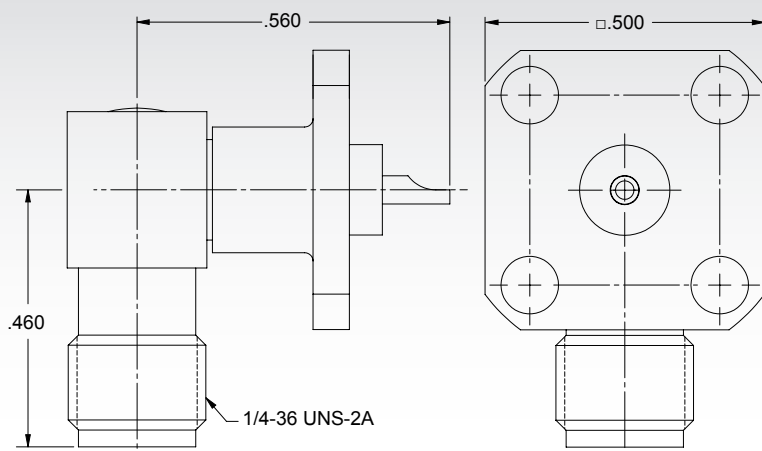
Female Flange Mount Connector, 4 Hole (Solder Pot)



P/N
SF2950-6081

SMA SERIES

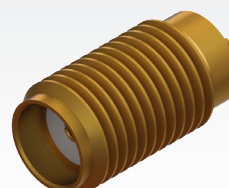
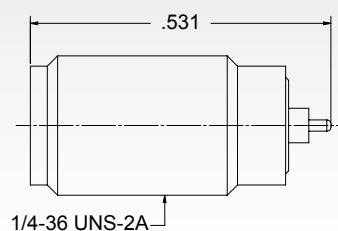
Female Flange Mount Connector, 4 Hole, R/A (Solder Pot)



P/N

SF2960-6001

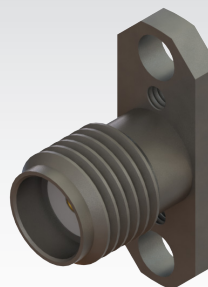
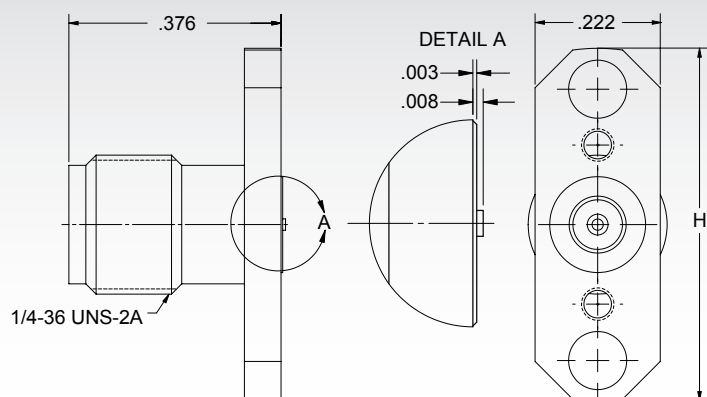
Female Sparkplug Hermetic Connector



P/N

2975-6200

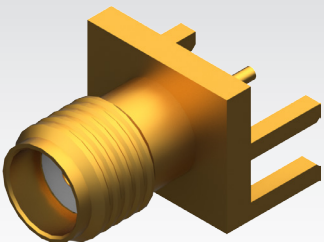
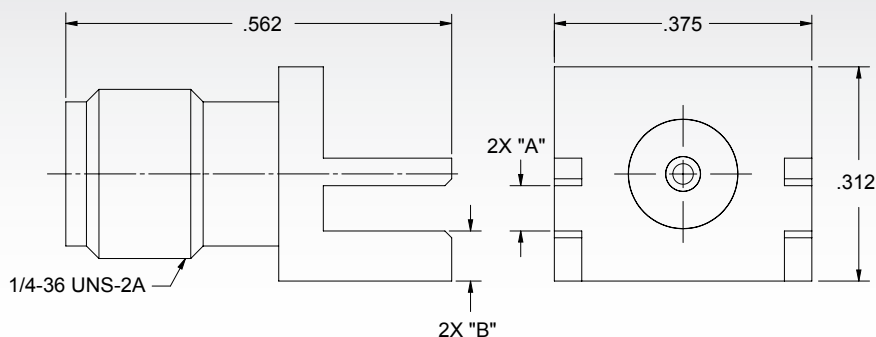
Female Flange Compression Mount Connector, 2 Hole



P/N	Desc.	H
SF2921-6920	Stripline	.625"
SF2921-61356	Stripline	.400"
SF2921-61345	CPW, Microstrip	.400"

Contact SV directly to access our database of recommended PCB layouts

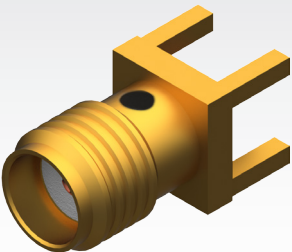
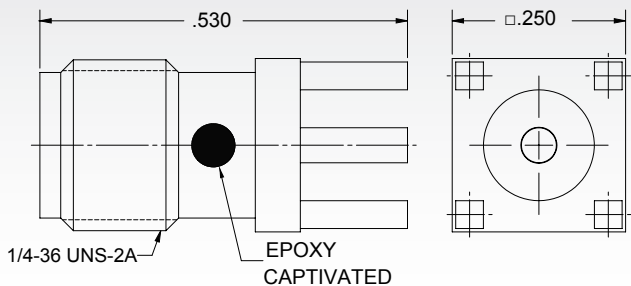
Female Edge Launch Connector



P/N	A	B
2985-6035	.068"	.073"
2985-6036	.048"	.093"
2985-6037	.037"	.104"
2985-6038	.099"	.042"

Contact SV directly to access our database of recommended PCB layouts

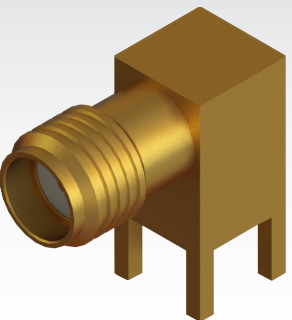
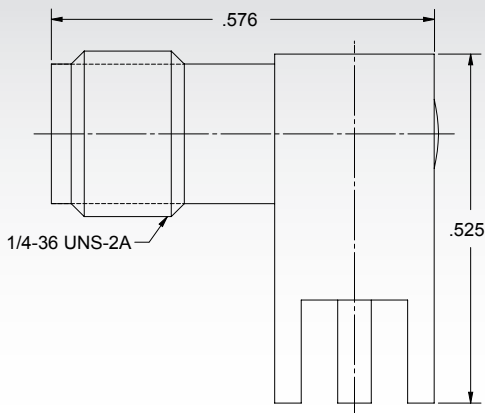
Female PCB Thru-Hole Connector



P/N
2985-6004

Contact SV directly to access our database of recommended PCB layouts

Female PCB Thru-Hole Connector, R/A

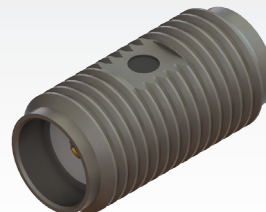
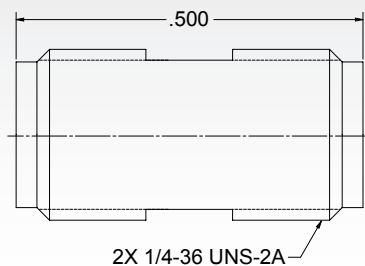


P/N
2986-6001

Contact SV directly to access our database of recommended PCB layouts

SMA SERIES

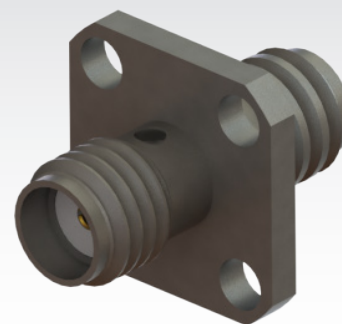
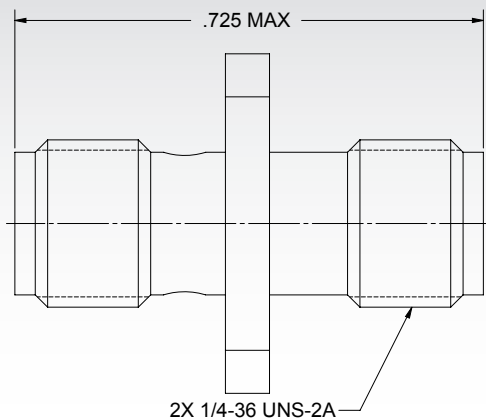
SMA Female to Female Adapter



P/N

SF2992-6001

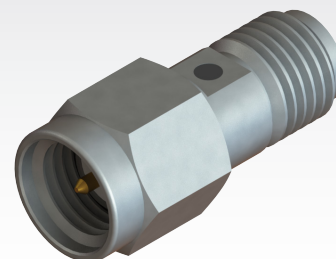
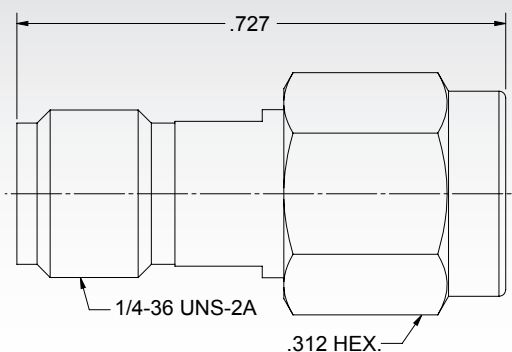
SMA Female to Female Adapter , 4 Hole



P/N

M55339/28-30002

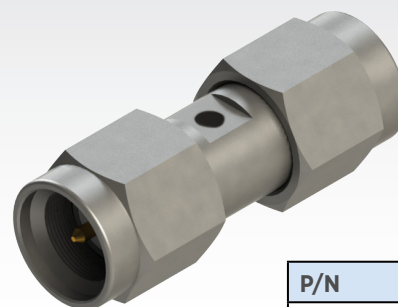
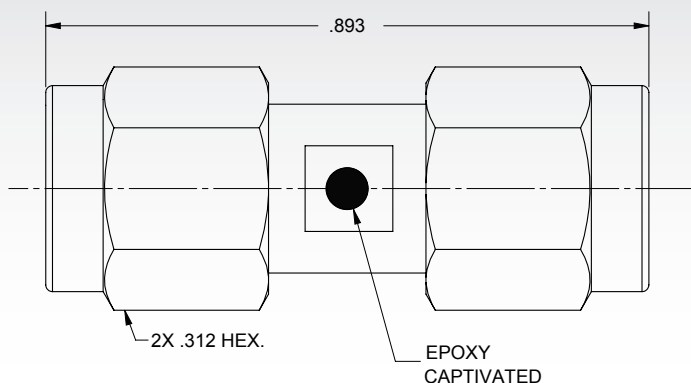
SMA Female to Male Adapter



P/N

SF299 7-6003

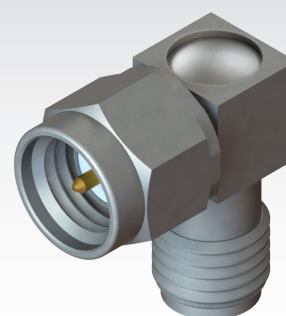
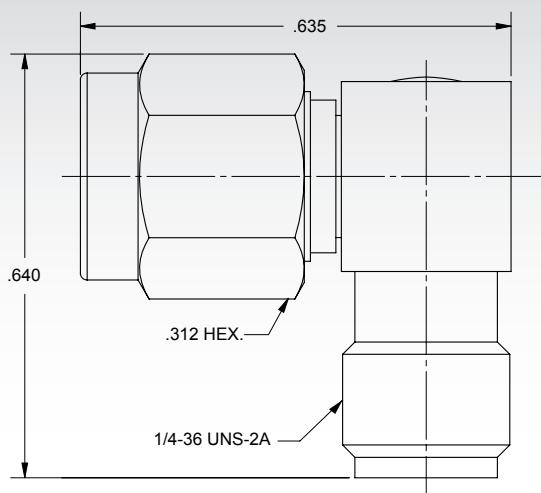
SMA Male to Male Adapter



P/N
2993-6001
SF2993-6001

'SF' denotes passivated Stainless Finish

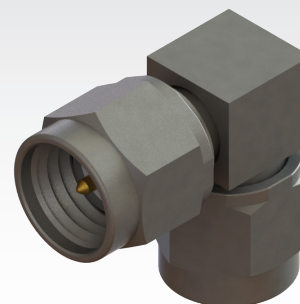
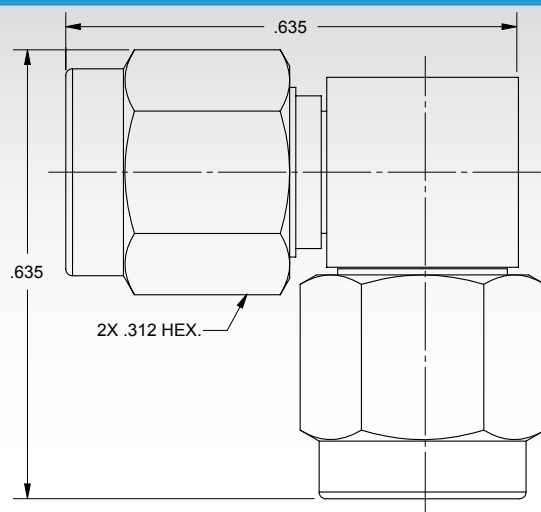
SMA Female to Male Adapter, R/A



P/N
2994-6001
SF2994-6001
M55339/02-30001

'SF' denotes passivated Stainless Finish

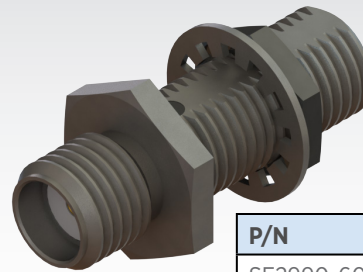
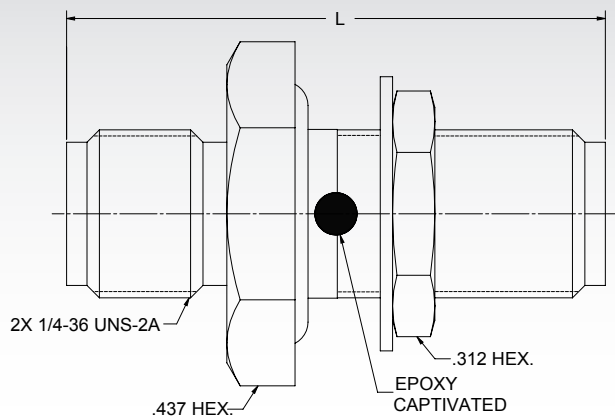
SMA Male to Male Adapter, R/A



P/N
M55339/53-30001

SMA SERIES

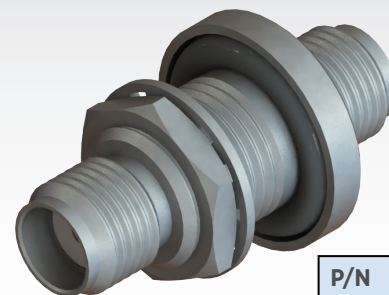
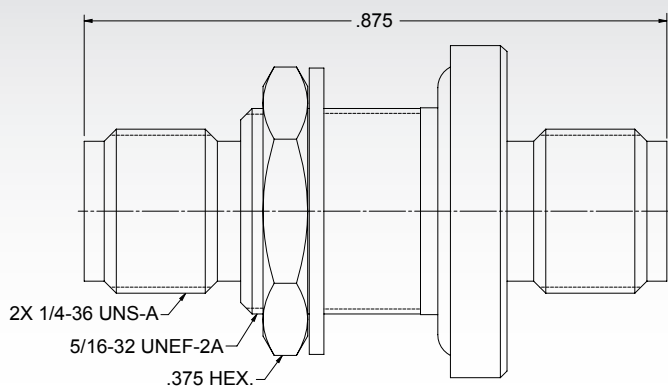
SMA Female to Female Bulkhead Adapter



P/N	L
SF2990-6002	.790"
2990-6005	.875"
SF2990-6005	.875"
M55339/28-30001	.906"

'SF' denotes passivated Stainless Finish

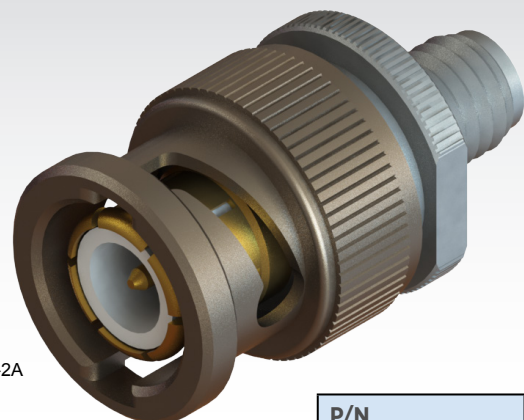
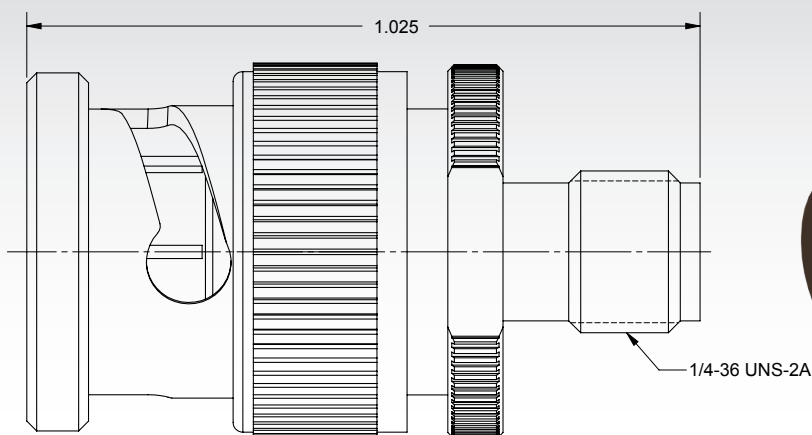
SMA Female to Female Bulkhead Hermetic Adapter



P/N
2991-6002
SF2991-6002

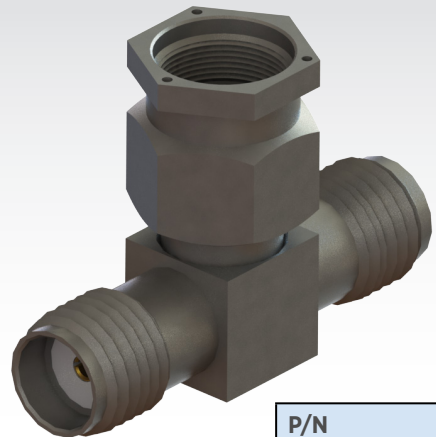
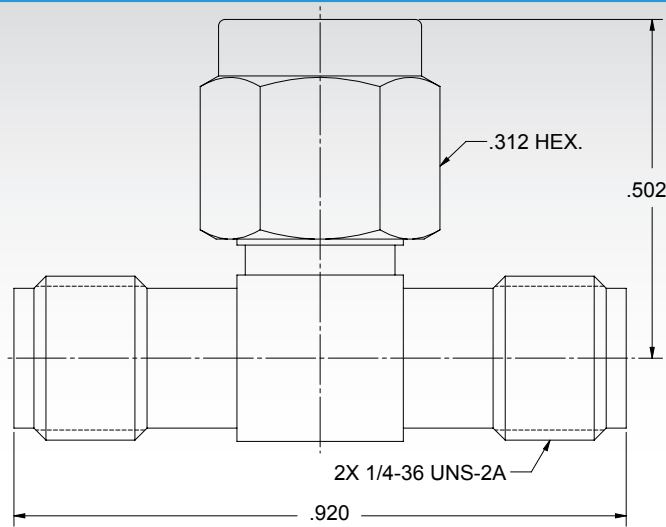
'SF' denotes passivated Stainless Finish

SMA Female to BNC Male Adapter



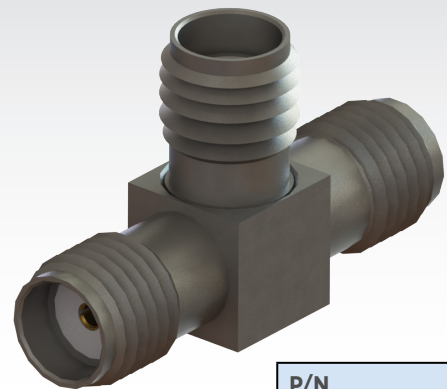
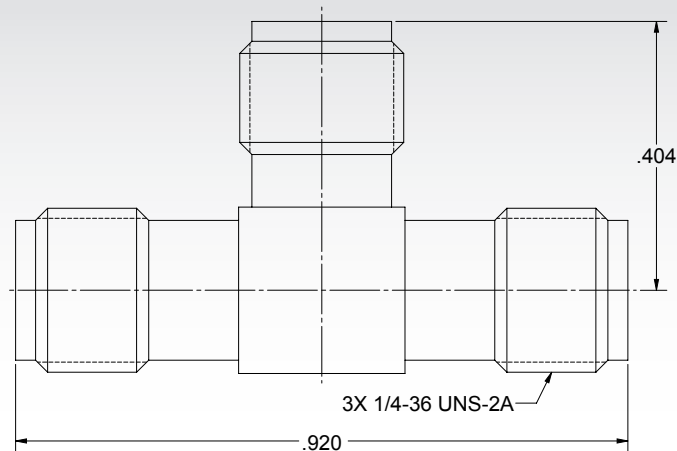
P/N
M55339/44-30001

SMA Female to Female to Male Adapter



P/N
M55339/30-30101

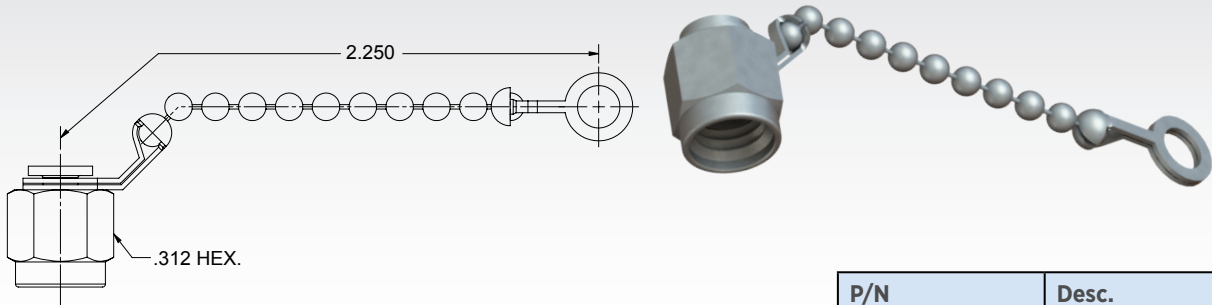
SMA Female to Female to Female Adapter



P/N
M55339/30-30003

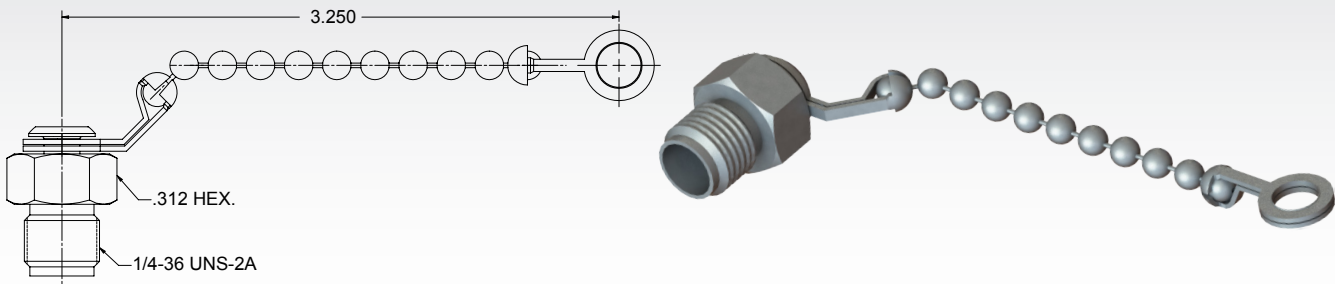
SMA SERIES

Male Dust Cap



P/N	Desc.
M39012/25-3024	Bead Chain
M39012/25-3025	Link Chain
M39012/25-3124	Rope Chain

Female Dust Cap



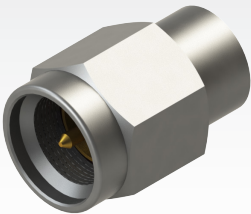
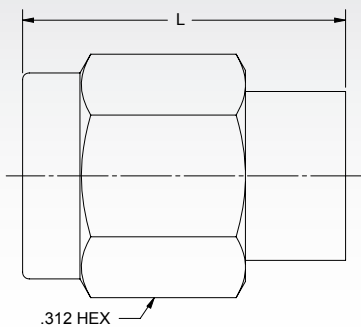
P/N	Desc.
M39012/25-3026	Bead Chain

Male Short



P/N
SF8018-6007

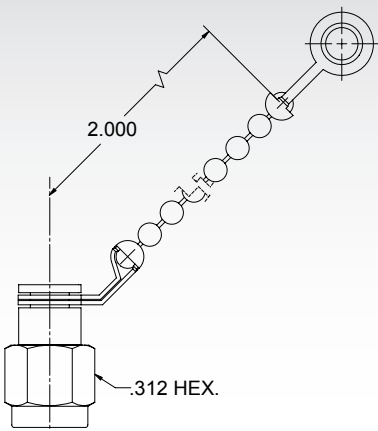
Male Termination



P/N	L
SF8018-6060	.330"
8018-6061	.330"
SF8018-6061	.330"
8018-6172	.500"
8018-6173	.500"
8018-6005	.520"
SF8018-6005	.520"

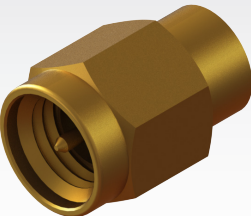
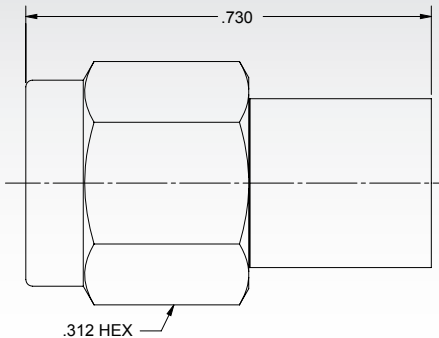
'SF' denotes passivated Stainless Finish

Male Termination



P/N	Desc.
8018-6174	Bead Chain

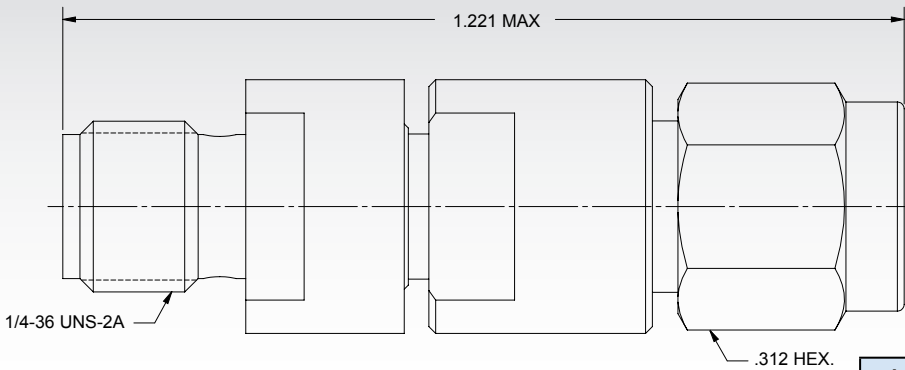
Male Termination



P/N	Desc.
M39030/3-XXN	Nonscreened
M39030/3-XXS	Screened

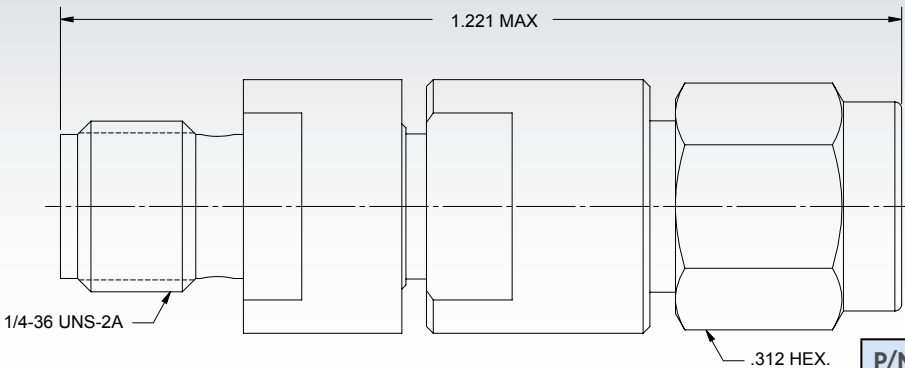
SMA SERIES

SMA Male to Female Attenuator, 12.4 GHz



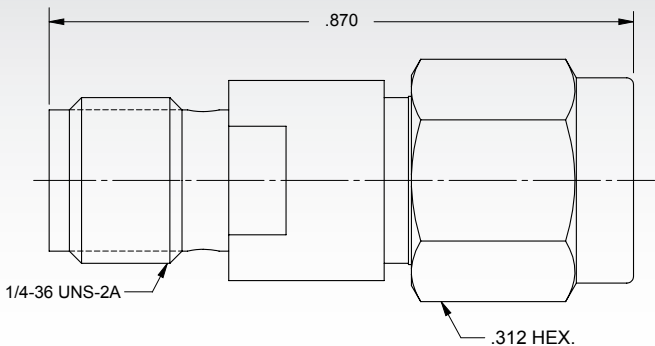
P/N	Desc.
M3933/14-XXN	Nonscreened
M3933/14-XXS	Screened

SMA Male to Female Attenuator, 18 GHz



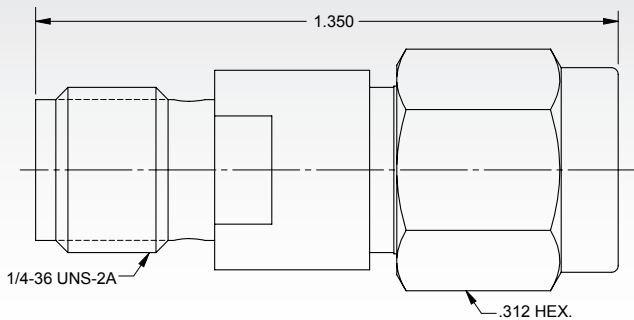
P/N	Desc.
M3933/16-XXN	Nonscreened
M3933/16-XXS	Screened

SMA Male to Female Attenuator, 18 GHz



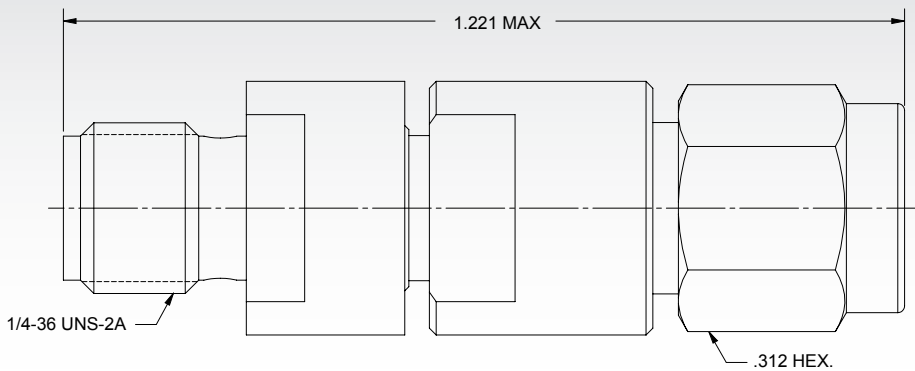
P/N	Desc.
M3933/25-XXN	Nonscreened
M3933/25-XXS	Screened

SMA Male to Female Attenuator, 18 GHz



P/N
SF0929-6200-XX

SMA Male to Female Attenuator, 18 GHz



P/N
SF0930-6200-XX

2.92MM SERIES

2.92mm Interface at a Glance

The 2.92mm connector was developed for use to 40 GHz. The male pin is shorter than that of an SMA or 3.5mm to ensure that the outer contacts of the male and female connectors engage before the pin and female receptacle do. This ensures that the pin and socket will not see excessive wear and mating stress seen by misalignment in an SMA or 3.5mm connector. The 2.92mm connector also has a thicker wall than a standard SMA. The 2.92mm series mates with SMA and 3.5mm connectors.

Electrical Specifications

Impedance	50Ω
Frequency	40 GHz
VSWR	1.03 + .005 f
Insertion Loss	.04 √ f
Shielding Effectiveness	≥ 100 dB

Mechanical Specifications

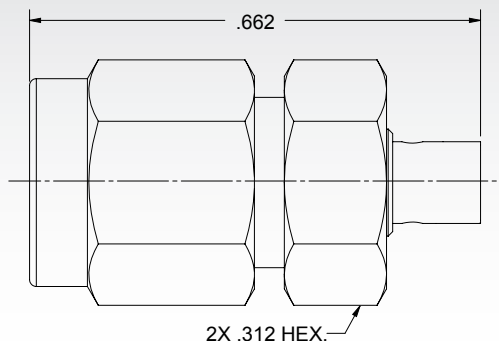
Mating Cycles	500
Mating Torque	7 - 10 in - lbs
Inter-mate ability	SMA, 3.5mm

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +125°C
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

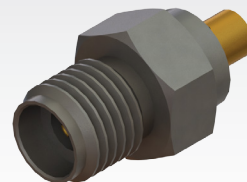
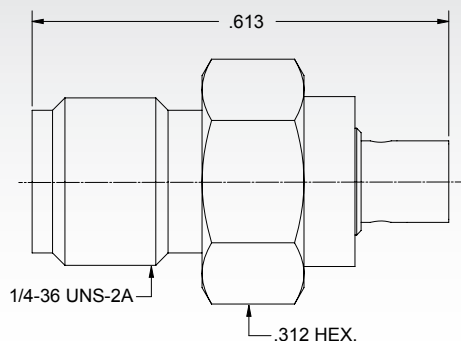
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Male Cable Connector



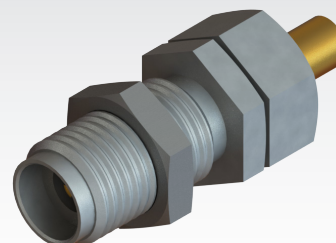
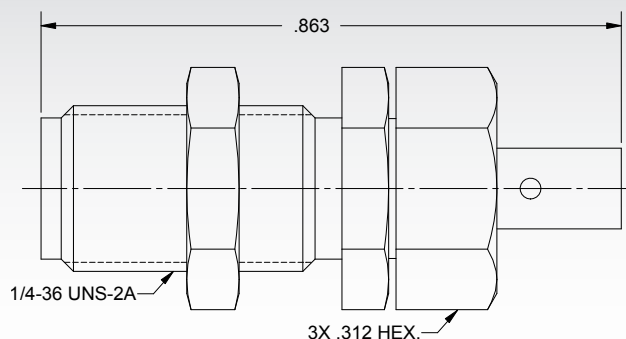
Cable	P/N
.047	SF1511-60069
.085	SF1511-60071
.141	SF1511-60044

Female Cable Connector



Cable	P/N
.047	SF1521-60039
.085	SF1521-60077
.141	SF1521-60042

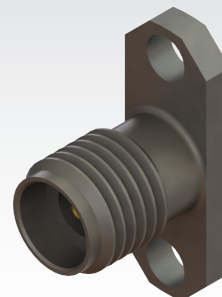
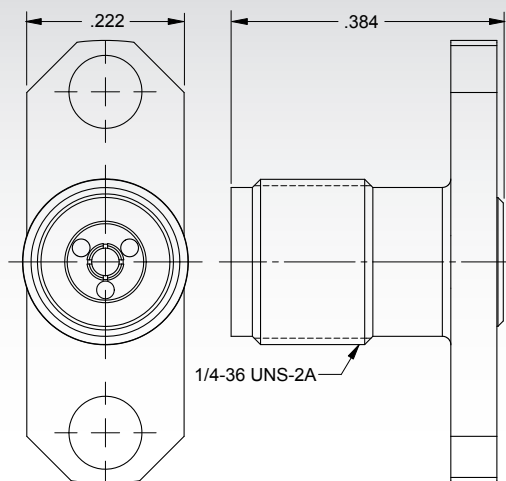
Female Bulkhead Cable Connector



Cable	P/N
.047	SF1521-60045
.085	SF1521-60025
.141	SF1521-60044

2.92MM SERIES

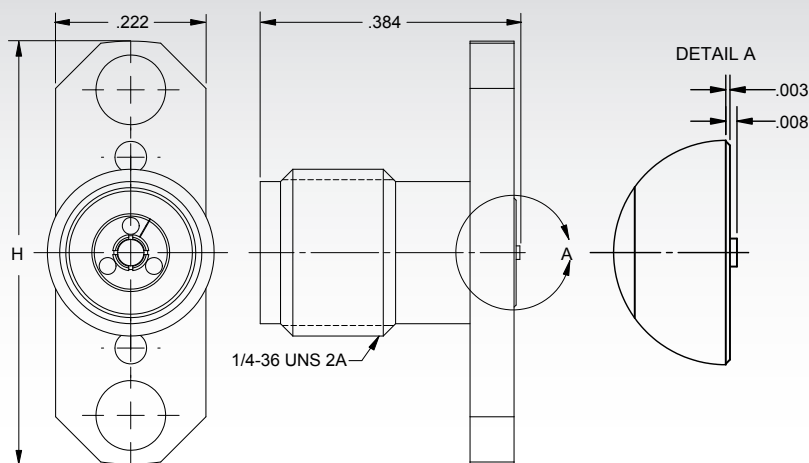
Female Flange Mount Connector, 2 Hole (Accepts Ø.012" Pin)



P/N

SF1552-6002

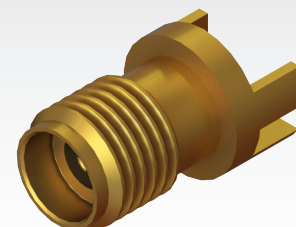
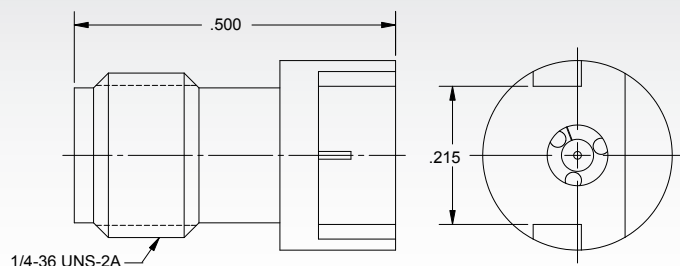
Female Flange Compression Mount Connector, 2 Hole



Contact SV directly to access our database of recommended PCB layouts

P/N	Desc.	H
SF1521-60013	Stripline	.625"
SF1521-60061	Stripline	.400"
SF1521-60070	CPW, Microstrip	.400"

Female Edge Launch Connector (.062" PCB Thickness)



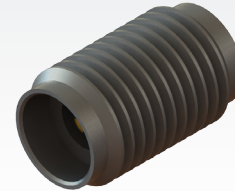
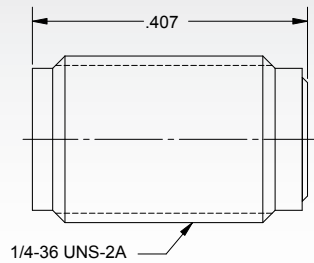
Contact SV directly to access our database of recommended PCB layouts

P/N

1521-60051

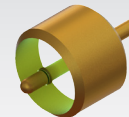
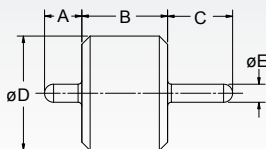
2.92MM SERIES

Female Sparkplug Connector



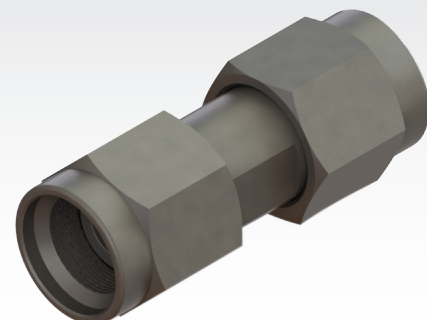
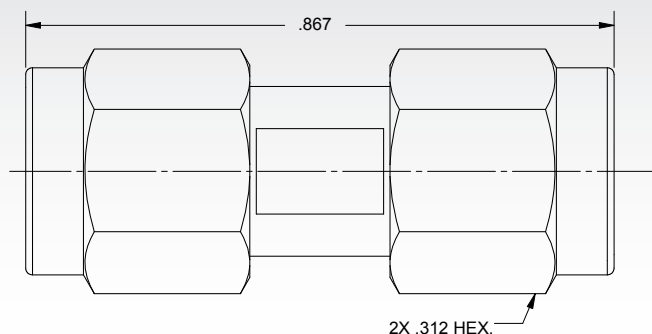
P/N
SF1575-6007

Feed-Thru Hermetic Seal



P/N	A	B	C	øD	øE
066-15-000	.040"	.055"	.029"	.076"	.012"
066-15-001	.040"	.055"	.080"	.076"	.012"
066-15-002	.030"	.055"	.026"	.068"	.009"
066-15-003	.030"	.055"	.080"	.068"	.009"
066-15-004	.030"	.055"	.120"	.068"	.009"
066-15-005	.050"	.060"	.125"	.158"	.020"

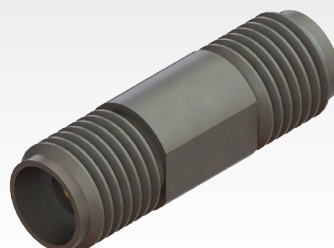
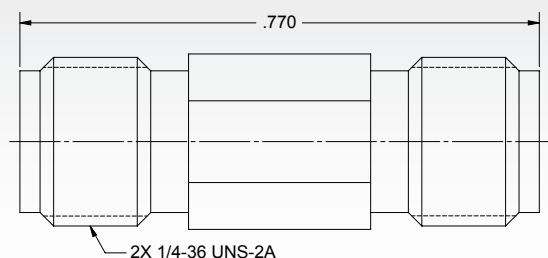
2.92mm Male to Male Adapter



P/N
SF1593-6000

2.92MM SERIES

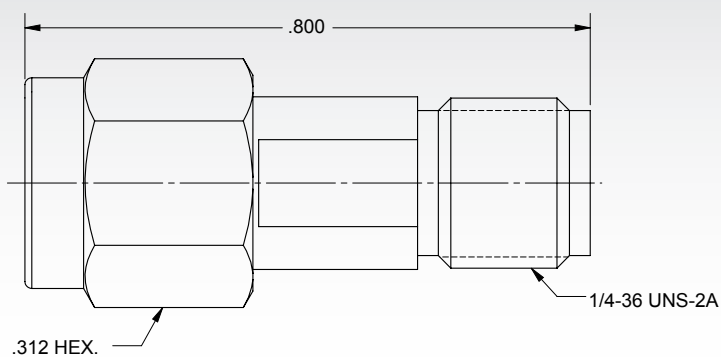
2.92mm Female to Female Adapter



P/N

SF1590-6000

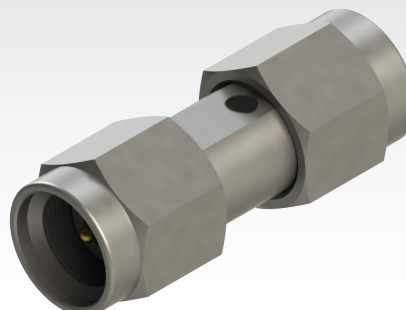
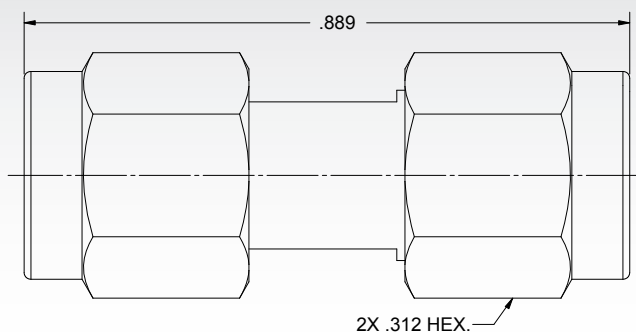
2.92mm Male to Female Adapter



P/N

SF1597-6003

2.92mm Male to SMA Male Adapter



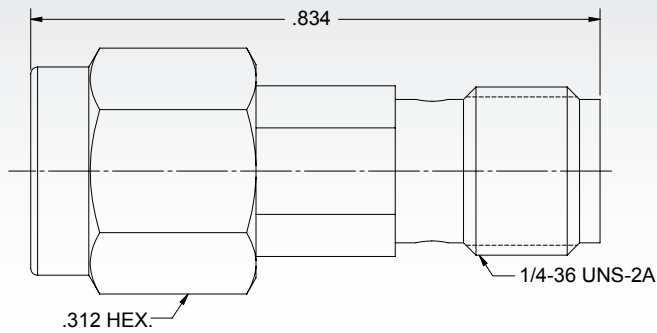
P/N

SF1115-6011

2.92MM SERIES

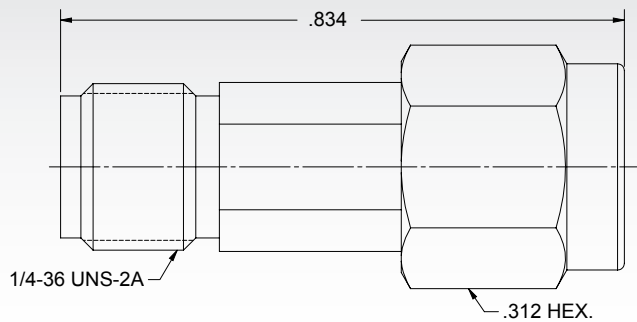
2.92MM SERIES

2.92mm Male to SMA Female Adapter



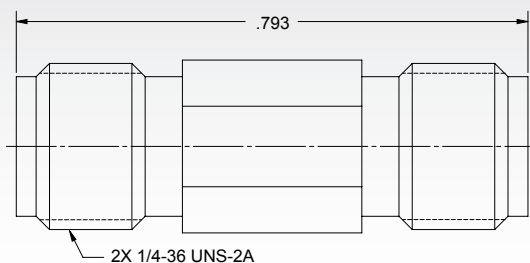
P/N
SF1115-6009

2.92mm Female to SMA Male Adapter



P/N
SF1115-6007

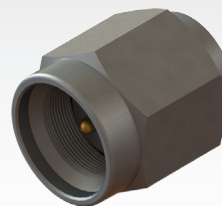
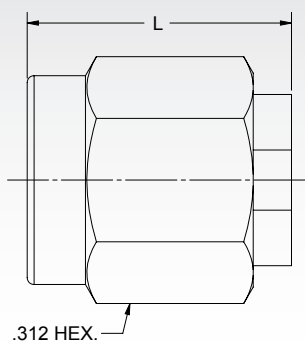
2.92mm Female to SMA Female Adapter



P/N
SF1115-6005

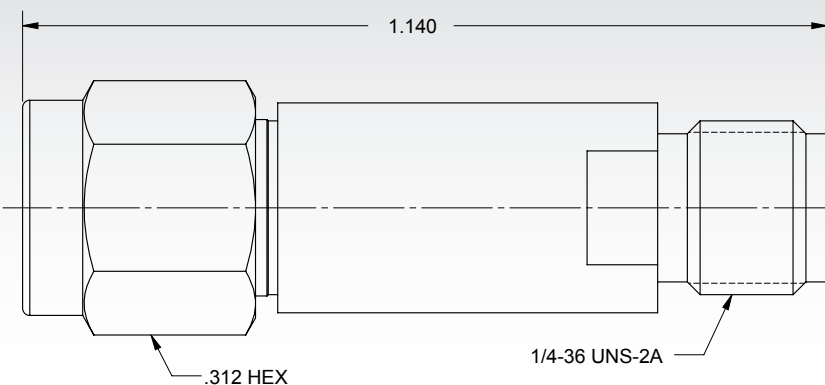
2.92MM SERIES

Male Termination



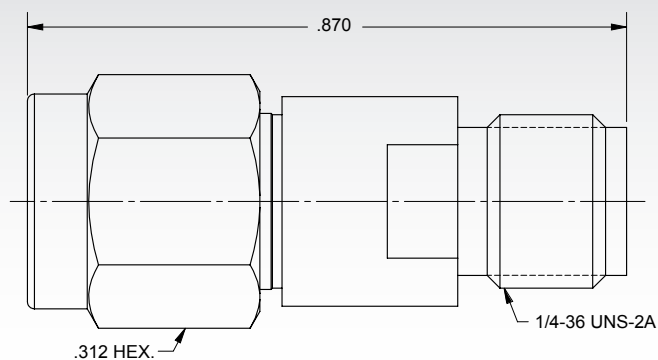
P/N	L
SF8015-6002	.375"
SF8015-6007	.560"

2.92mm Female to Male Attenuator, 32 GHz



P/N	Desc.
M3933/30-XXN	Nonscreened
M3933/30-XXS	Screened

2.92mm Male to Female Attenuator, 40 GHz



P/N
SF0915-6200-XX

2.4MM SERIES

2.4mm Interface at a Glance

The 2.4mm connector was developed for use to 50 GHz. This connector series uses a thick outer wall to eliminate the fragility seen in SMA and 2.92mm connectors. The female socket is also strengthened to ensure reliable mating. The 2.4mm series mates with SMA, 3.5mm and 2.92mm connectors with adapters and can mate with the 1.85mm series without adapters.

Electrical Specifications

Impedance	50Ω
Frequency	50 GHz
VSWR	1.03 + .005 f
Insertion Loss	.04 √ f
Shielding Effectiveness	≥ 100 dB

Mechanical Specifications

Mating Cycles	500
Recommended Torque	5 - 7 in - lbs
Inter-mate ability	1.85mm

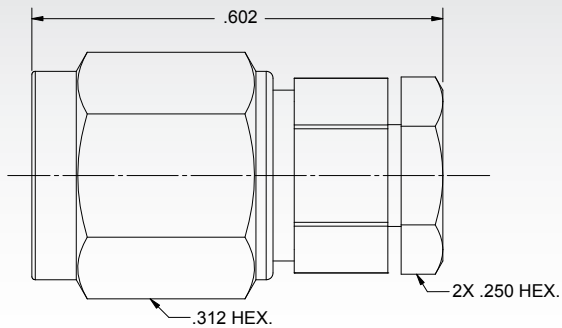
Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +125°C
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

Note: Specifications, dimensions and images are typical for the series and may vary by part number

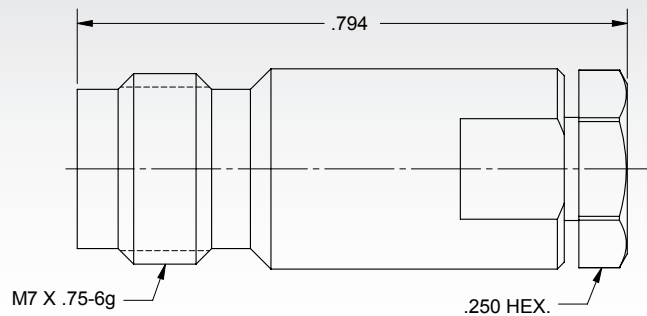
2.4MM SERIES

Male Cable Connector



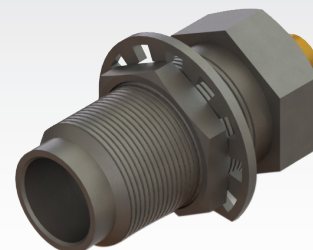
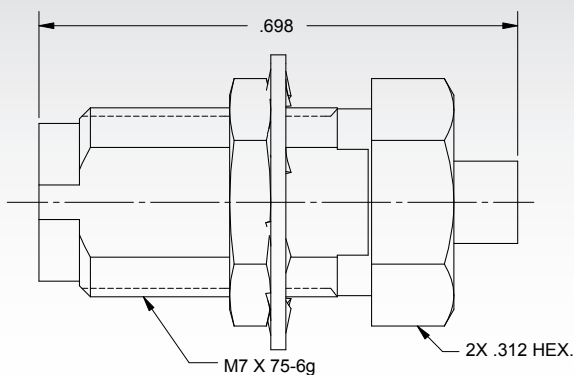
Cable	P/N
.047	SF1611-60001
.085	SF1611-60003

Female Cable Connector



Cable	P/N
.047	SF1621-60014
.085	SF1621-60009

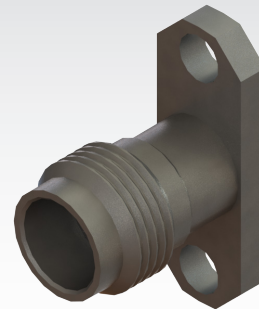
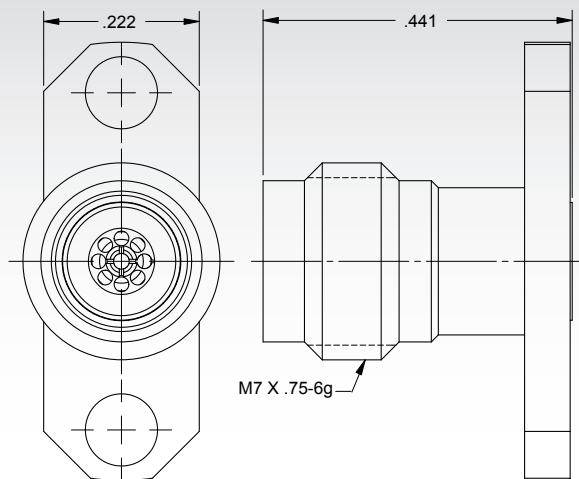
Female Bulkhead Cable Connector



Cable	P/N
.047	SF1621-60005
.085	SF1644-6001

2.4MM SERIES

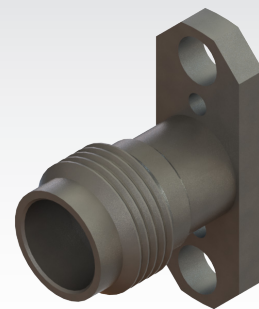
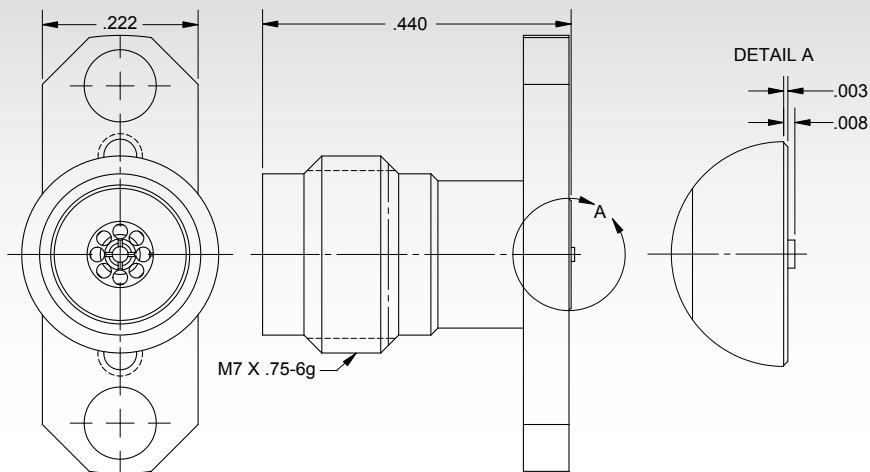
Female Flange Mount Connector, 2 Hole (Accepts Ø.012" Pin)



P/N

SF1621-60017

Female Flange Compression Mount Connector, 2 Hole

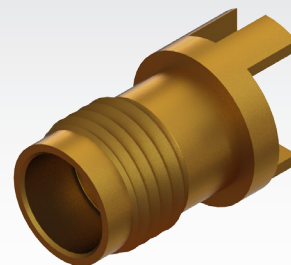
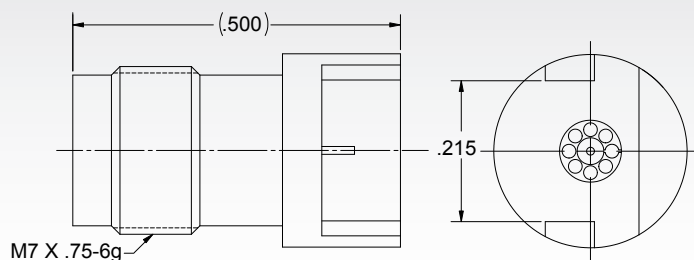


P/N

SF1621-60003

Contact SV directly to access our database of recommended PCB layouts

Female Edge Launch Connector (.062" PCB Thickness)



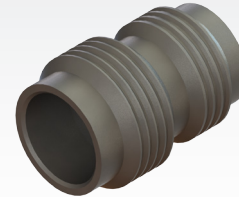
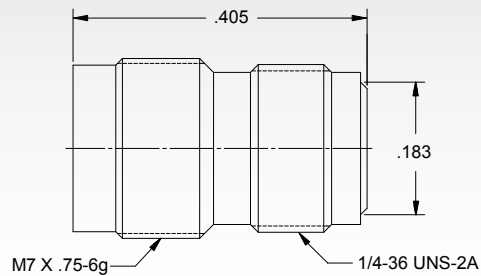
P/N

1621-60008

Contact SV directly to access our database of recommended PCB layouts

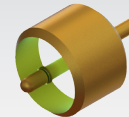
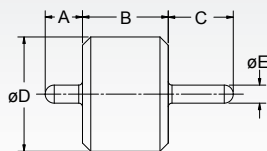
2.4MM SERIES

Male Sparkplug Connector (Accepts Ø.008" Pin)



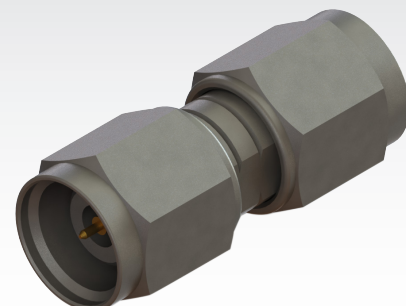
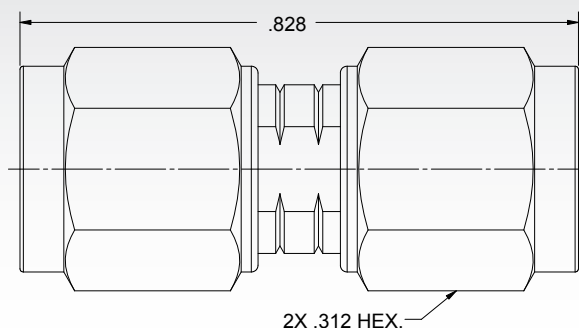
P/N
SF1675-600 4

Feed-Thru Hermetic Seal



P/N	A	B	C	ØD	ØE
066-15-000	.040"	.055"	.029"	.076"	.012"
066-15-001	.040"	.055"	.080"	.076"	.012"
066-15-002	.030"	.055"	.026"	.068"	.009"
066-15-003	.030"	.055"	.080"	.068"	.009"
066-15-004	.030"	.055"	.120"	.068"	.009"
066-15-005	.050"	.060"	.125"	.158"	.020"

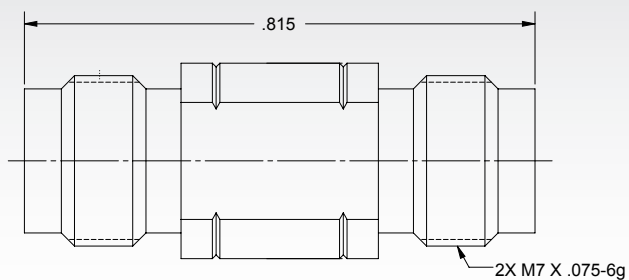
2.4mm Male to Male Adapter



P/N
SF1116-6039

2.4MM SERIES

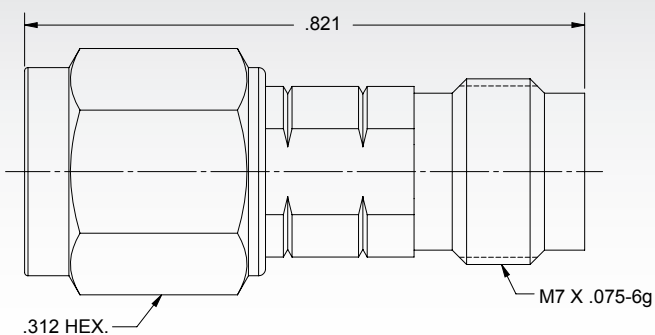
2.4mm Female to Female Adapter



P/N

SF1116-6037

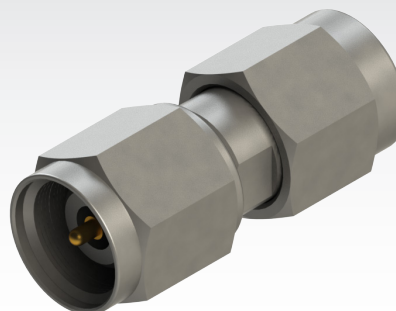
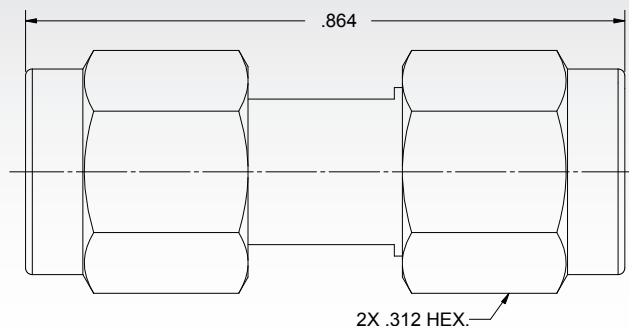
2.4mm Male to Female Adapter



P/N

SF1116-6040

2.4mm Male to 2.92mm Male Adapter

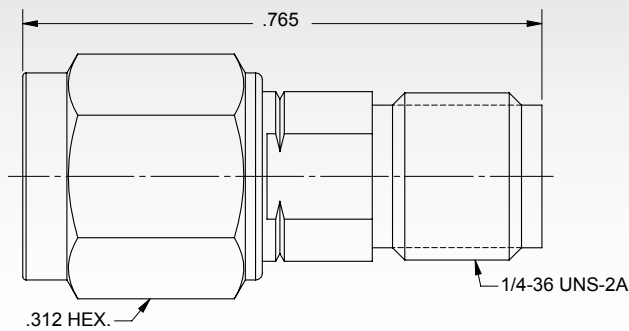


P/N

SF1116-6007

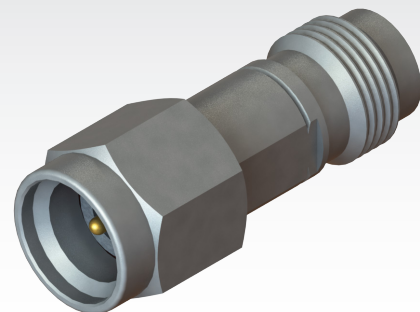
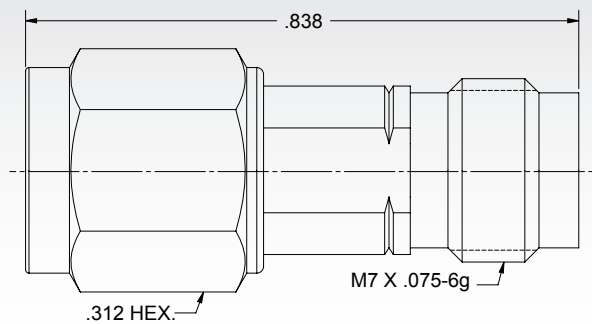
2.4MM SERIES

2.4mm Male to 2.92mm Female Adapter



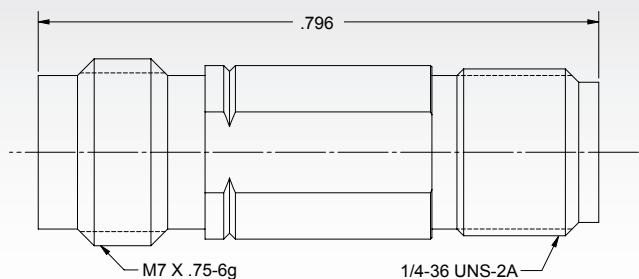
P/N
SF1116-6002

2.4mm Female to 2.92mm Male Adapter



P/N
SF1116-6003

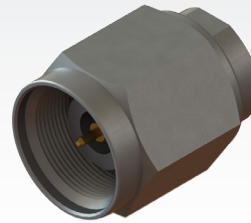
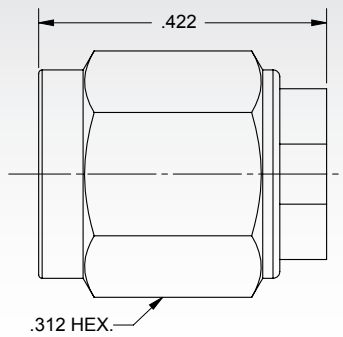
2.4mm Female to 2.92mm Female Adapter



P/N
SF1116-6004

2.4MM SERIES

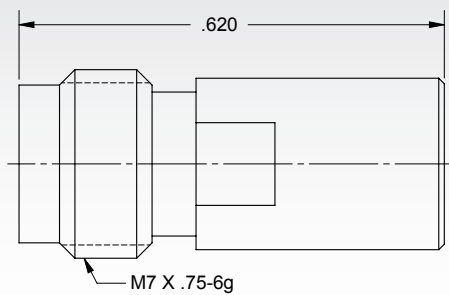
Male Termination



P/N

SF8016-6304

Female Termination



P/N

SF8016-6402

1.85MM SERIES

1.85mm Interface at a Glance

The 1.85mm connector was designed for mode free operation through 65 GHz. The interface uses a mostly air-dielectric with a support bead that is set back in the body of the connector to reduce bead interaction in a mated pair. Like the 2.92mm and 2.4mm connector, the body has been designed to ensure that the outer conductors engage before the center conductors make contact. The 1.85mm interface uses an M7 thread and is compatible only with the 2.4mm interface. SV Microwave supplies adapters to mate 1.85mm connectors to SMA and 2.92mm connectors.

Electrical Specifications

Impedance	50Ω
Frequency	65 GHz
VSWR	1.03 + .005 f
Insertion Loss	.04 √ f
Shielding Effectiveness	≥ 100 dB

Mechanical Specifications

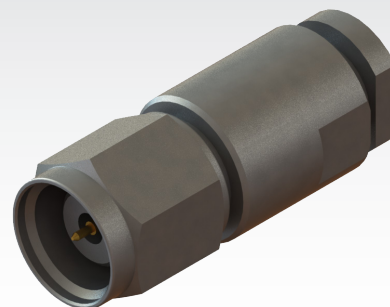
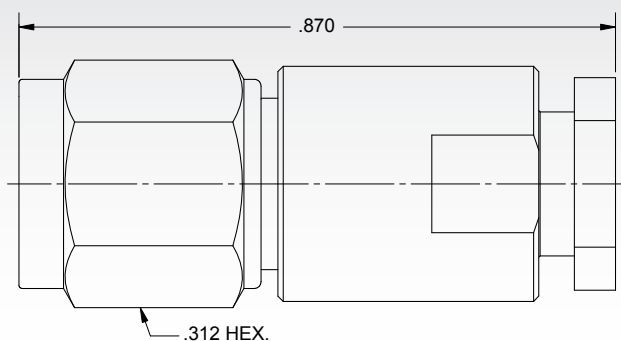
Mating Cycles	500
Mating Torque	5 - 7 in - lbs
Inter-mate ability	2.4mm

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +125°C
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

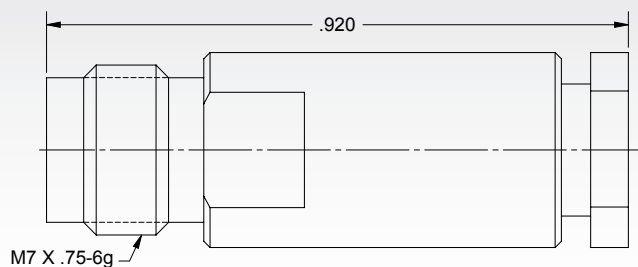
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Male Cable Connector



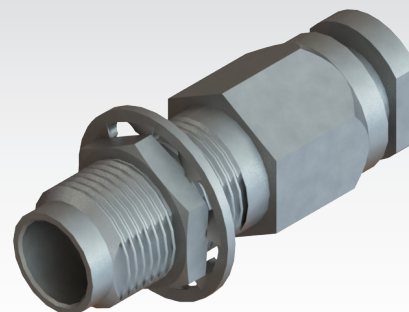
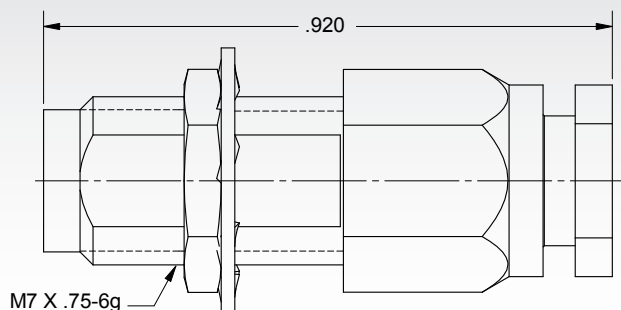
Cable	P/N
.047	SF3311-60002
.085	SF3311-60003

Female Cable Connector



Cable	P/N
.047	SF3321-60005
.085	SF3321-60006

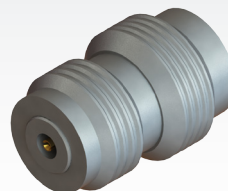
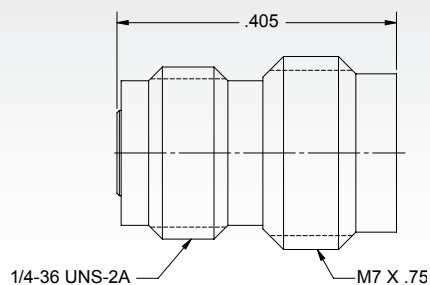
Female Bulkhead Cable Connector



Cable	P/N
.047	SF3321-60004
.085	SF3321-60007

1.85MM SERIES

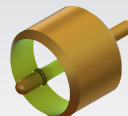
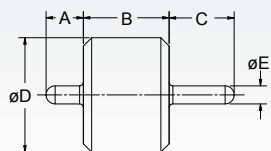
Female Sparkplug Connector (Accepts Ø.008" Pin)



P/N

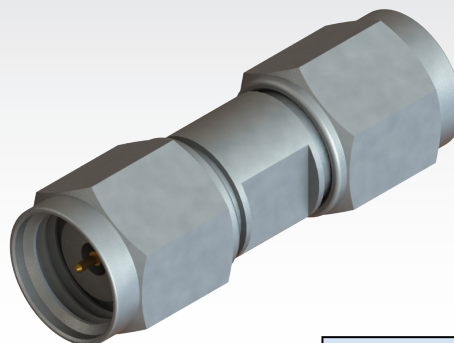
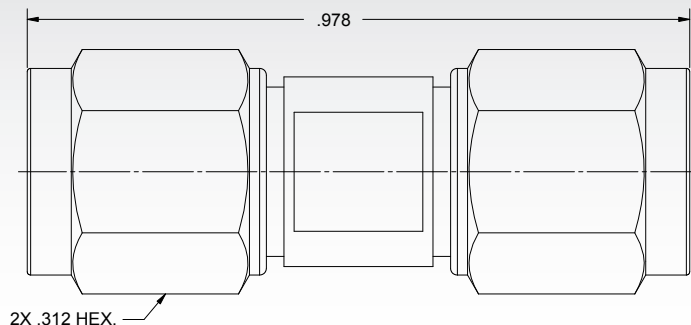
SF3375-6001

Feed-Thru Hermetic Seal



P/N	A	B	C	øD	øE
066-15-000	.040"	.055"	.029"	.076"	.012"
066-15-001	.040"	.055"	.080"	.076"	.012"
066-15-002	.030"	.055"	.026"	.068"	.009"
066-15-003	.030"	.055"	.080"	.068"	.009"
066-15-004	.030"	.055"	.120"	.068"	.009"
066-15-005	.050"	.060"	.125"	.158"	.020"

1.85mm Male to Male Adapter

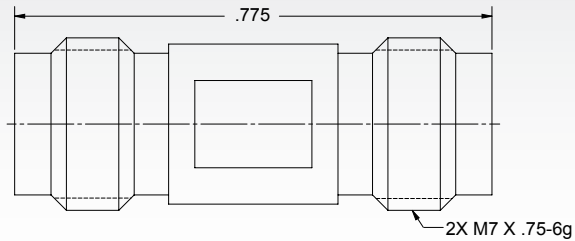


P/N

SF1133-6009

1.85MM SERIES

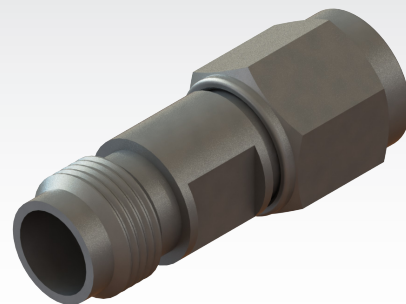
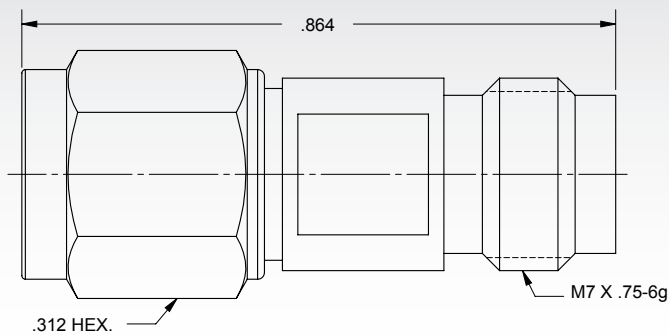
1.85mm Female to Female Adapter



P/N

SF1133-6008

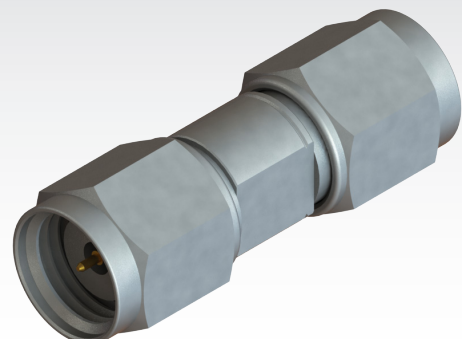
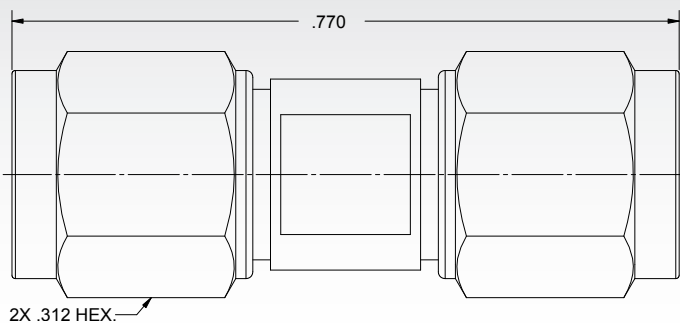
1.85mm Male to Female Adapter



P/N

SF1133-6010

1.85mm Male to 2.4mm Male Adapter

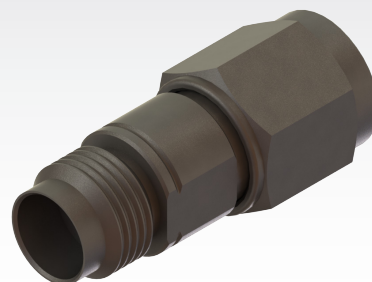
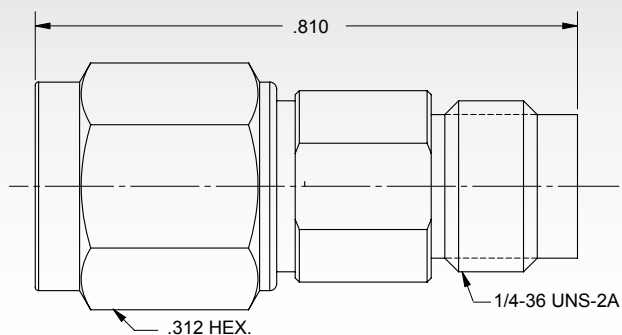


P/N

SF1133-6006

1.85MM SERIES

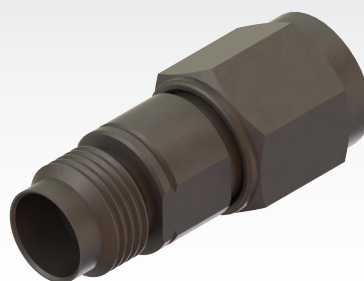
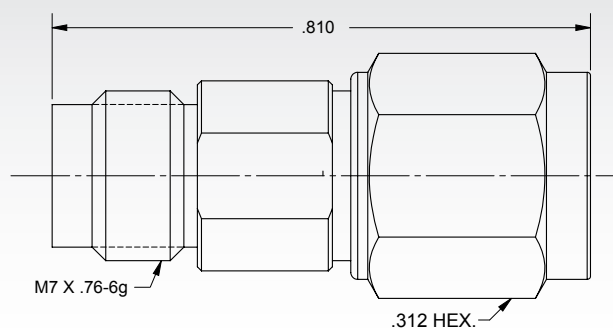
1.85mm Male to 2.4mm Female Adapter



P/N

SF1133-6004

1.85mm Female to 2.4mm Male Adapter



P/N

SF1133-6005

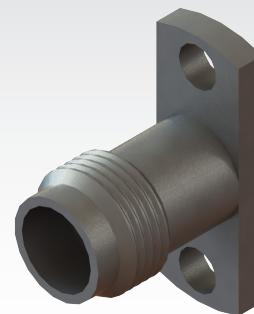
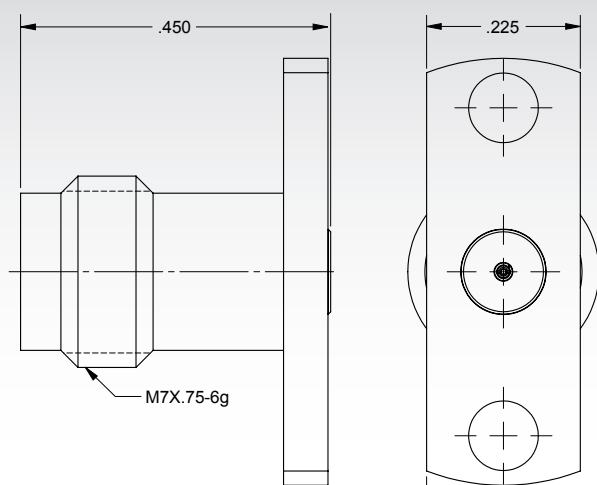
1.85mm Female to 2.4mm Female Adapter



P/N

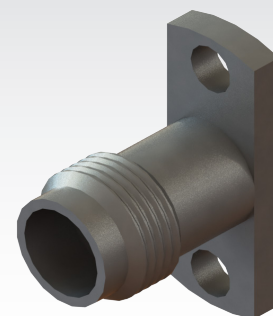
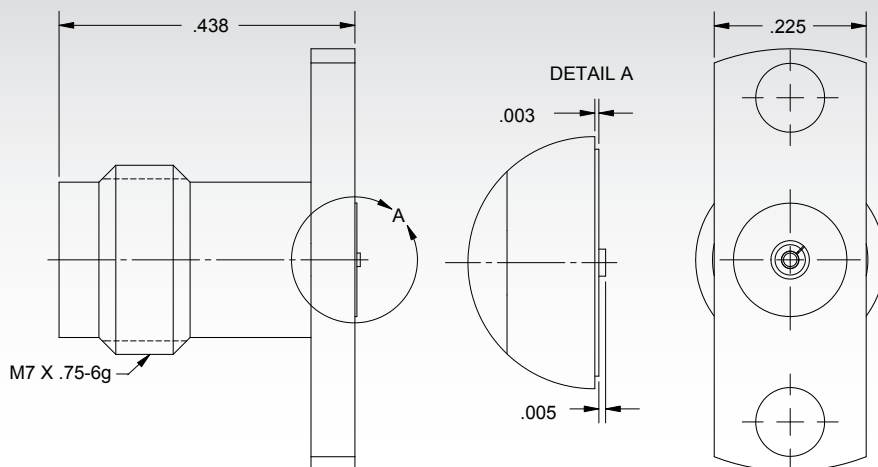
SF1133-6003

Female Flange Mount Connector, 2 Hole (Accepts Ø.009" Pin)



P/N
SF3321-60003

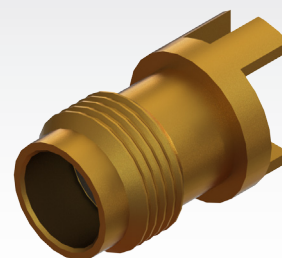
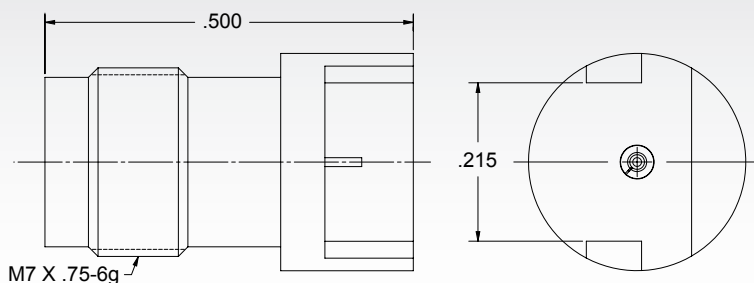
Female Flange Compression Mount Connector, 2 Hole



P/N
SF3321-60011

Contact SV directly to access our database of recommended PCB layouts

Female Edge Launch Connector (.062" PCB Thickness)



P/N
3321-60001

Contact SV directly to access our database of recommended PCB layouts

SMP SERIES

SMP Interface at a Glance

SV Microwave offers a complete line of SMP connectors that conform to DSCC 94007, 94008 and MIL-STD-348. The SMP connector was developed to meet an industry need for a smaller high frequency compact design that incorporated ease of use and functionality. The SMP bullet is the heart of this unique design.

Electrical Specifications

Impedance	50Ω
Frequency	40 GHz
VSWR	1.15:1 to 26.5 GHz typ.; 1.5:1 to 40 GHz typ.
Insertion Loss	.06 √ f
Shielding Effectiveness	≥ -80 dB DC - 3 GHz; ≥ -65 dB 3 - 26.5 GHz
Dielectric Withstanding Voltage	500 VRMS

Mechanical Specifications

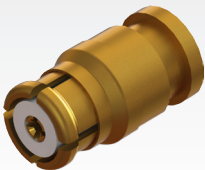
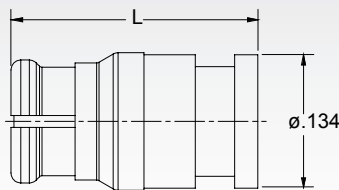
	SB	LD	FD
Mating Cycles	1000	500	100
Force to Engage/Disengage	3.0 / 0.5 lbs	5.0 / 7.0 lbs	7.0 / 9.0 lbs
Axial Misalignment			.010"
Radial Misalignment			± .010"

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +165°C
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

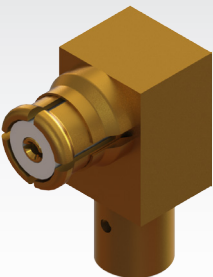
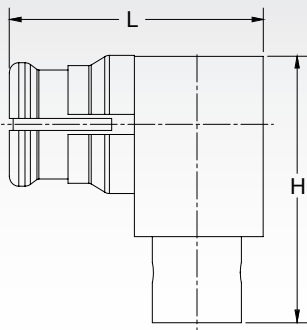
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Female Cable Connector



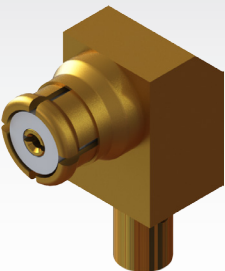
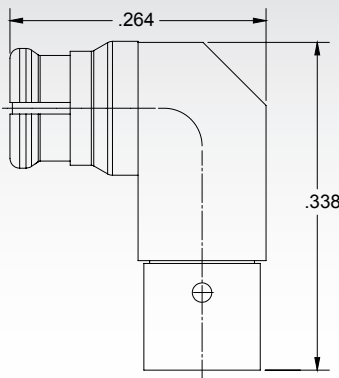
Cable	P/N	L
.047	1221-4010	.265"
.085	1221-4009	.265"
RG-174	1221-4005	.300"
RG-178	1221-4004	.250"

Female Cable Connector, R/A



Cable	P/N	L	H
.047	1213-4007	.265"	.220"
.047	1222-4012	.263"	.188"
.085	1222-4011	.265"	.188"
RG-174	1221-4006	.268"	.338"
RG-178	1222-4006	.268"	.266"

Female Cable Connector, Swept R/A

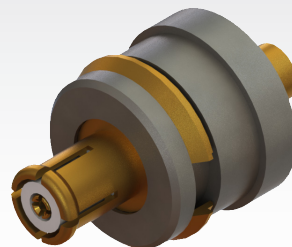
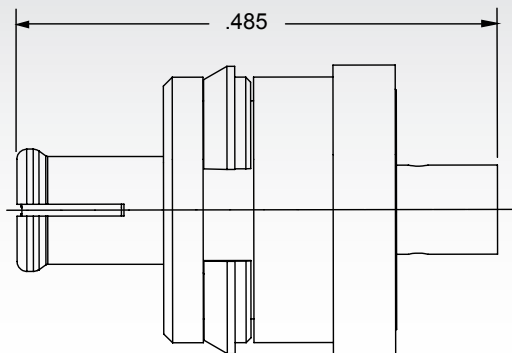


Cable	P/N
.047	1222-4004
.085	1222-4005

SMP SERIES

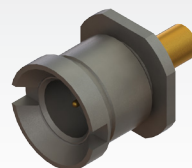
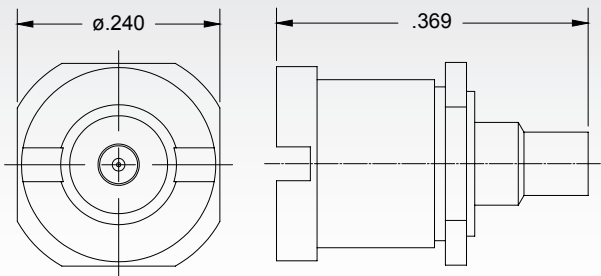
SMP SERIES

Female Snap-In Cable Connector



Cable	P/N
.047	1221-6001
.085	1204-6000

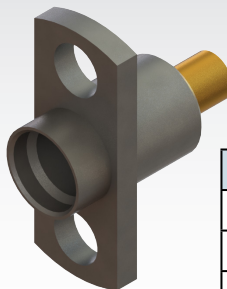
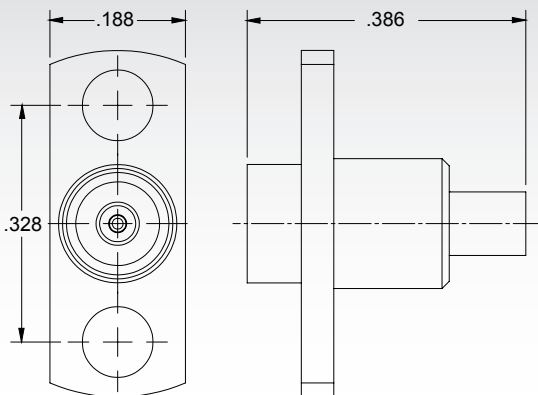
Male Bulkhead Cable Connector



Detent	Cable	P/N
LD	.047	SF1211-6059
LD	.085	SF1211-6062
FD	.047	SF1211-6058
FD	.085	SF1211-6061
CM	.047	SF1211-6060*
CM	.085	SF1211-6063*

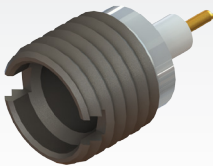
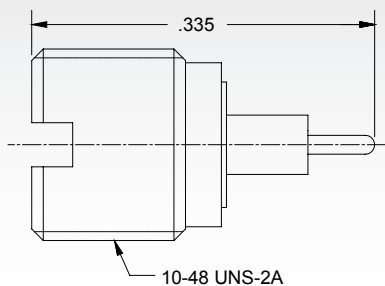
* Note: Dimensions on Catchers Mitt do not match image shown in catalog

Male Flange Mount Cable Connector, 2 Hole



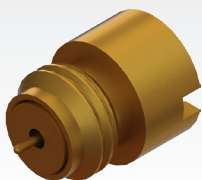
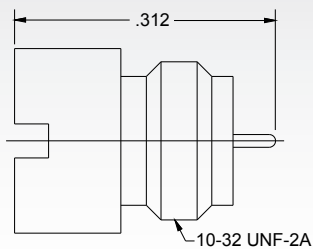
Detent	Cable	P/N
SB	.047	SF1211-6022
SB	.085	SF1211-6023
LD	.047	SF1211-6021
LD	.085	SF1211-6024
FD	.047	SF1233-6000
FD	.085	SF1211-6025

Male Thread-In Connector (.018")



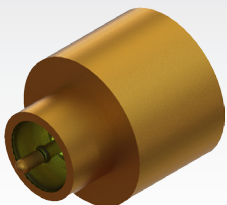
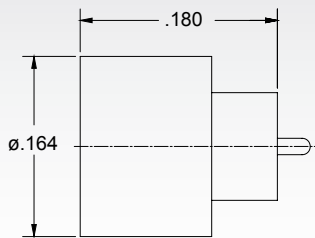
Detent	P/N
SB	SF1211-66114
LD	SF1211-66113
FD	SF1279-6001

Male Thread-In Hermetic Connector (.015")



Detent	P/N
SB	1211-40008
LD	1279-4002
FD	1279-4001

Male Solder-In Hermetic Connector (.015")

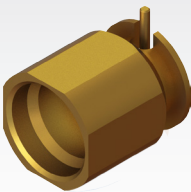
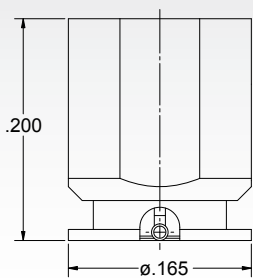


Detent	P/N
SB	1211-6043
LD	1211-60 2
FD	1211-6041

SMP SERIES

SMP SERIES

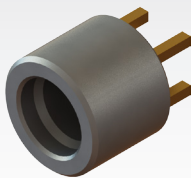
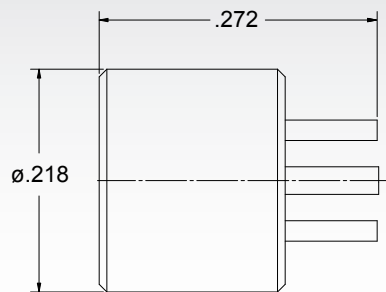
Male Surface Mount Connector, R/A



Detent	P/N
SB	1211-40001
LD	1211-40004
FD	1211-40003

Contact SV directly to access our database of recommended PCB layouts

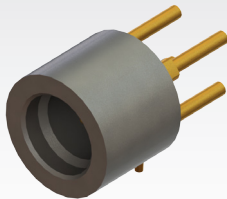
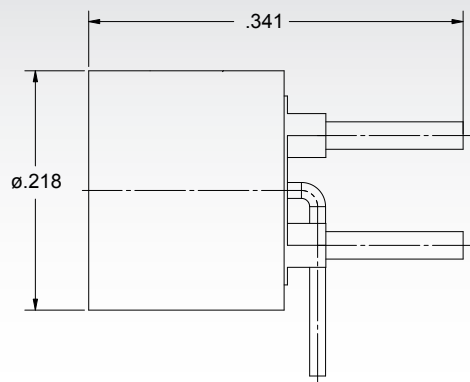
Male PCB Thru-Hole Connector



Detent	P/N
SB	SF1211-6045
LD	SF1211-6044
FD	SF1287-6001

Contact SV directly to access our database of recommended PCB layouts

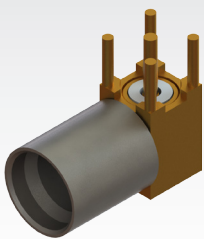
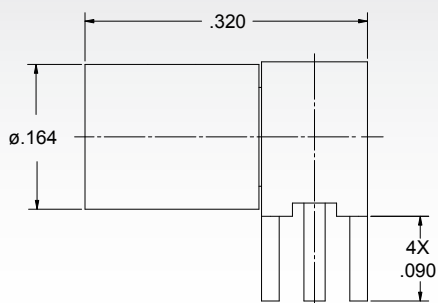
Male PCB Thru-Hole Connector, R/A



Detent	P/N
SB	SF1211-40002
LD	SF1211-40006
FD	SF1211-40007

Contact SV directly to access our database of recommended PCB layouts

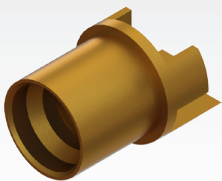
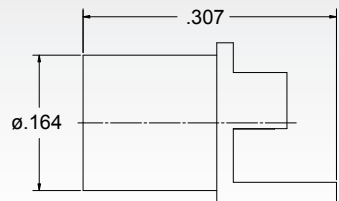
Male PCB Thru-Hole Connector, R/A



Detent	P/N
SB	SF1212-6002
LD	SF1212-6001
FD	SF1212-6000

Contact SV directly to access our database of recommended PCB layouts

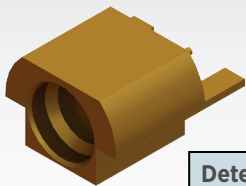
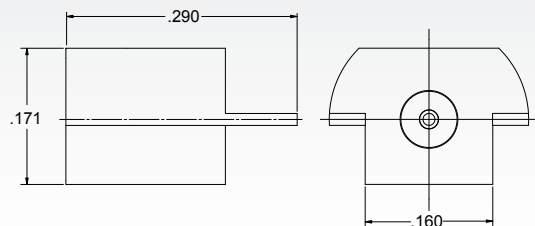
Male Edge Launch Connector (.062" PCB Thickness)



Detent	P/N
SB	1285-6004
LD	1285-6003
FD	1285-6002

Contact SV directly to access our database of recommended PCB layouts

Male Edge Launch Connector

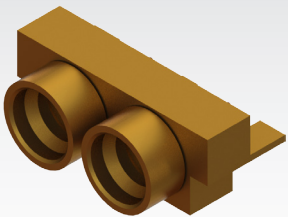
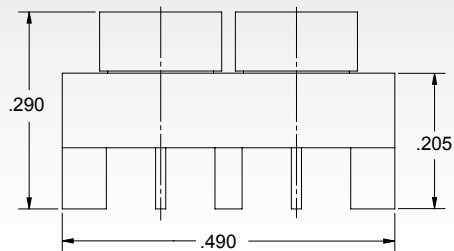


Detent	P/N
SB	1211-66139
LD	1211-66138
FD	1211-66137
CM	1211-66175*

* Note: Dimensions on Catchers Mitt do not match image shown in catalog

Contact SV directly to access our database of recommended PCB layouts

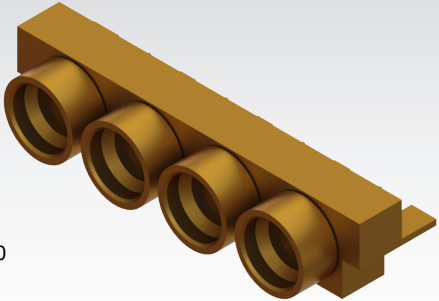
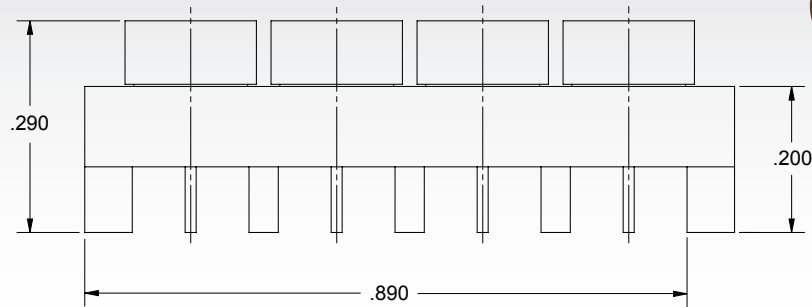
Male Edge Launch Connector, 2 Port



Detent	P/N
SB	9311-60033
LD	9311-60034
FD	9311-60035

Contact SV directly to access our database of recommended PCB layouts

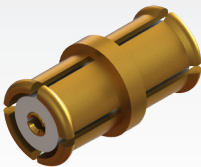
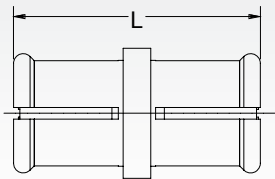
Male Edge Launch Connector, 4 Port



Detent	P/N
SB	9311-60036
LD	9311-60037
FD	9311-60038

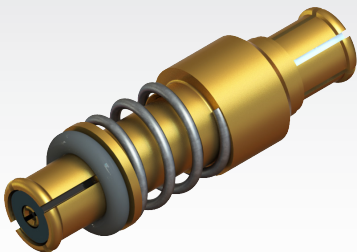
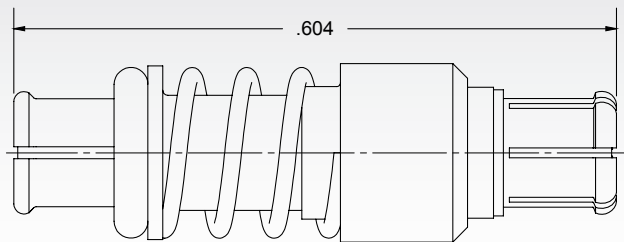
Contact SV directly to access our database of recommended PCB layouts

Female to Female Bullet



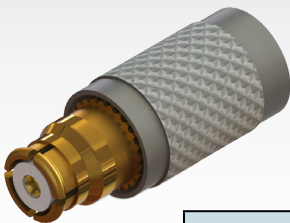
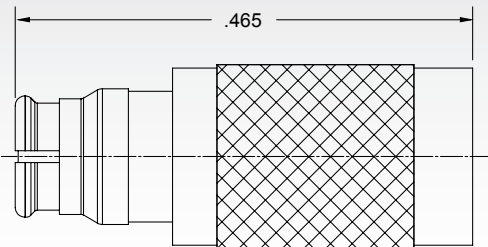
P/N	L
1290-4001	.254"
1290-4009	.395"
1290-4007	.769"

Female to Female Bullet, Spring Loaded



P/N
1112-4019

SMP Male to Female Adapter

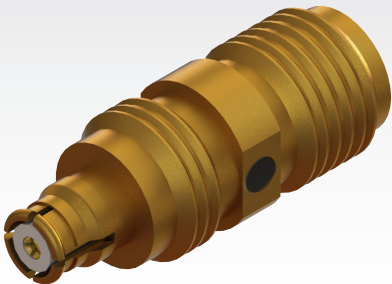
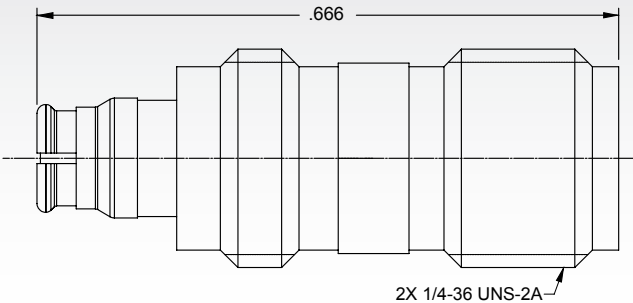


Detent	P/N
SB	1112-4012
LD	1112-4011
FD	1112-4009

SMP SERIES

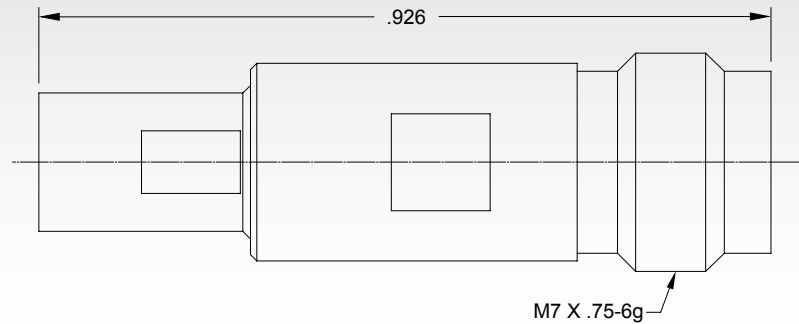
SMP SERIES

SMP Female to SMA Female Adapter



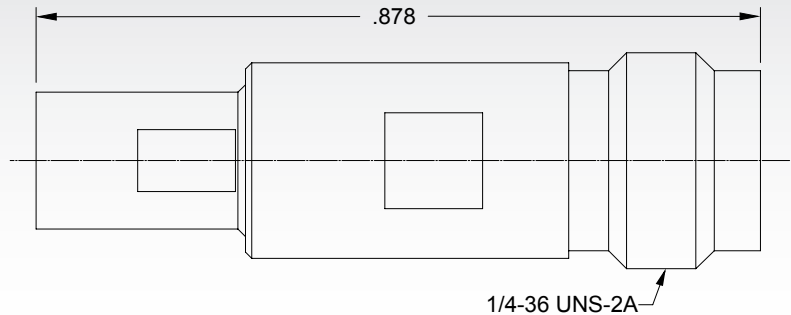
P/N
1112-4018

SMP Male to 2.4mm Female Adapter



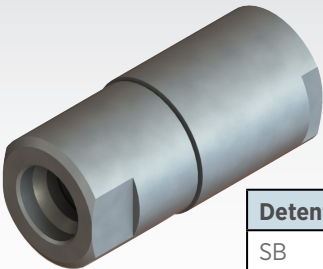
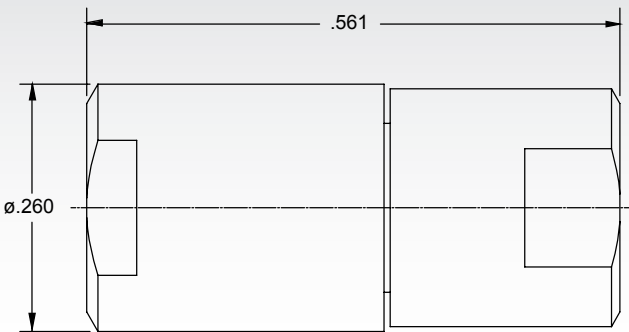
Detent	P/N
SB	SF1116-6016
LD	SF1116-6048
FD	1116-6014

SMP Male to 2.92mm Female Adapter



Detent	P/N
SB	SF1112-6031
LD	SF1112-6025
FD	SF1112-6122

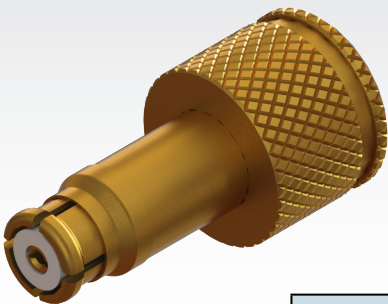
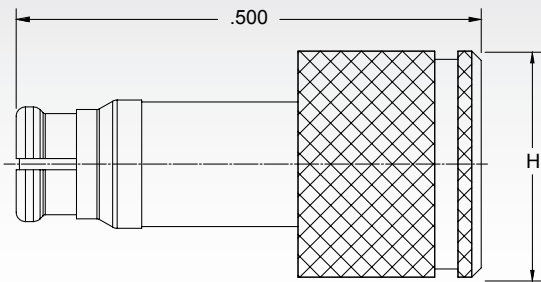
Male Termination



Detent	P/N
SB	SF8012-6102
LD	SF8012-6101
FD	SF8012-6009
CM	SF8012-6103*

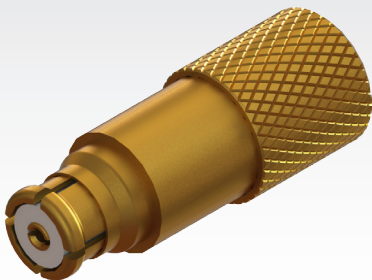
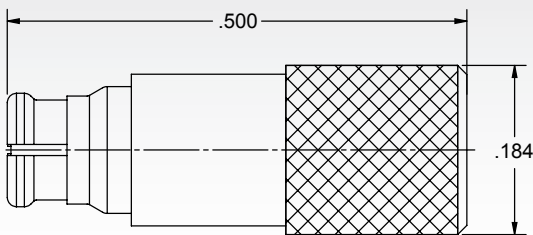
* Note: Dimensions on Catchers Mitt do not match image shown in catalog

Female Termination



P/N	H
8012-4013	.245"
8012-4006	.187"

Female Short

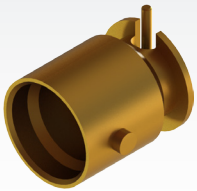
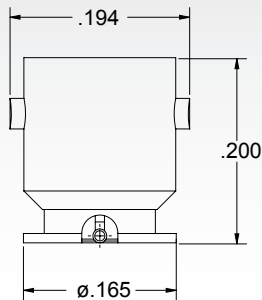


P/N
8012-4008

SMP SERIES

SMP SERIES

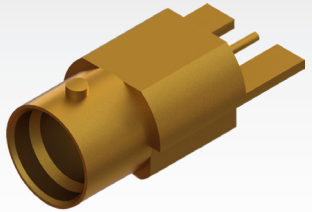
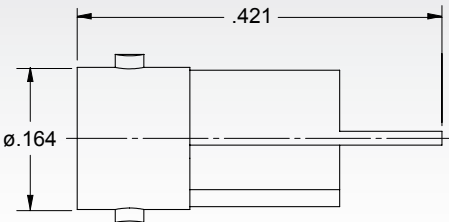
Male QB Surface Mount Connector



Contact SV directly to access our database of recommended PCB layouts

P/N
1211-40032

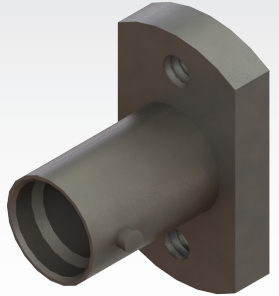
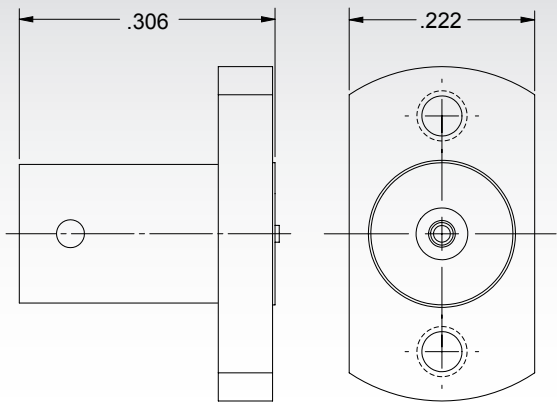
Male QB Edge Launch Connector



Contact SV directly to access our database of recommended PCB layouts

P/N
1211-66195

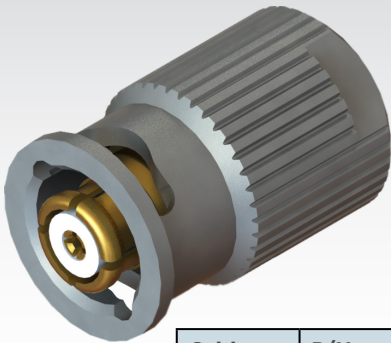
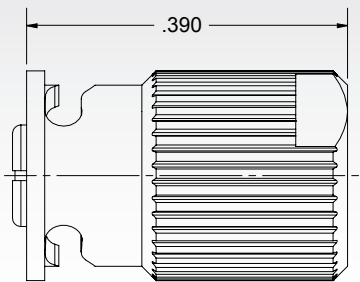
Male QB Flange Compression Mount Connector, 2 Hole



Contact SV directly to access our database of recommended PCB layouts

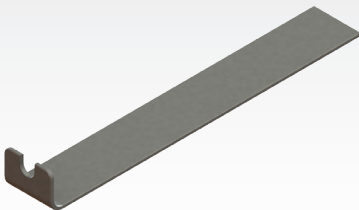
P/N
SF1211-66214

Female QB Cable Connector



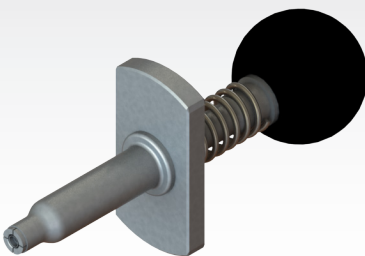
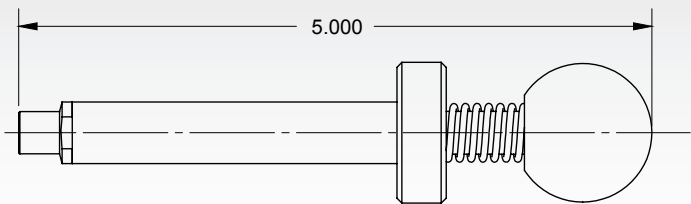
Cable	P/N
.047	1221-40051
.085	1221-40049
.141	1221-40050

Female Cable Removal Tool



P/N
500-12-019

Female Bullet Removal Tool



P/N
500-12-000

SMPPM Interface at a Glance

SV Microwave offers a complete line of SMPPM connectors. The SMPPM connector was developed to improve on the application density and operating frequency range of the SMP connector. The SMPPM connector is widely used in high density, high performance applications today.

Electrical Specifications

Impedance	50Ω
Frequency	65 GHz
VSWR	1.10:1 to 26.5 GHz typ.; 1.30:1 to 50 GHz typ.
Insertion Loss	.07 √ f
Shielding Effectiveness	≥ -80 dB typ.
Dielectric Withstanding Voltage	325 VRMS

Mechanical Specifications

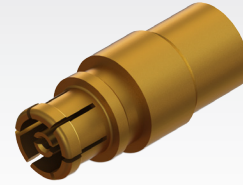
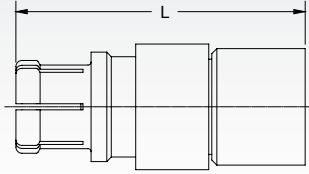
	SB	FD
Mating Cycles	500	100
Force to Engage/Disengage	2.5 / 1.5 lbs	4.5 / 6.5 lbs
Axial Misalignment		.010"
Radial Misalignment		± .010"

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +165°C
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

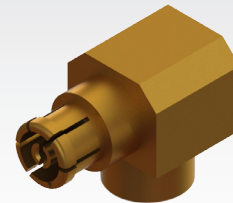
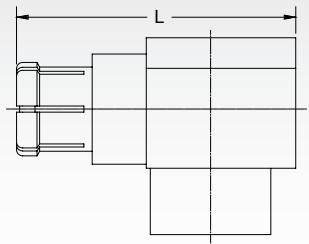
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Female Cable Connector



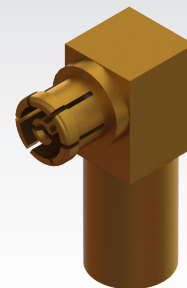
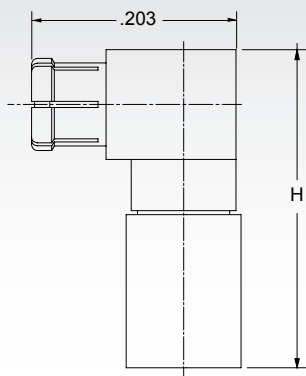
Cable	P/N	L
.047	3221-40007	.260"
.085	3221-40006	.285"

Female Cable Connector, R/A



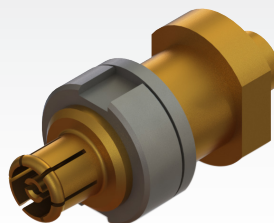
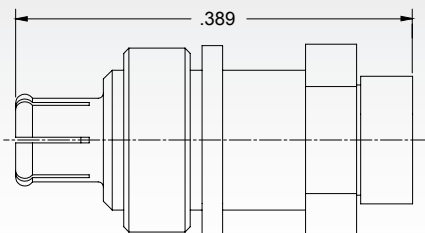
Cable	P/N	L
.047	3269-4001	.207"
.085	3222-40002	.274"

Female Cable Connector, Swept R/A



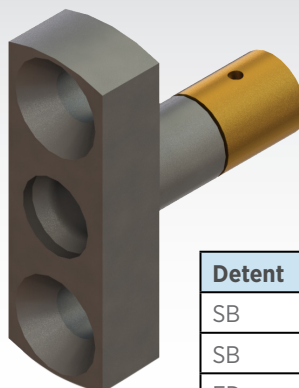
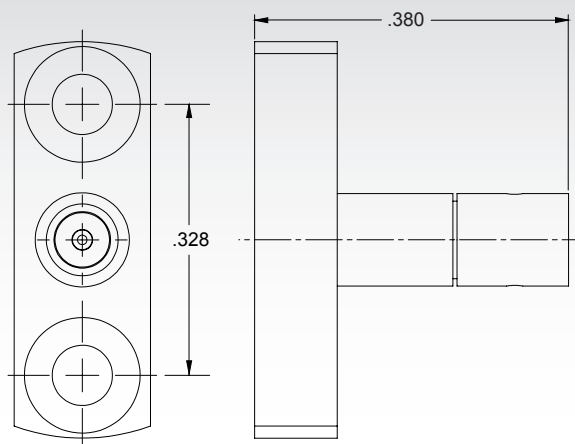
Cable	P/N	H
.047	3222-40006	.221"
.085	3222-40005	.316"

Female Bulkhead Cable Connector



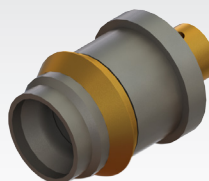
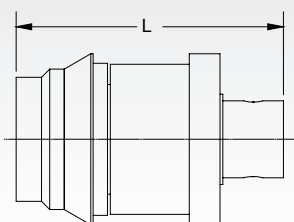
Cable	P/N
.047	3221-40011
.085	3221-4000

Male Flange Mount Cable Connector, 2 Hole



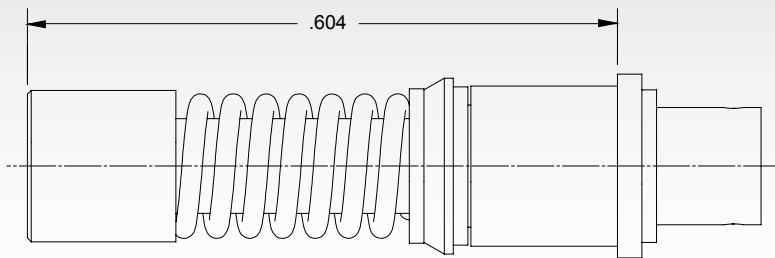
Detent	Cable	P/N
SB	.047	SF3211-60024
SB	.085	SF3211-6000
FD	.047	SF3211-60025
FD	.085	SF3211-60013

Male Snap-In Cable Connector



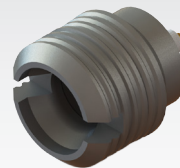
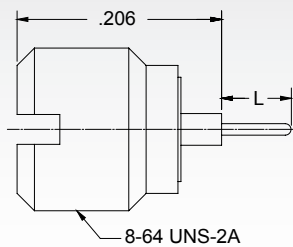
Detent	Cable	P/N	L
SB	.047	3211-40003	.278"
SB	.085	3211-40005	.302"
FD	.047	3202-6000	.278"
FD	.085	3211-40004	.302"

Male Snap-In Float Mount Cable Connector



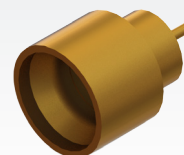
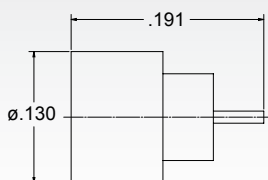
Cable	P/N
.047	SF3202-6001

Male Thread-In Connector (.012")



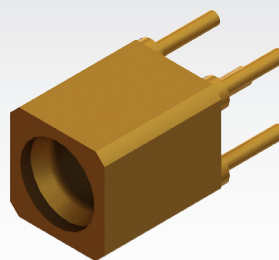
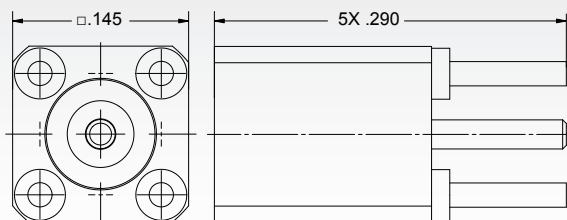
Detent	P/N	L
SB	SF3211-60011	.015"
SB	SF3211-60012	.065"
FD	SF3211-60009	.015"
FD	SF3211-60010	.065"

Male Solder-In Hermetic Connector (.012")



Detent	P/N
SB	3211-60028
FD	3211-60027

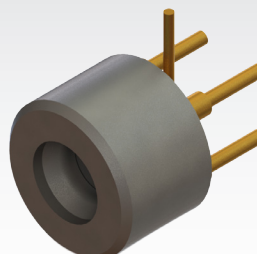
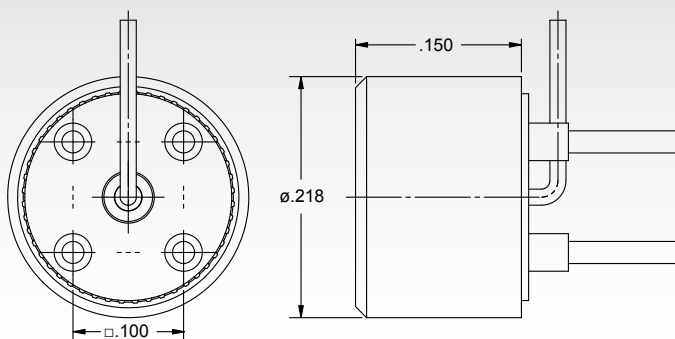
Male PCB Thru-Hole Connector



Detent	P/N
SB	3287-4101
FD	3287-4100

Contact SV directly to access our database of recommended PCB layouts

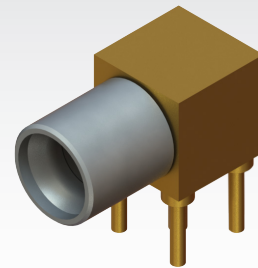
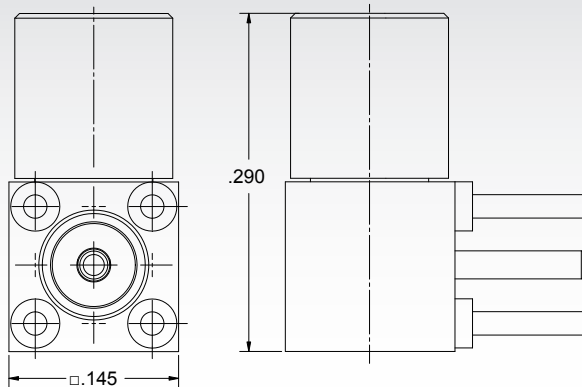
Male PCB Thru-Hole Connector, R/A



Detent	P/N
SB	SF3211-60034
FD	SF3211-60033

Contact SV directly to access our database of recommended PCB layouts

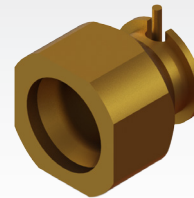
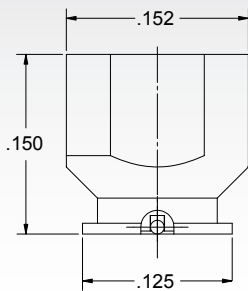
Male PCB Thru-Hole Connector, R/A



Detent	P/N
SB	3212-40003
FD	3212-40002

Contact SV directly to access our database of recommended PCB layouts

Male Surface Mount Connector, R/A

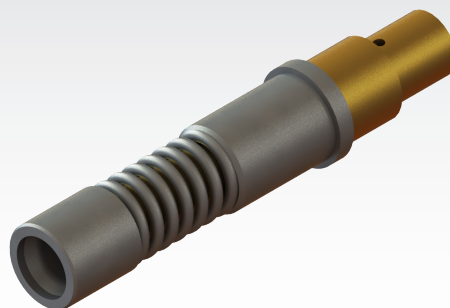
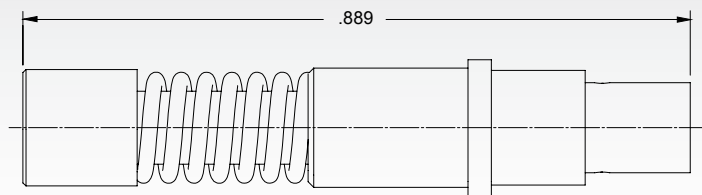


Detent	P/N
SB	3287-6101
FD	3287-6100

Contact SV directly to access our database of recommended PCB layouts

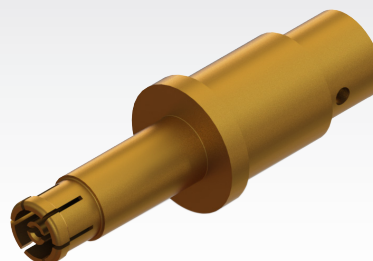
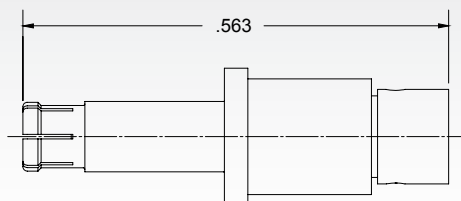
SMPM SERIES

Socket D38999 Cable Contact (Size 12)



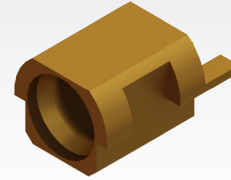
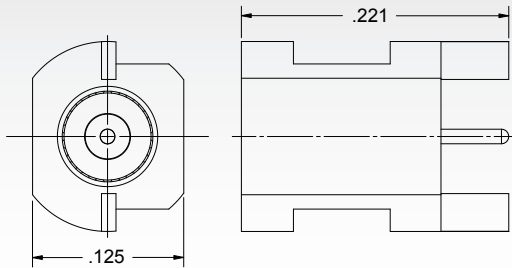
Cable	P/N
.085	SF3211-6004

Pin D38999 Cable Contact (Size 12)



Cable	P/N
.085	3221-4002

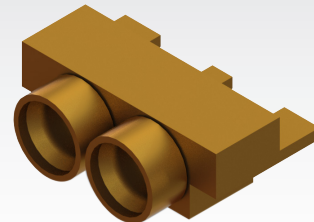
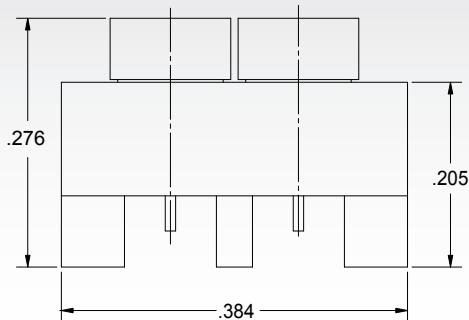
Male Edge Launch Connector



Detent	P/N
SB	3211-60035
FD	3285-6001

Contact SV directly to access our database of recommended PCB layouts

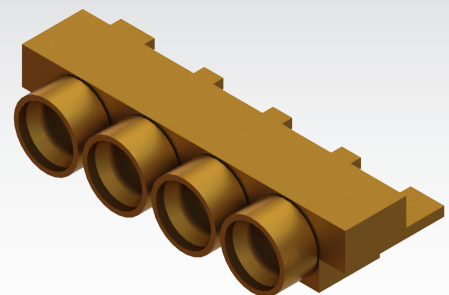
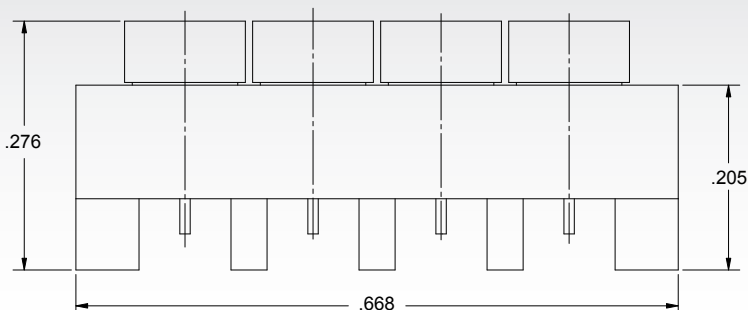
Male Edge Launch Connector, 2 Port



Detent	P/N
SB	3211-60086
FD	3211-60087

Contact SV directly to access our database of recommended PCB layouts

Male Edge Launch Connector, 4 Port

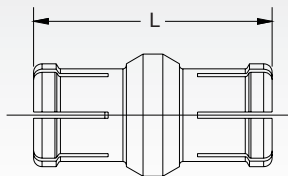


Detent	P/N
SB	9311-60015
FD	9311-60039

Contact SV directly to access our database of recommended PCB layouts

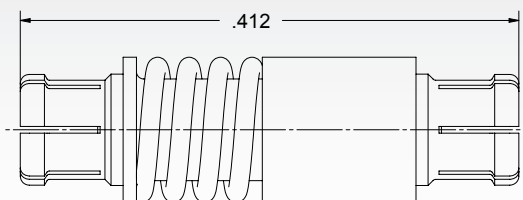
SMPM SERIES

Female to Female Bullet



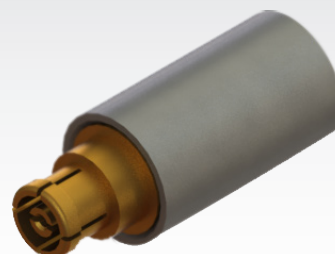
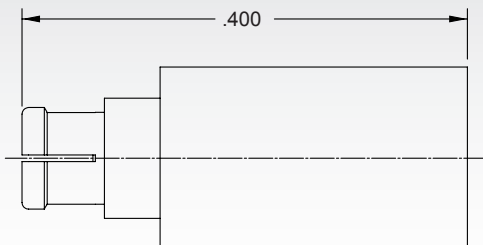
P/N	L
3290-4002	.211"
3290-4003	.327"

Female to Female Bullet, Spring Loaded



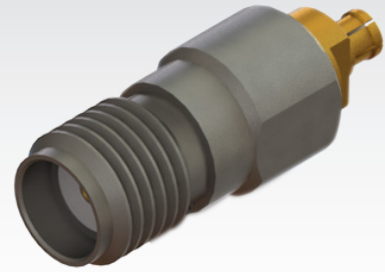
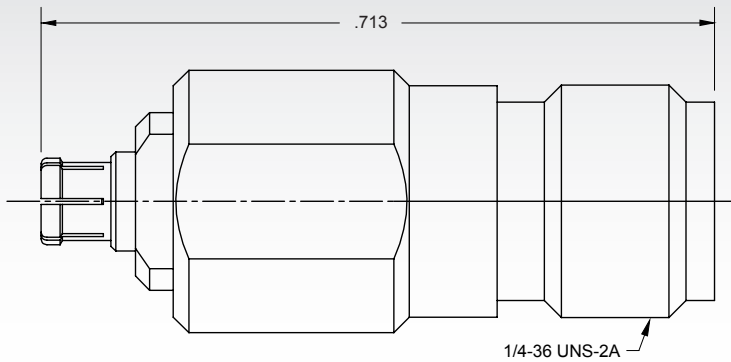
P/N
1132-4006

SMPM Male to Female Adapter



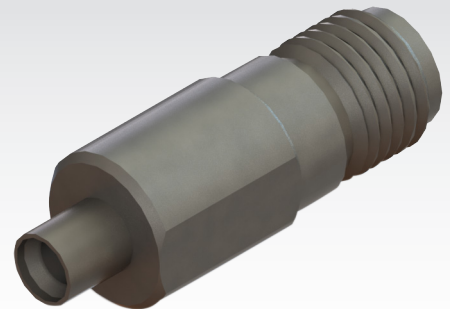
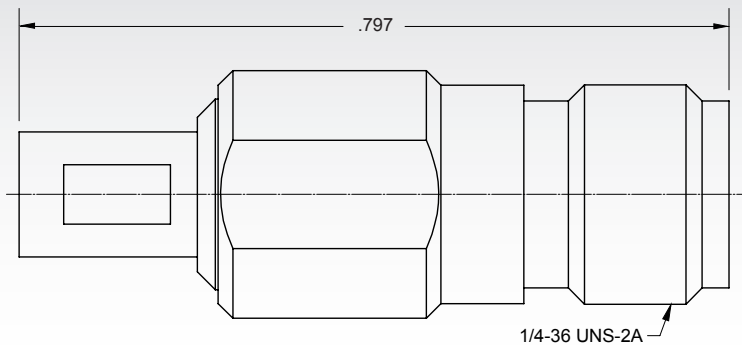
Detent	P/N
SB	1132-4005

SMPM Female to SMA Thread-In Adapter



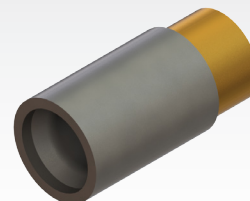
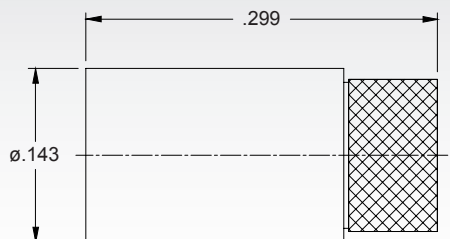
P/N	Desc.
1132-6025	SMA Female
1132-4003	SMA Male

SMPM Male to SMA Female Adapter



Detent	P/N
SB	SF1132-6026
FD	SF1132-6027

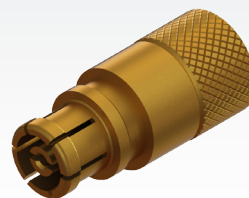
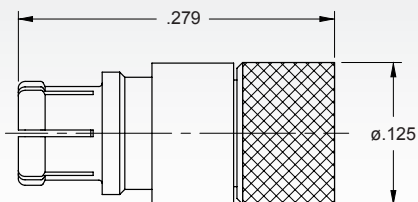
Male Termination



Detent	P/N
SB	8032-6002
FD	8032-6001

SMPM SERIES

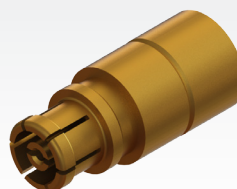
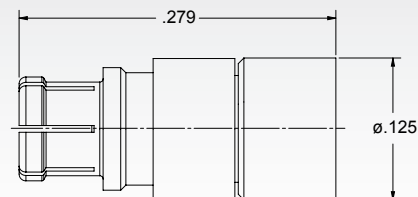
Female Termination



P/N

8032-4003

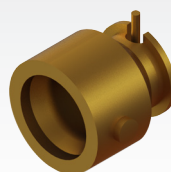
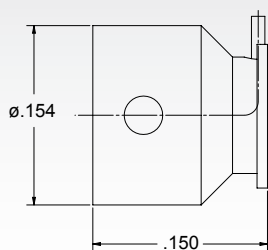
Female Short



P/N

8032-4007

Male QB Surface Mount Connector, R/A

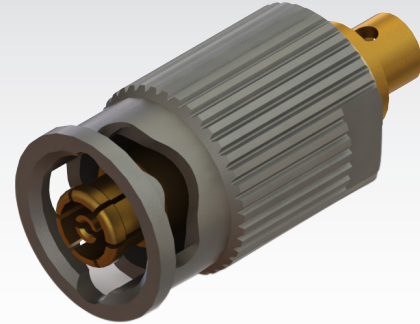
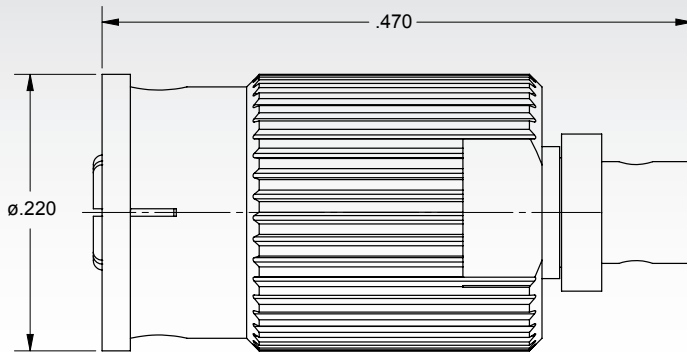


P/N

3211-60112

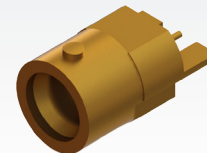
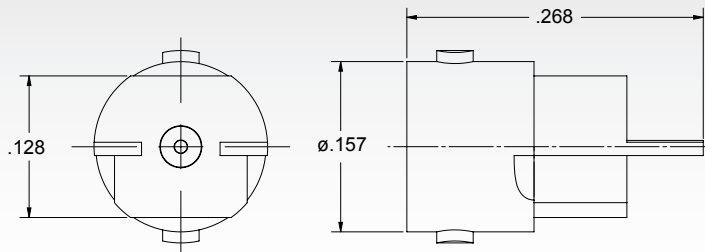
Contact SV directly to access our database of recommended PCB layouts

Female QB Cable Connector



Cable	P/N
.047	3221-60003
.085	3221-60004

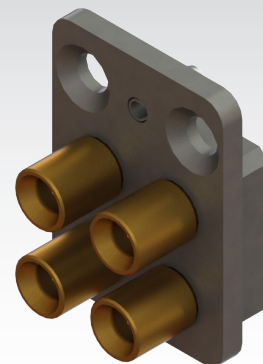
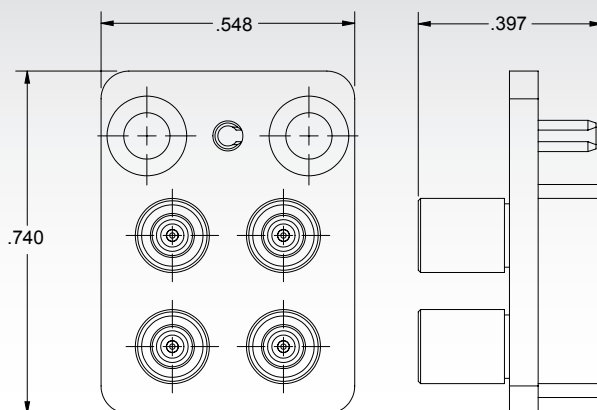
Male QB Edge Launch Connector



Contact SV directly to access our database of recommended PCB layouts

P/N
3211-60118

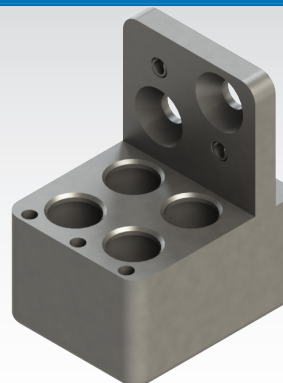
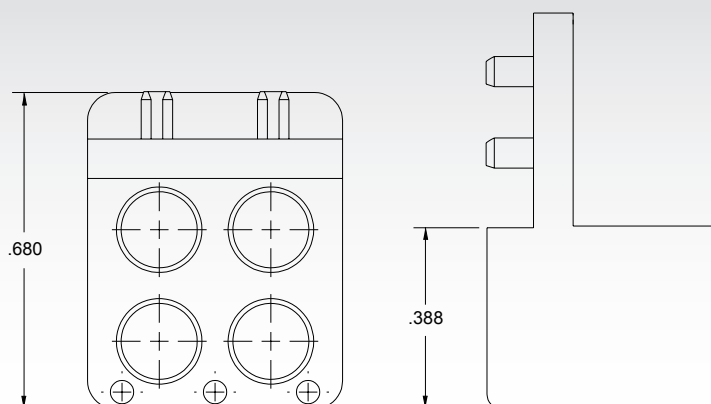
Motherboard VITA Connector



P/N	Desc.
SF1132-6037	4 Position, 67.1
SF1132-6036	8 Position, 67.2

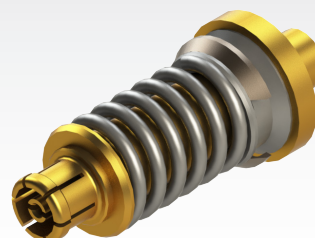
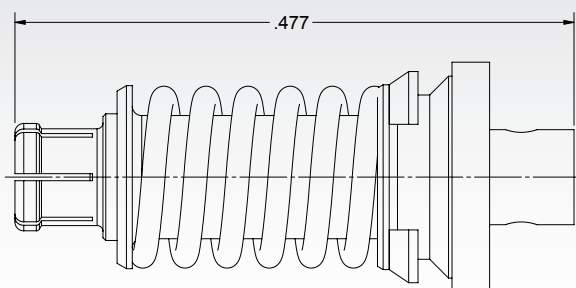
SMPM SERIES

Daughtercard VITA Connector



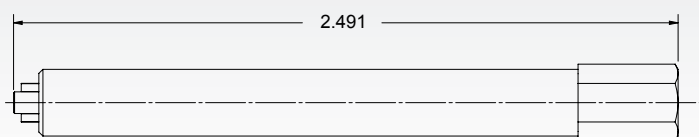
P/N	Desc.
SF9321-60015	4 Position, 67.1
SF9321-60013	8 Position, 67.2

Female VITA Snap-In Float Mount Cable Connector



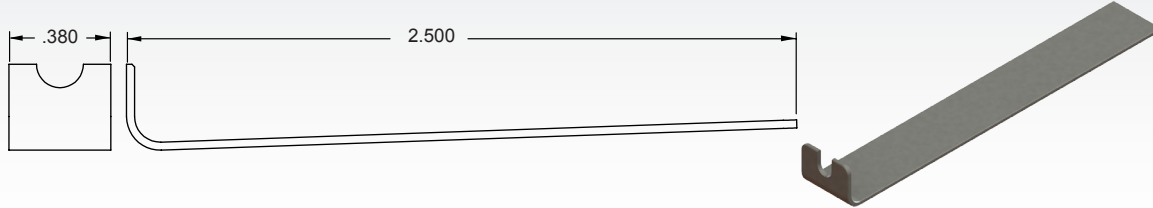
Cable	P/N
.047	3221-40019
.085	3221-40022

Male Shroud Driver



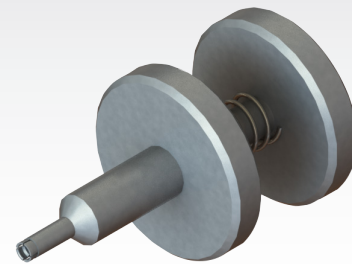
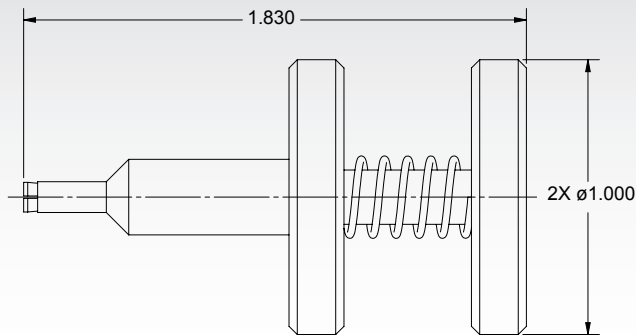
Detent	P/N
FD	500-32-008
CM	500-32-009

Female Cable Removal Tool



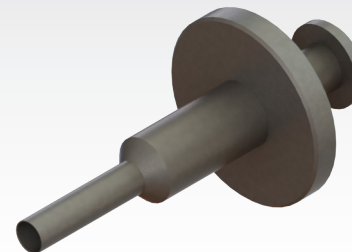
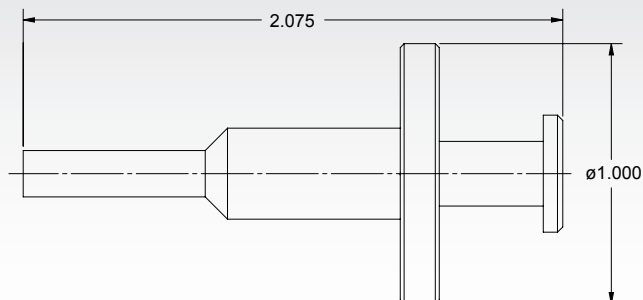
P/N
500-32-010

Female Bullet Removal Tool



P/N
500-32-007

Male Panel Removal Tool



P/N
500-32-004

SMPS SERIES

SMPS Interface at a Glance

SV Microwave offers a complete line of SMPS connectors. The SMPS connector utilizes the same great features of the SMP and SMPM connector series in an even smaller package. The SMPS series is ideal in applications where density is of the utmost importance.

Electrical Specifications

Impedance	50Ω
Frequency	100 GHz
VSWR	1.10:1 to 26.5 GHz typ.; 1.25:1 to 65 GHz typ.
Insertion Loss	.07 √ f
Shielding Effectiveness	≥ -80 dB typ.
Dielectric Withstanding Voltage	250 VRMS

Mechanical Specifications

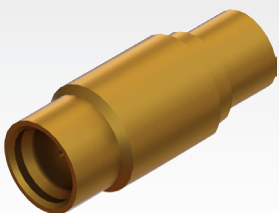
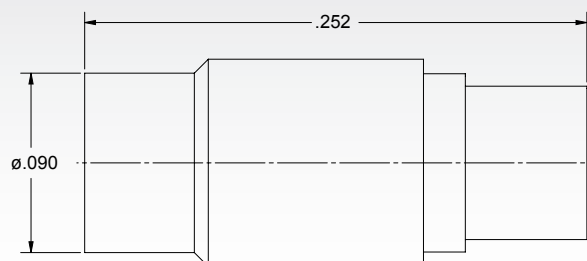
	SB	FD
Mating Cycles	500	100
Force to Engage/Disengage	1.2 / 1.0 lbs	2.5 / 4.5 lbs
Axial Misalignment		.010"
Radial Misalignment		± .010"

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D, 20 Gs
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Thermal Shock	MIL-STD-202, Method 107. Cond. B, -65°C to +165°C
Barometric Pressure (Altitude)	MIL-STD-202, Method 105, Condition C, 70k Ft.

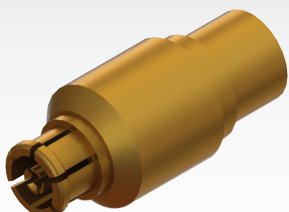
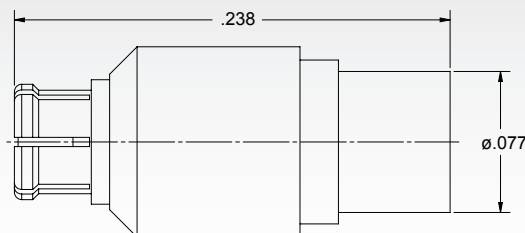
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Male Cable Connector



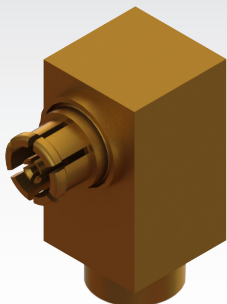
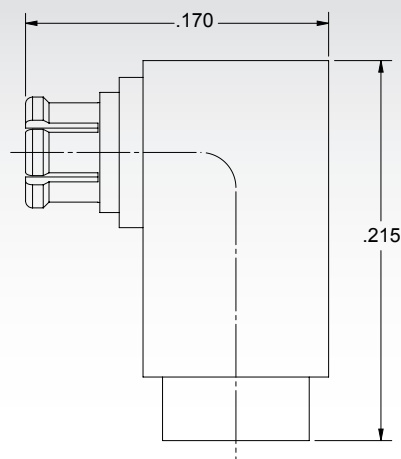
Detent	Cable	P/N
SB	.047	3811-40002
FD	.047	3811-40001

Female Cable Connector



Cable	P/N
.047	3821-40001

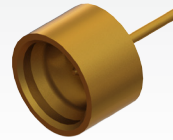
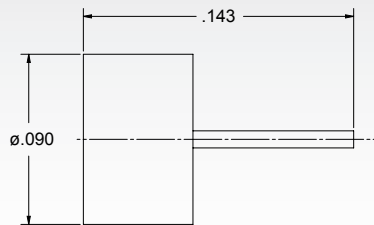
Female Cable Connector, Swept R/A



Cable	P/N
.047	3822-40001

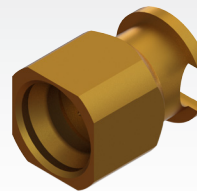
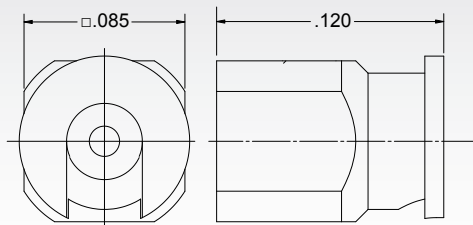
SMPS SERIES

Male Solder-In Connector (.009")



Detent	P/N
SB	3811-40005
FD	3811-40006

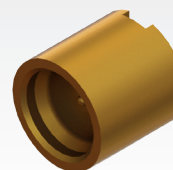
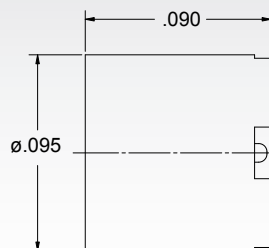
Male Surface Mount Connector



Detent	P/N
SB	3811-40023
FD	3811-40022

Contact SV directly to access our database of recommended PCB layouts

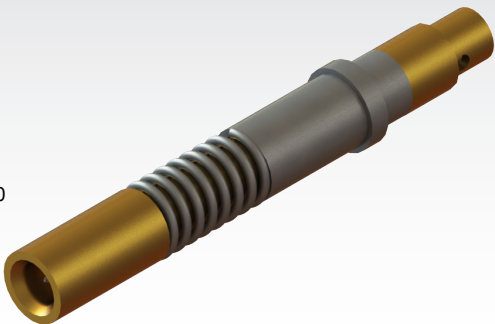
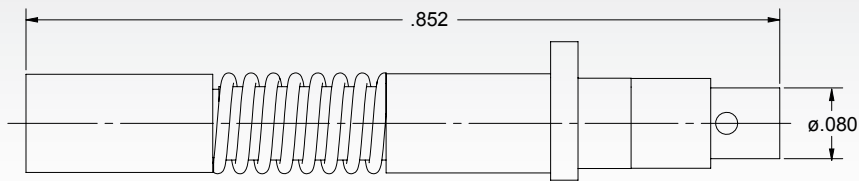
Male Surface Mount Hermetic Connector (.009")



Detent	P/N
SB	3811-60005
FD	3811-60006

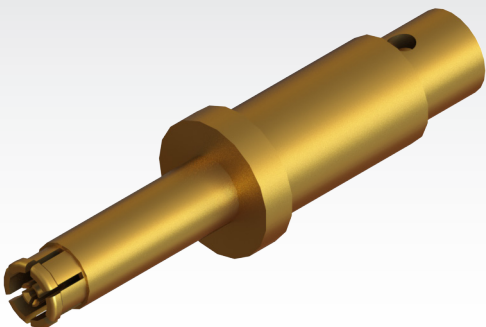
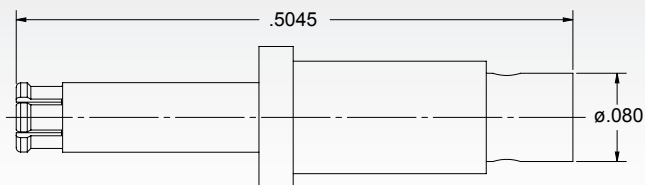
Contact SV directly to access our database of recommended PCB layouts

Socket D38999 Cable Contact (Size 16)



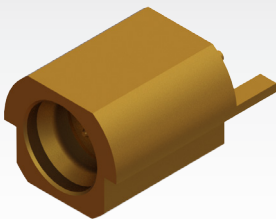
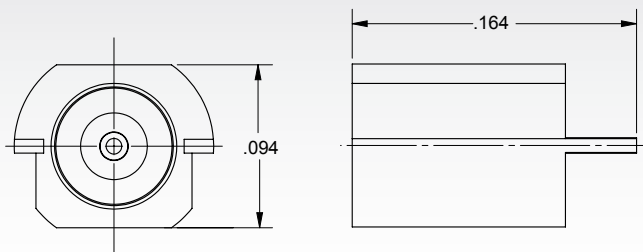
Cable	P/N
.047	SF9911-60001

Pin D38999 Cable Contact (Size 16)



Cable	P/N
.047	9921-40001

Male Edge Launch Connector

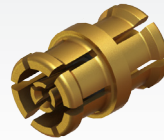
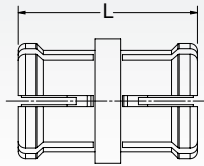


Detent	P/N
SB	3811-40004
FD	3811-40003

Contact SV directly to access our database of recommended PCB layouts

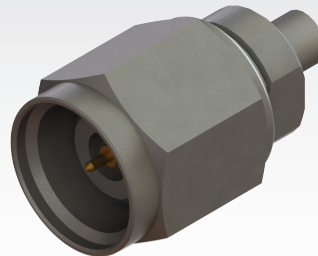
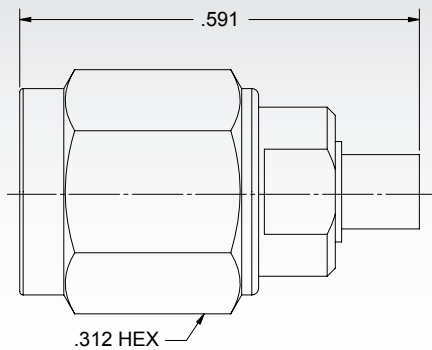
SMPS SERIES

Female to Female Bullet



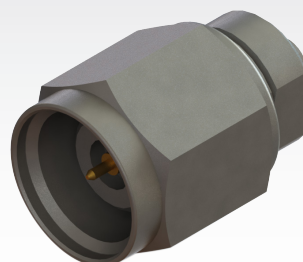
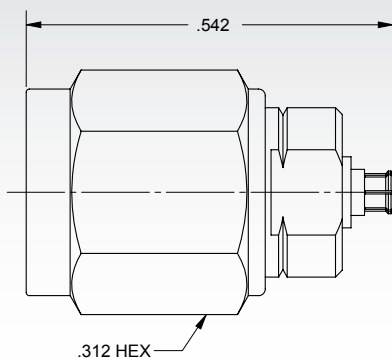
P/N	L
1138-4001	.098"
1138-4002	.118"
1138-4003	.134"
1138-4004	.188"

SMPS Male to 2.4mm Male Adapter



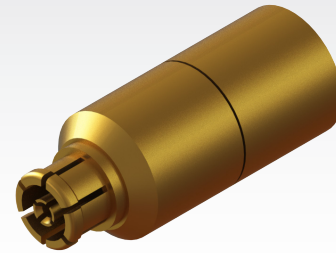
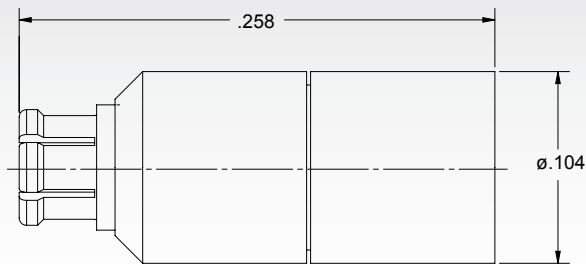
Detent	P/N
SB	SF1116-6023
FD	SF1116-6024

SMPS Female to 2.4mm Male Adapter



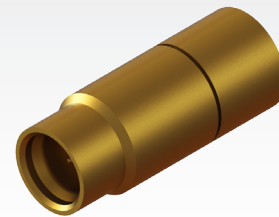
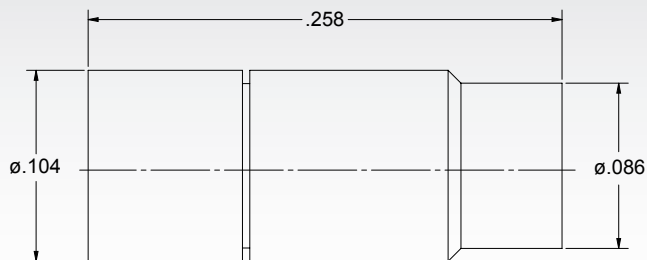
P/N
SF1116-6025

Female Termination



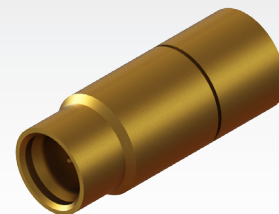
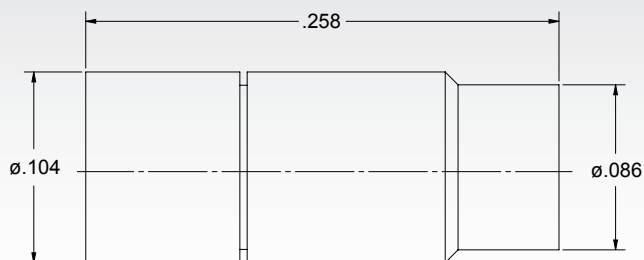
P/N
8038-4001

Male Termination



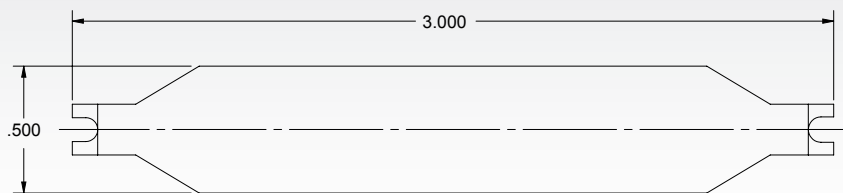
Detent	P/N
SB	8038-6003
FD	8038-6004

Male Short



Detent	P/N
SB	8038-6005
FD	8038-6006

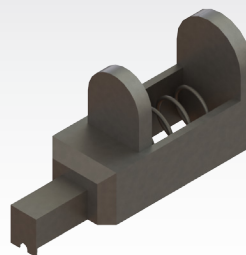
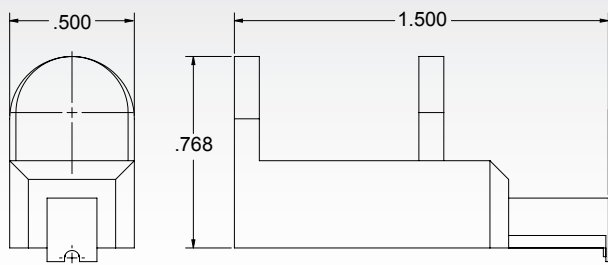
Female Cable Removal Tool



P/N

500-38-002

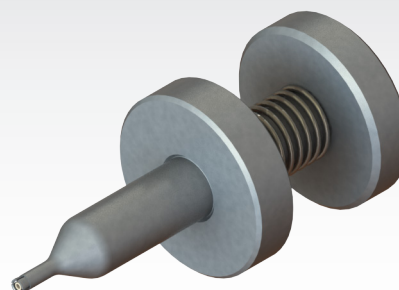
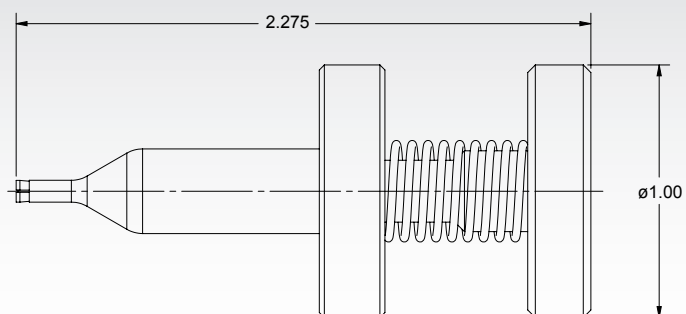
Female Removal Tool



P/N

500-38-003

Female Bullet Removal Tool



P/N

500-38-004

TNC / PTNC Interfaces at a Glance

Developed in the late 1950's, the TNC stands for Threaded Neill Concelman and is named after Amphenol engineer Carl Concelman. Designed as a threaded version of the BNC, the TNC series features screw threads for mating. TNC are miniature, threaded weatherproof units with a constant impedance of 50 Ohms and operate at DC to 11 GHz. As a ruggedized version of the BNC, the TNC features a threaded coupling that offers extra mating stability. TNC connectors are used in many applications including Mil-Aero, instrumentation, and cable assemblies.

Electrical Specifications

	TNC	PTNC
Frequency	11 GHz	18 GHz
VSWR	1.3:1 at 11 GHz	1.2:1 at 18 GHz
Impedance		50Ω
Insertion Loss		.06 √ f
Shielding Effectiveness		≥ -90 dB
Dielectric Withstanding Voltage		1500 VRMS

Mechanical Specifications

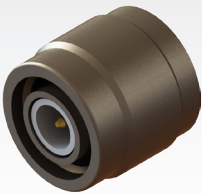
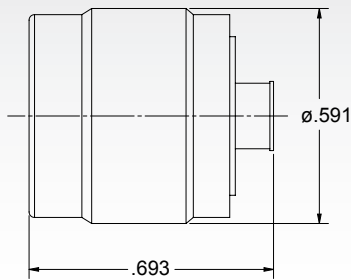
Mating Cycles	500
Mating Torque	12 - 15 in - lb

Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Thermal Shock	MIL-STD-202, Method 107
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B

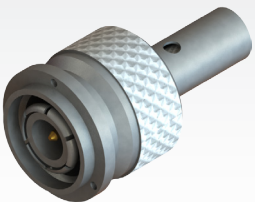
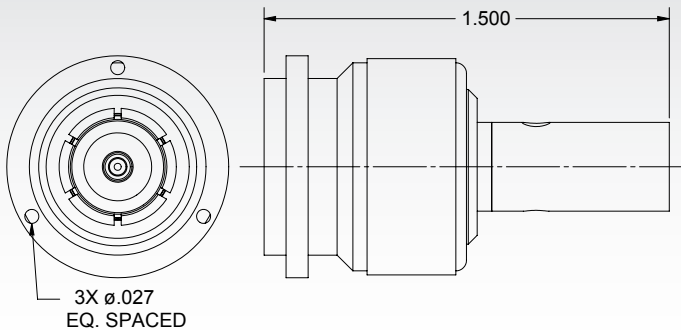
Note: Specifications, dimensions and images are typical for the series and may vary by part number

Male Cable Connector



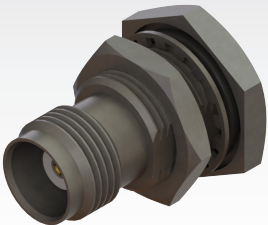
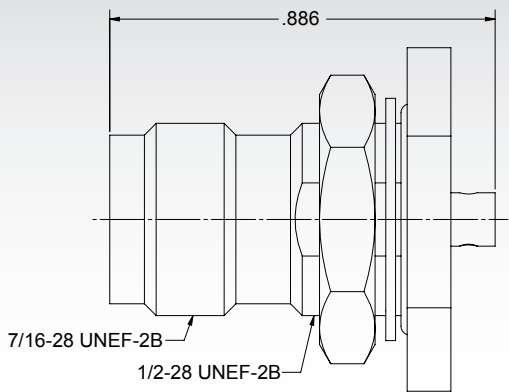
Cable	P/N
.085	4011-00043
.141	4011-00044

Male Cable Connector, Lockwire Holes



Cable	P/N
RG-58	M39012/26B0006
RG-303	M39012/26B0015

Female Bulkhead Cable Connector

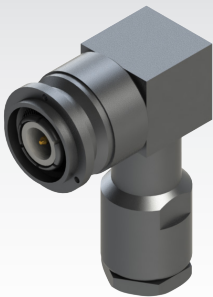
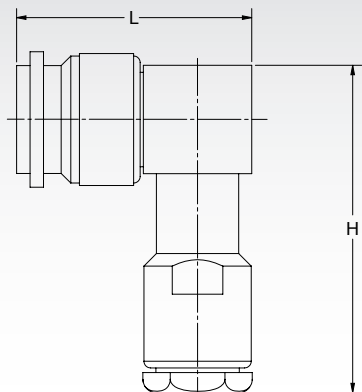


Cable	P/N
.085	4021-00064
.141	4021-00065

TNC SERIES

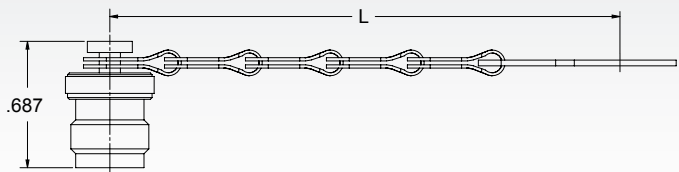
TNC SERIES

Male Cable Connector, R/A



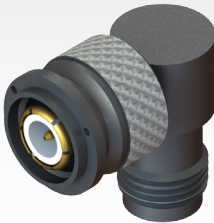
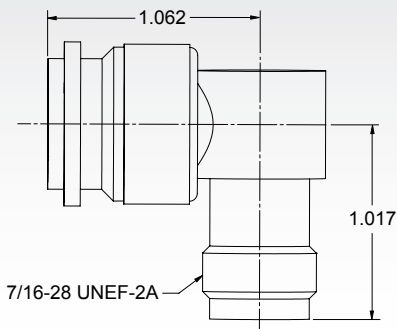
Cable	P/N	L	H
RG-58	M39012/30-0101	1.110"	1.600"
RG-58	M39012/30B0005	1.218"	2.000"

Female Dust Cap



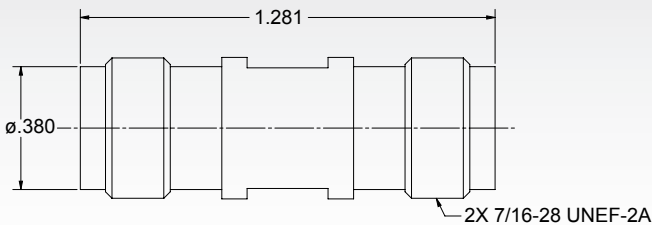
P/N	L	Desc.
M39012/25-0019	3.250"	Safety chain
M39012/25-0118	4.000"	Wire rope

TNC Male to Female Adapter, R/A



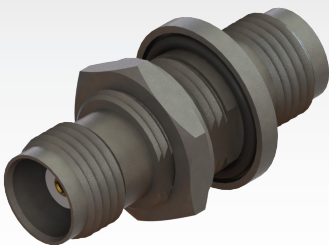
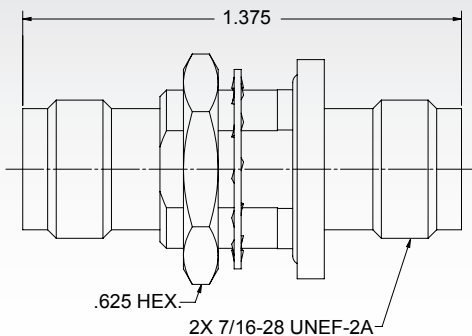
P/N
M55339/32-00001

TNC Female to Female Adapter



P/N
M55339/33-00001

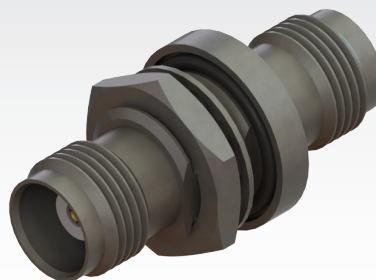
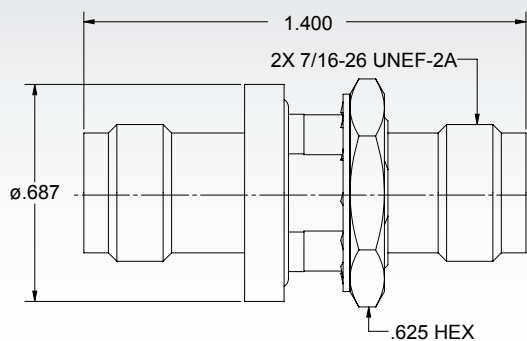
TNC Female to Female Bulkhead Hermetic Adapter



P/N
M55339/34-30001

TNC SERIES

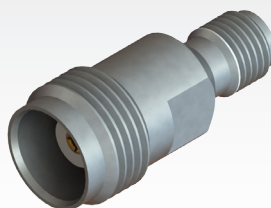
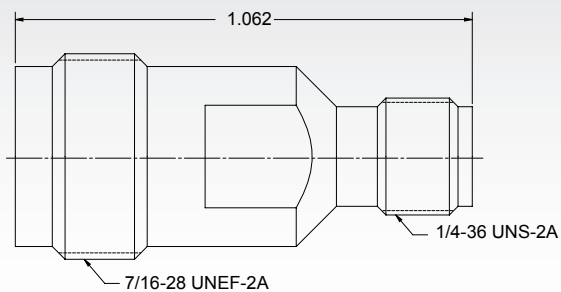
TNC Female to Female Bulkhead Adapter



P/N

SF4532-6009

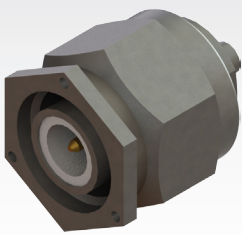
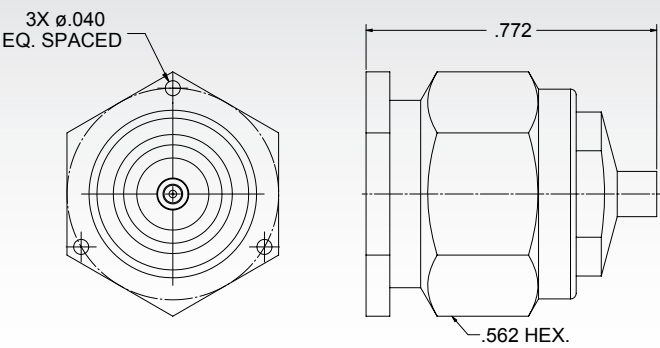
TNC Female to SMA Female Adapter



P/N

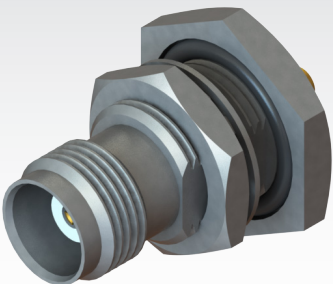
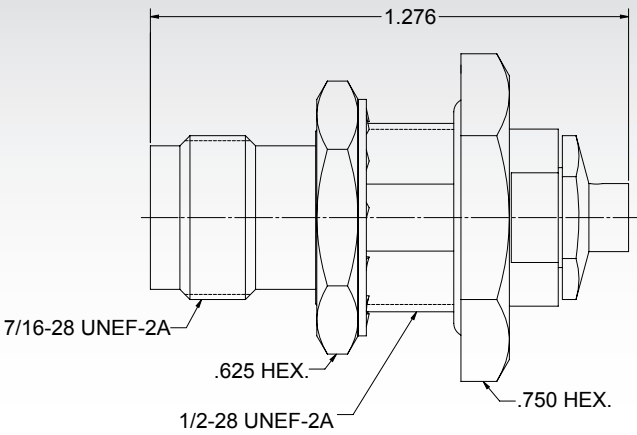
M55339/41-30001

Male Cable Connector, Lockwire Holes



Cable	P/N
.085	SF4501-6023
.141	SF4501-6039

Female Bulkhead Cable Connector



Cable	P/N
.085	SF4546-6011
.141	SF4546-6010

TYPE N / PN SERIES

Type N / PN Interfaces at a Glance

Named after Paul Neill of Bell Labs after being developed in the 1940's, the Type N offered the first true microwave performance. The Type N connector was developed to satisfy the need for a durable, weatherproof, medium-size RF connector with consistent performance through 11 GHz.

Electrical Specifications

	Type N	PN
Frequency	12.4 GHz	18.0 GHz
Impedance		50Ω
VSWR		1.3:1
Insertion Loss		.07 √ f
Shielding Effectiveness		≥ -90 dB
Dielectric Withstanding Voltage		3000 VRMS

Mechanical Specifications

Mating Cycles	500
Mating Torque	12 - 15 in - lbs

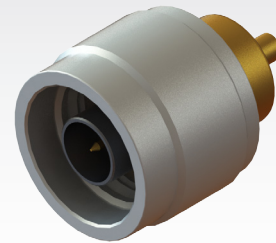
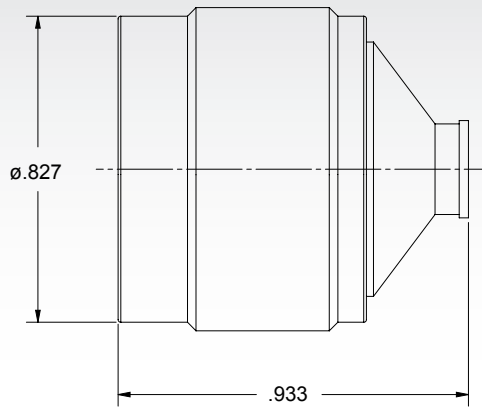
Environmental Specifications

Temperature Rating	-65°C to +165°C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Thermal Shock	MIL-STD-202, Method 107
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B

Note: Specifications, dimensions and images are typical for the series and may vary by part number

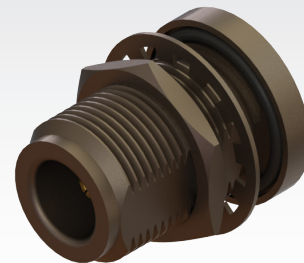
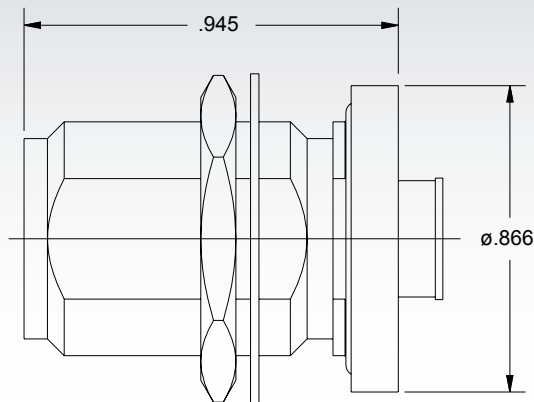
TYPE N SERIES

Male Cable Connector



Cable	P/N
.085	5011-00034
.141	5011-00035

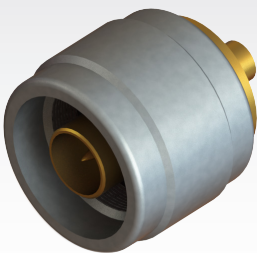
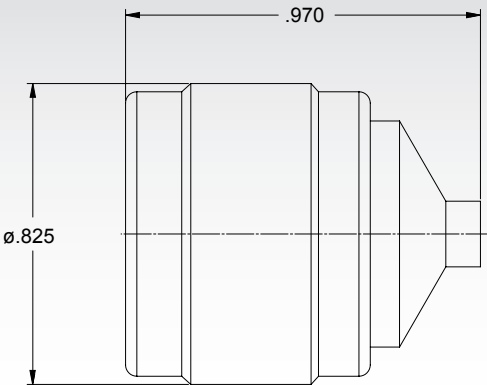
Female Bulkhead Cable Connector



Cable	P/N
.085	5021-00026
.141	5021-00027

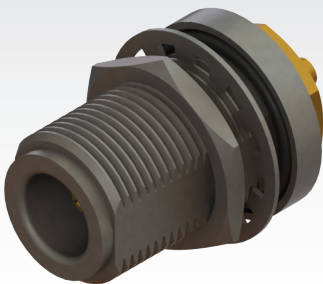
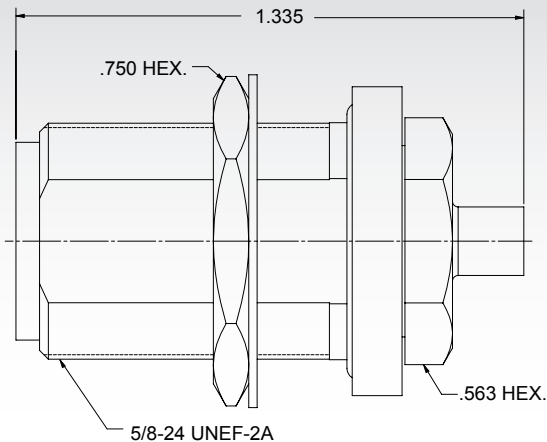
TYPE N SERIES

Male Cable Connector



Cable	P/N
.085	SF6511-60010
.141	SF6505-6003

Female Bulkhead Cable Connector



Cable	P/N
.085	SF6545-6017
.141	SF6545-6003

SMP/SMPM/SMPS Applications

SMP/SMPM/SMPS series connectors are commonly used in a shroud-bullet-shroud configuration. This configuration is ideal for applications where mating cycles are high.

Typically one of the male shrouds will be smooth bore (or limited detent) and the other one will be full detent. This ensures that the bullet will remain mated to the full detent side when the system is disengaged.

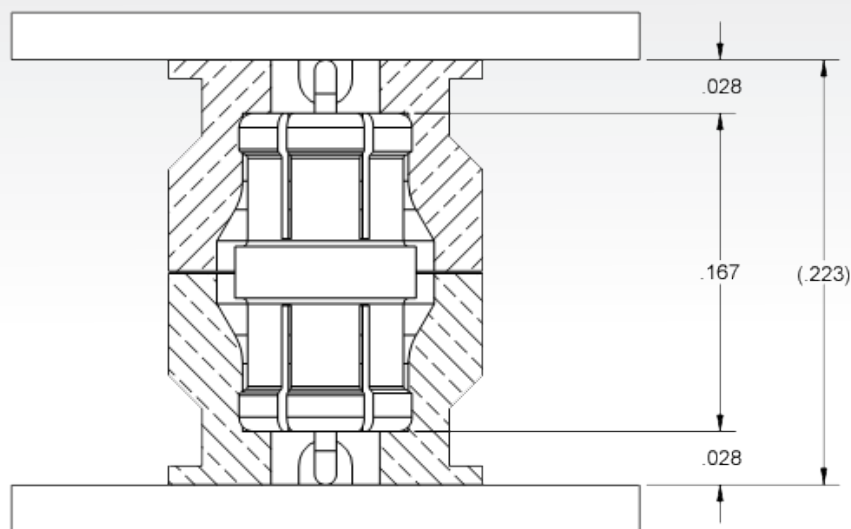


Figure 1: SMPM Shroud-Bullet-Shroud System

SMP/SMPM/SMPS Applications

Another common technique is to make the male smooth bore shroud a 'Catchers Mitt'. The 'Catchers Mitt' interface style has an extra chamfer on the opening to help align the bullet during mating.

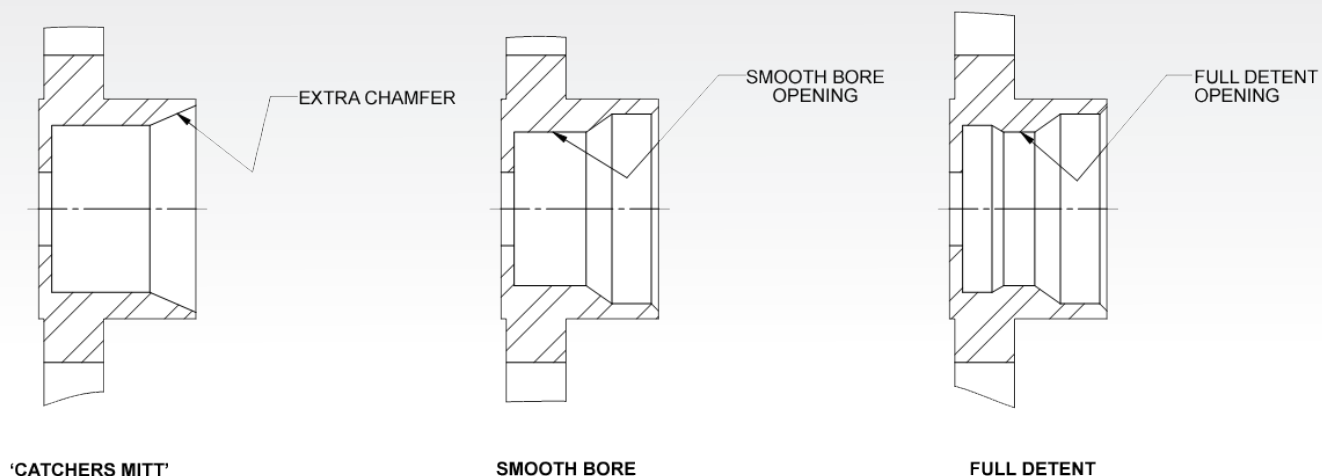


Figure 2: 'Catchers Mitt', Smooth Bore and Full Detent Interfaces

SMP/MPM/SMPS Applications

SMP/MPM/SMPS connectors are designed to perform well, even under misaligned conditions. The image to below shows how SV Microwave defines radial and axial misalignment.

Radial and axial definitions are per mating interface. It is generally assumed that if a Full Detent interface is used on one side, the bullet will be contacting the reference plane of the shroud at some point under any condition.

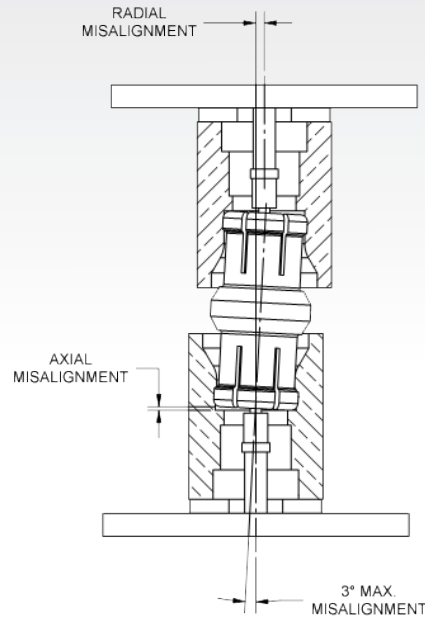


Figure 3: Radial and Axial Misalignment Definitions

SMP/MPM/SMPS Applications

SV Microwave also offers spring loaded female cable connectors and adapters. The spring force ensures that the reference planes will remain fully mated under axial misalignment. Spring loaded interfaces are ideal under conditions where vibration is expected or tolerance stack-up requires additional axial misalignment. SV Microwave can customize the spring length to provide the exact amount of axial tolerance needed for any application.

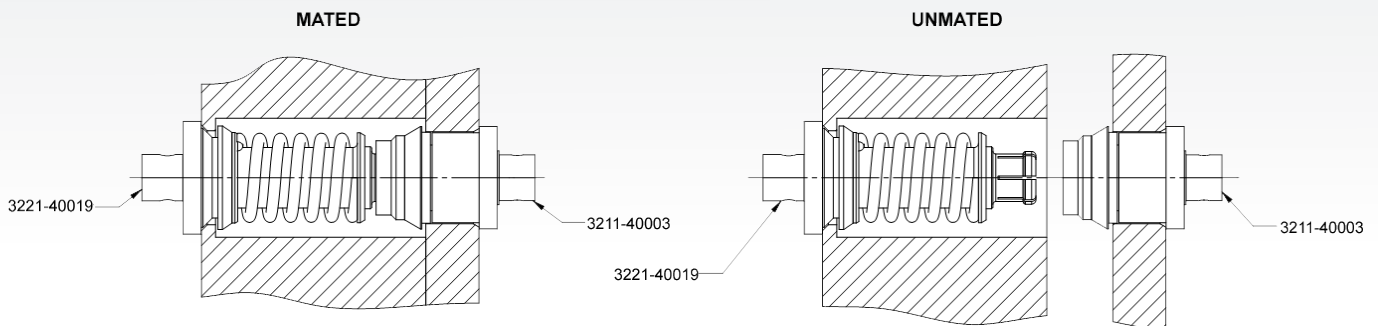
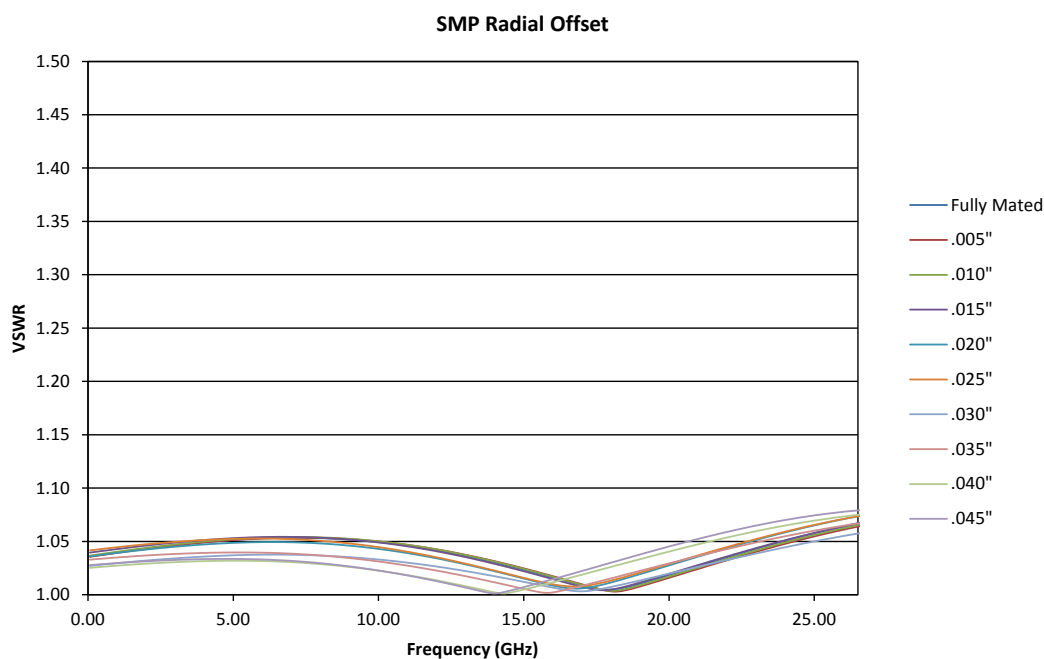
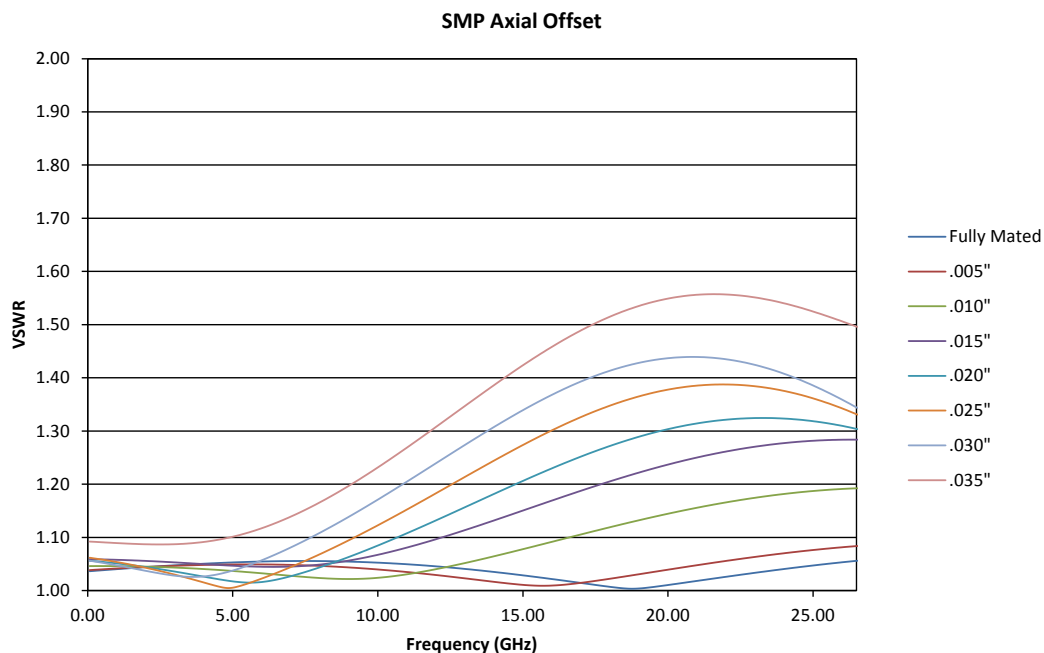


Figure 4: Snap-in Spring Loaded Female Cable Connector and Snap-in Male Cable Connector

APPENDIX - SMP

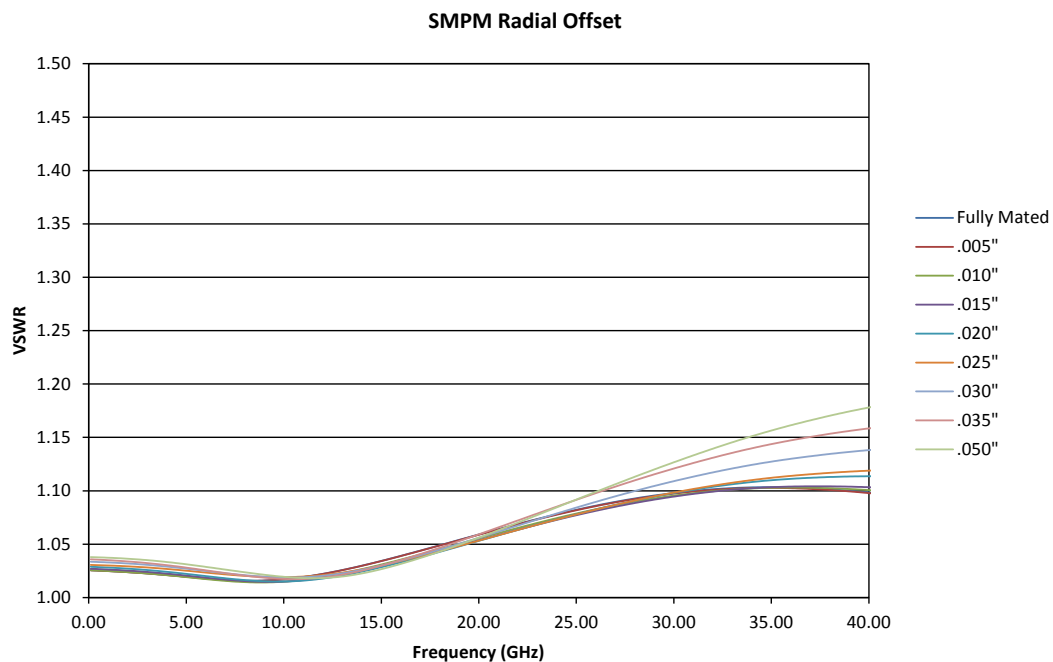
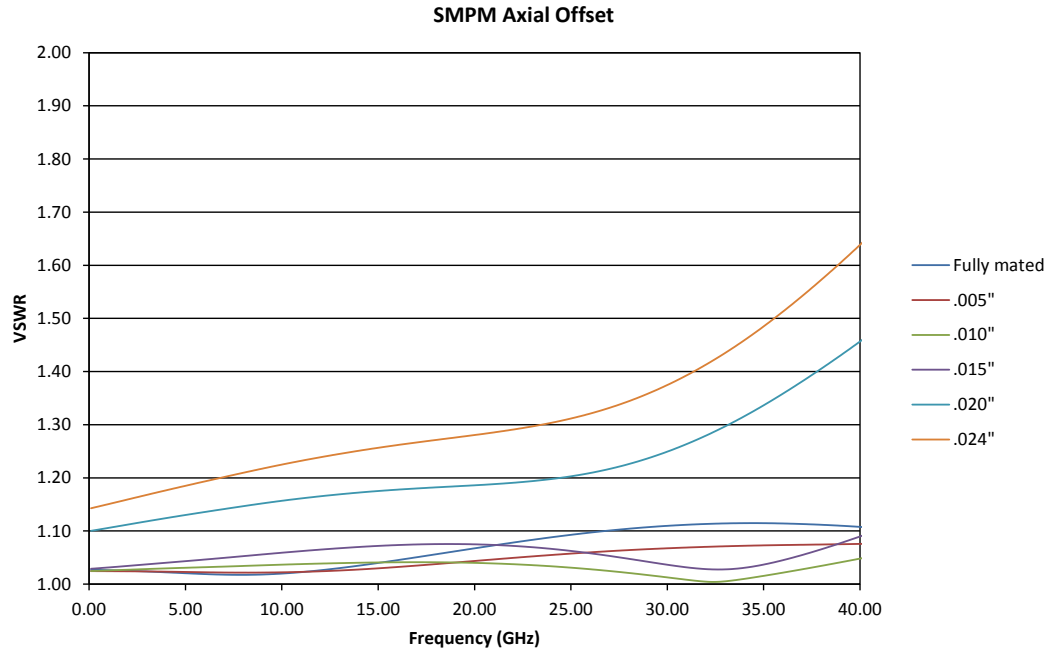
SMP Misalignment Performance Measurements

Measurements taken with a .254" long bullet. 2.92mm to SMP male adapters were full detent on one side and smooth bore on the other side.



SMPM Misalignment Performance Measurements

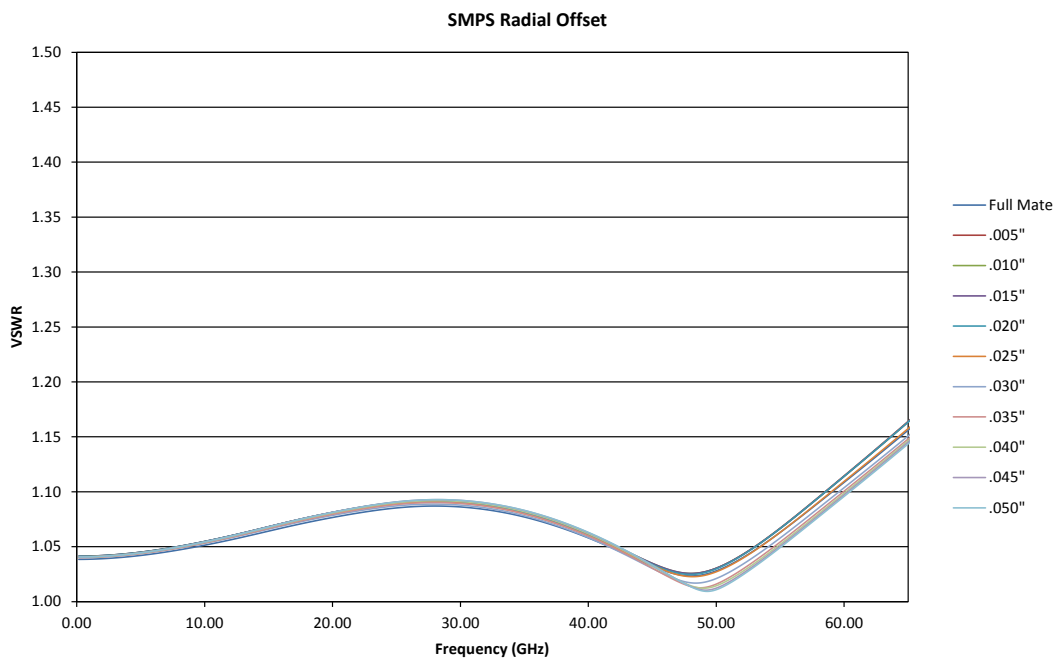
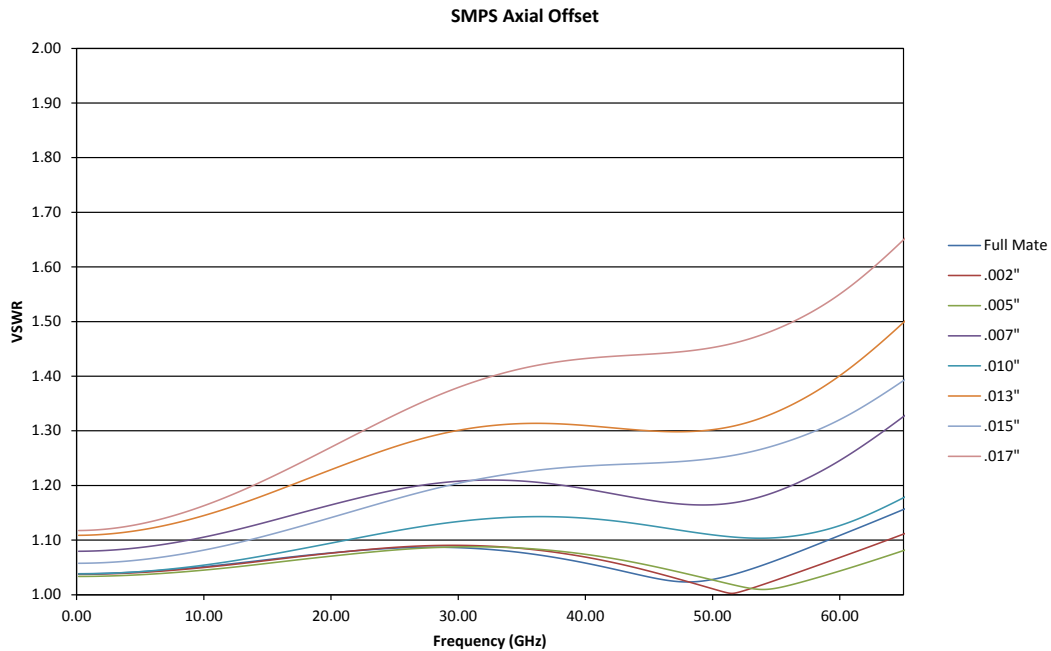
Measurements taken with a .211" long bullet. 2.4mm to SMPM male adapters were full detent on one side and smooth bore on the other side.



APPENDIX - SMPS

SMPS Misalignment Performance Measurements

Measurements taken with a .098" long bullet. 1.85mm to SMPS male adapters were full detent on both sides.



APPENDIX - BOARD MOUNT

Board Mount Connector Footprint Design Process - STEP 1: Select Connector

Select connector series and type based on performance requirements and packaging constraints

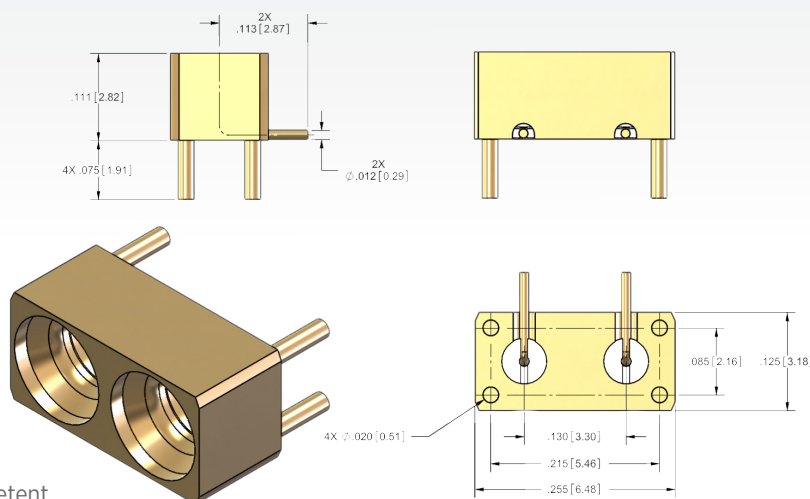
Series	Force to Engage (Max)			Max Freq.
	SB	LD	FD	
SMP	2.0 lbs	10 lbs	15 lbs	40 GHz
SMPM	4.0 lbs	N/A	8.0 lbs	65 GHz
SMPS	3.0 lbs	N/A	4.0 lbs	100 GHz

Series	Force to Disengage (Min)		
	SB	LD	FD
SMP	8 oz	2.0 lbs	5.0 lbs
SMPM	8 oz	N/A	3.0 lbs
SMPS	6 oz	N/A	2.0 lbs

Series	Mating Cycles (Min)		
	SB	LD	FD
SMP	1000	500	100
SMPM	500	N/A	100
SMPS	500	N/A	100

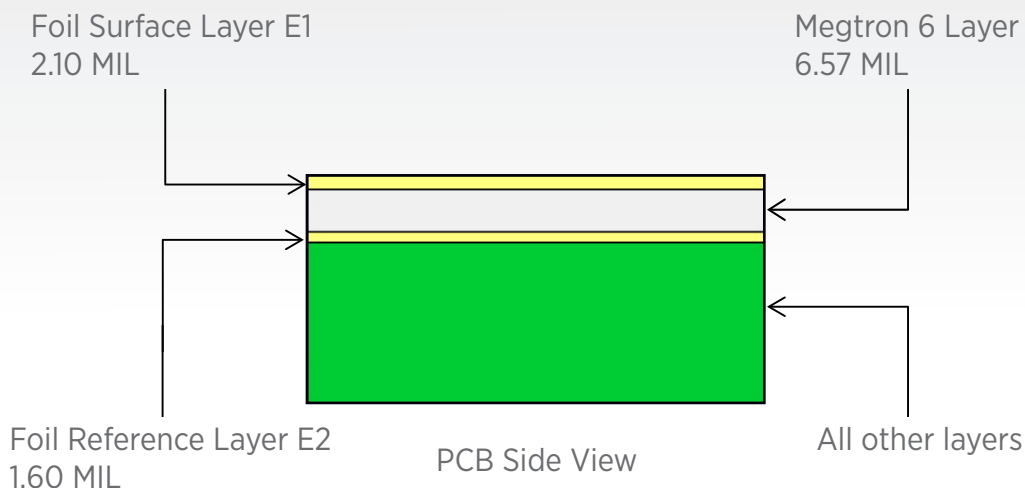
SB = Smooth Bore, LD = Limited Detent, FD = Full Detent

Example Connector Selection:



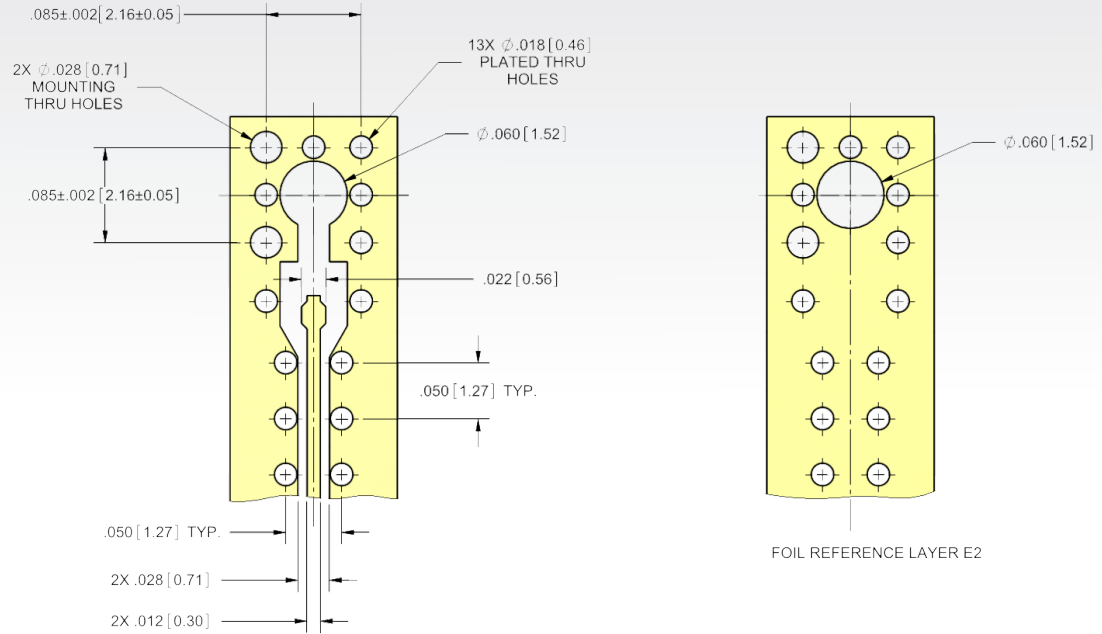
STEP 2: PCB Definition

Provide PCB Characteristics to the SV Microwave Team to begin simulation and optimization (see pages 108 & 109 for more information)

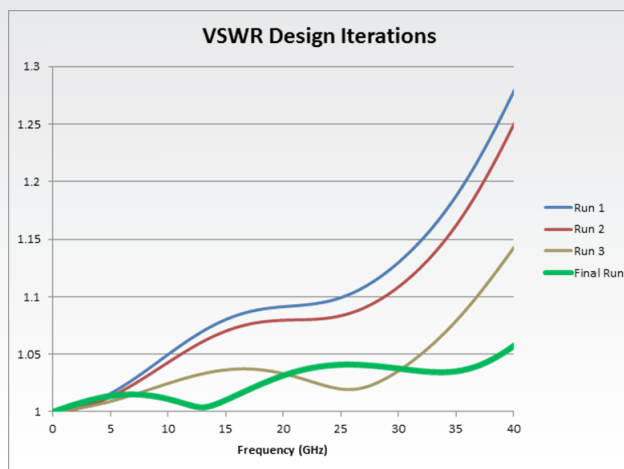


STEP 3: Footprint Design

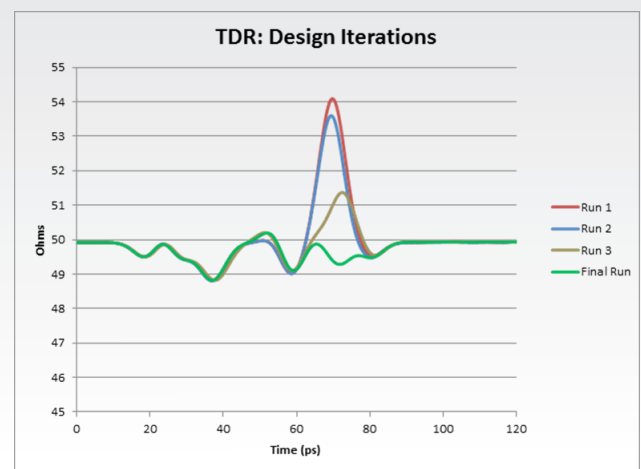
SV Engineering develops customized PCB launch footprint based on design parameters of connector and PCB Materials



STEP 4: Simulation and Optimization



VSWR Improvement over connector launch with Successive Design Iterations



TDR Improvement over connector launch with Successive Design Iterations

APPENDIX - BOARD MOUNT

Board Mount Specific Application Connector Request

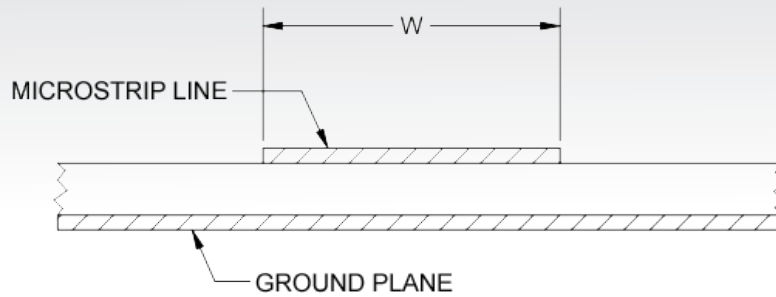
SV Microwave requests the information below in order to optimize our connector design for your specific application. The footprint will be designed and simulated per your input. Please submit the completed table below to marketing@svmicrowave.com or fax to 561.842.6277. (Additional Copies Available on our Website)

Footprint Specification Sheet for PCB Mount RF Connectors

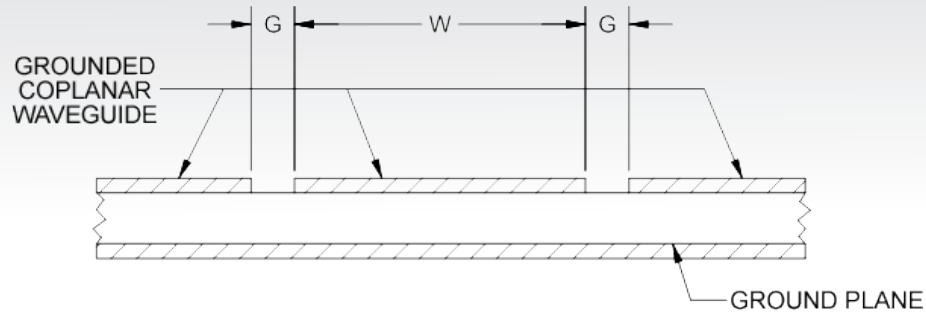
SV Microwave Part Number (if available)	
Operating Frequency Range (GHz)	
Desired VSWR/Return Loss (dB)	
PCB Type (Stripline, Coplanar Waveguide, Microstrip)	
Connector Series (SMA, SMP, SMPM, etc.)	
Connector Type (Edge Launch, Surface Mount, Etc.)	
Signal Line Impedance (ohms)	
PCB Material Type (Rogers 4003, Megtron 6, Etc.)	
Ground Plane Layer 1 Thickness (T1)	
Substrate Layer 1 Dielectric Constant (Er1)	
Signal Line Width (W – see next page)	
Gap Width (G – see next page)	
Substrate Layer 1 Thickness (S1)	
Ground Plane Layer 2 Thickness (T2)	
Substrate Layer 2 Dielectric Constant (Er2)	
Substrate Layer 2 Thickness (S2)	
Ground Plane Layer 3 Thickness (T3)	
Additional Notes:	

If possible, please attach additional documentation detailing the design features of the PCB including relative layer dimensions and characteristics.

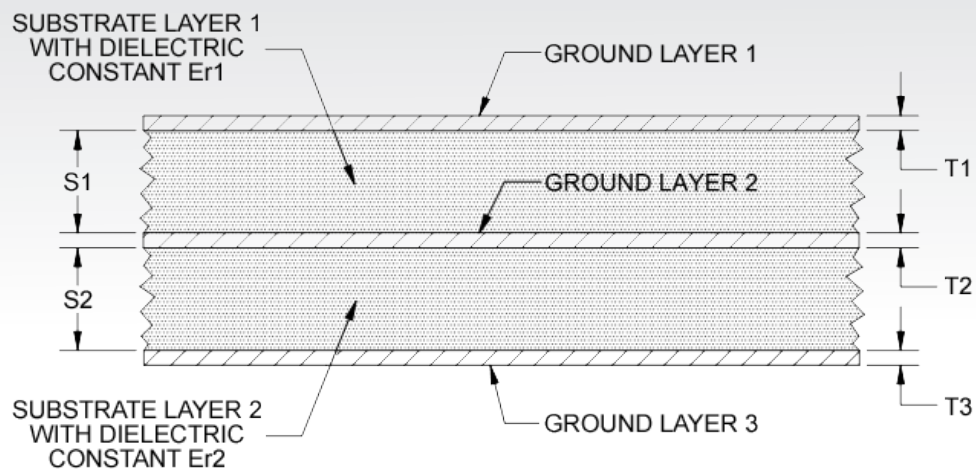
Micro Strip Line



Coplanar Waveguide



Material Stack-Up



FREQUENCY CHART

Type	Prefix	Freq (GHz)	VSWR*	DWV**	Coupling	Relative Size	Competitor Equivalents	Notes
7/16	84	6	1.15:1	4000	Threaded	3 X		
1.85mm	33	65	1.60:1	500	Threaded	1 X		Mates to 2.4mm
2.4mm	16	50	1.40:1	500	Threaded	1 X	OS-2.4	Mates to 1.85mm
2.92mm	15	40	1.34:1	750	Threaded	1 X	OS-2.92	Mates to SMA
3.5mm	92	26.5	1.30:1	500	Threaded	1 X	OS-3.5	Mates to SMA
BMA	17	22	1.15:1	1000	Slide-on	1 X	OSP	
BMMA	14	28	1.30:1	750	Slide-on	0.75 X	OSSP	
BMZ	89	18	1.20:1	1000	Slide-on	0.75 X		
BNC	47	6	1.20:1	1500	Bayonet	1.5 X		
BZ	88	2	1.10:1	1500	Slide-on	1.5 X		
PN	65	18	1.30:1	3000	Threaded	2.5 X		
PTNC	45	18	1.20:1	1500	Threaded	2 X		(a)
SC	52	11	1.30:1	3000	Threaded	3 X		
SMA	29	18	1.20:1	1000	Threaded	1 X	OSM	(a) (c)
SMB	23	4	1.10:1	1000	Slide-on	0.5 X		
SMC	22	10	1.40:1	1000	Threaded	0.5 X		
SMP	12	40	1.40:1	500	Snap-on	0.25 X	GPO, MMSP, OSMSP	
SMPM	32	65	1.30:1	325	Snap-on	0.2 X	GPPO, MSSP, OSMPPM	
SMPS	38	100	1.30:1***	250	Snap-on	0.15 X	G3PO	
SSMA	27	36	1.30:1	750	Threaded	0.75 X	OSSM	(b)
SVMS	49	23	1.30:1	1500	Snap-on	1 X	GMS	
TNC	40	15	1.30:1	1500	Threaded	2 X		(a)
TRIAx (BNC)	48	6	1.30:1	1500	Bayonet	2 X		
TRIAx (TNC)	48	11	1.30:1	1500	Threaded	2 X		
TYPE N	50	12.4	1.30:1	3000	Threaded	2.5 X		
ZMA	87	18	1.20:1	1500	Bayonet	1.5 X		

(a) 12.4 GHz for mitered right angle version

(b) 18 GHz for mitered right angle version

(c) 26 GHz version available

* VSWR measured at max frequency

** DWV Values given at sea level
and 25 degrees Celsius

*** Measured at 65 GHz

M39012 - Connectors

M83517 - Stripline Connectors

M55339 - Adapters

M31031 - Blindmate Connectors

M3933 - Attenuators

P/N	Page
066-15-000	37
066-15-001	37
066-15-002	37
066-15-003	37
066-15-004	37
066-15-005	37
1112-4009	63
1112-4011	63
1112-4012	63
1112-4018	64
1112-4019	63
1116-6014	64
1132-4003	77
1132-4005	76
1132-4006	76
1132-6025	77
1138-4001	86
1138-4002	86
1138-4003	86
1138-4004	86
1204-6000	58
1211-40001	60
1211-40003	60
1211-40004	60
1211-40008	59
1211-40032	66
1211-6041	59
1211-6042	59
1211-6043	59
1211-66137	62
1211-66138	62
1211-66139	62
1211-66175	62
1211-66195	66
1212-6000	61
1213-4007	57
1221-4004	57
1221-40049	67
1221-4005	57
1221-40050	67
1221-40051	67

P/N	Page
1221-4006	57
1221-4009	57
1221-4010	57
1221-6001	58
1222-4004	57
1222-4005	57
1222-4006	57
1222-4011	57
1222-4012	57
1279-4001	59
1279-4002	59
1285-6002	61
1285-6003	61
1285-6004	61
1290-4001	63
1290-4007	63
1290-4009	63
1521-60051	36
1621-60008	44
1708-0001	5
1709-6002	5
1711-60008	7
1732-6012	5
1733-6008	5
1740-6001	5
1742-6002	5
1785-0003	9
1785-6001	9
1789-6001	9
2900-6001	17
2903-6001	17
2906-6002	17
2910-6001	19
2912-6001	18
2913-6001	19
2921-6002	20
2922-6007	20
2926-6015	20
2933-6001	21
2933-6004	22
2942-6045	21

P/N	Page
2944-6001	21
2946-6012	21
2950-6061	22
2960-6025	23
2975-6200	24
2985-6004	25
2985-6035	25
2985-6036	25
2985-6037	25
2985-6038	25
2986-6001	25
2990-6005	28
2991-6002	28
2993-6001	27
2994-6001	27
3202-6000	70
3211-40003	70
3211-40004	70
3211-40005	70
3211-60027	71
3211-60028	71
3211-60035	75
3211-60086	75
3211-60087	75
3211-60112	78
3211-60118	79
3212-40002	73
3212-40003	73
3221-4000	70
3221-40006	69
3221-40007	69
3221-40011	70
3221-40019	80
3221-4002	74
3221-40022	80
3221-60003	79
3221-60004	79
3222-40002	69
3222-40005	69
3222-40006	69
3269-4001	69

P/N	Page
3285-6001	75
3287-4100	72
3287-4101	72
3287-6100	73
3287-6101	73
3290-4002	76
3290-4003	76
3321-60001	55
3811-40001	83
3811-40002	83
3811-40003	85
3811-40004	85
3811-40005	84
3811-40006	84
3811-40022	84
3811-40023	84
3811-60005	84
3811-60006	84
3821-40001	83
3822-40001	83
4011-00043	91
4011-00044	91
4021-00064	91
4021-00065	91
500-12-000	67
500-12-019	67
500-32-004	81
500-32-007	81
500-32-008	80
500-32-009	80
500-32-010	81
500-38-002	88
500-38-003	88
500-38-004	88
5011-00034	97
5011-00035	97
5021-00026	97
5021-00027	97
8001-4101	13
8001-4102	14
8001-4103	13

INDEX

P/N	Page
8001-4104	14
8001-4107	13
8001-4108	13
8012-4006	65
8012-4008	65
8012-4013	65
8017-6002	8
8018-6005	31
8018-6061	31
8018-6172	31
8018-6173	31
8018-6174	31
8032-4003	78
8032-4007	78
8032-6001	77
8032-6002	77
8038-4001	87
8038-6003	87
8038-6004	87
8038-6005	87
8038-6006	87
9311-60015	75
9311-60033	62
9311-60034	62
9311-60035	62
9311-60036	62
9311-60037	62
9311-60038	62
9311-60039	75
9921-40001	85
M39012/25-0019	92
M39012/25-0118	92
M39012/25-3024	30
M39012/25-3025	30
M39012/25-3026	30
M39012/25-3124	30
M39012/26B0006	91
M39012/26B0015	91
M39012/30-0101	92
M39012/30B0005	92
M39012/55-3009	21

P/N	Page
M39012/55-3030	18
M39012/55-3126	17
M39012/55-3128	17
M39012/55B3012	18
M39012/55B3015	18
M39012/55B3112	17
M39012/55B3115	17
M39012/56-3006	20
M39012/56-3007	20
M39012/56-3026	20
M39012/56-3028	20
M39012/56-3030	19
M39012/56-3106	18
M39012/56-3107	18
M39012/56-3109	18
M39012/56-3125	19
M39012/56-3128	19
M39012/56B3011	20
M39012/56B3014	20
M39012/56B3016	20
M39012/56B3017	20
M39012/56B3019	20
M39012/56B3022	20
M39012/56B3114	19
M39012/56B3116	19
M39012/56B3117	19
M39012/56B3119	19
M39012/79-3007	18
M39012/79B3001	18
M39012/79B3101	17
M39012/80-3005	19
M39012/80-3006	19
M39012/80-3008	19
M39012/80-3106	18
M39012/80-3107	18
M39012/80-3108	18
M39012/80B3101	18
M39030/3-XXN	31
M39030/3-XXS	31
M3933/14-XXN	32
M3933/14-XXS	32

P/N	Page
M3933/16-XXN	32
M3933/16-XXS	32
M3933/25-XXN	32
M3933/25-XXS	32
M3933/30-XXN	40
M3933/30-XXS	40
M55339/02-30001	27
M55339/28-30001	28
M55339/28-30002	26
M55339/30-30003	29
M55339/30-30101	29
M55339/32-00001	93
M55339/33-00001	93
M55339/34-30001	93
M55339/41-30001	94
M55339/44-30001	28
M55339/53-30001	27
SF0915-6200-XX	40
SF0929-6200-XX	33
SF0930-6200-XX	33
SF1112-6025	64
SF1112-6031	64
SF1112-6122	64
SF1115-6005	39
SF1115-6007	39
SF1115-6009	39
SF1115-6011	38
SF1116-6002	47
SF1116-6003	47
SF1116-6004	47
SF1116-6007	46
SF1116-6016	64
SF1116-6023	86
SF1116-6024	86
SF1116-6025	86
SF1116-6037	46
SF1116-6039	45
SF1116-6040	46
SF1116-6048	64
SF1117-6018	10
SF1132-6026	77

P/N	Page
SF1132-6027	77
SF1132-6036	79
SF1132-6037	79
SF1133-6003	54
SF1133-6004	54
SF1133-6005	54
SF1133-6006	53
SF1133-6008	53
SF1133-6009	52
SF1133-6010	53
SF1157-6009	11
SF1157-6013	10
SF1158-6001	10
SF1211-40002	60
SF1211-40006	60
SF1211-40007	60
SF1211-6021	58
SF1211-6022	58
SF1211-6023	58
SF1211-6024	58
SF1211-6025	58
SF1211-6044	60
SF1211-6045	60
SF1211-6058	58
SF1211-6059	58
SF1211-6060	58
SF1211-6061	58
SF1211-6062	58
SF1211-6063	58
SF1211-66113	59
SF1211-66114	59
SF1211-66214	66
SF1212-6000	61
SF1212-6001	61
SF1212-6002	61
SF1233-6000	58
SF1279-6001	59
SF1287-6001	60
SF1511-60044	35
SF1511-60069	35
SF1511-60071	35

P/N	Page
SF1521-60013	36
SF1521-60025	35
SF1521-60039	35
SF1521-60042	35
SF1521-60044	35
SF1521-60045	35
SF1521-60061	36
SF1521-60070	36
SF1521-60077	35
SF1552-6002	36
SF1575-6007	37
SF1590-6000	38
SF1593-6000	37
SF1597-6003	38
SF1611-60001	43
SF1611-60003	43
SF1621-60003	44
SF1621-60005	43
SF1621-60009	43
SF1621-60014	43
SF1621-60017	44
SF1644-6001	43
SF1675-6004	45
SF1711-60013	7
SF1732-6004	5
SF1733-6006	5
SF1750-6101	8
SF1755-6104	7
SF1755-6105	7
SF2900-6001	17
SF2902-6001	17
SF2902-6005	17
SF2906-6002	17
SF2911-60172	17
SF2912-6001	18
SF2912-60955	19
SF2912-6605	19
SF2913-6001	19
SF2915-6001	18
SF2915-6605	19
SF2921-61345	24

P/N	Page
SF2921-61356	24
SF2921-6920	24
SF2950-6061	22
SF2950-6062	23
SF2950-6081	23
SF2950-6200	22
SF2960-6001	24
SF2990-6002	28
SF2990-6005	28
SF2991-6002	28
SF2992-6001	26
SF2993-6001	27
SF2994-6001	27
SF2997-6003	26
SF3202-6001	71
SF3211-6000	70
SF3211-60009	71
SF3211-60010	71
SF3211-60011	71
SF3211-60012	71
SF3211-60013	70
SF3211-60024	70
SF3211-60025	70
SF3211-60033	72
SF3211-60034	72
SF3211-6004	74
SF3311-60002	51
SF3311-60003	51
SF3321-60003	55
SF3321-60004	51
SF3321-60005	51
SF3321-60006	51
SF3321-60007	51
SF3321-60011	55
SF3375-6001	52
SF4501-6023	95
SF4501-6039	95
SF4532-6009	94
SF4546-6010	95
SF4546-6011	95
SF6505-6003	98

P/N	Page
SF6511-60010	98
SF6545-6003	98
SF6545-6017	98
SF8012-6009	65
SF8012-6101	65
SF8012-6102	65
SF8012-6103	65
SF8015-6002	40
SF8015-6007	40
SF8016-6304	48
SF8016-6402	48
SF8017-6001	8
SF8018-6005	31
SF8018-6007	30
SF8018-6060	31
SF8018-6061	31
SF9321-60013	80
SF9321-60015	80
SF9411-6000	5
SF9411-6001	5
SF9421-6000	5
SF9421-6001	6
SF9911-60001	85



O: 561.840.1800 | F: 561.842.6277

2400 Centrepark West Drive, West Palm Beach, FL 33409

www.svmicrowave.com