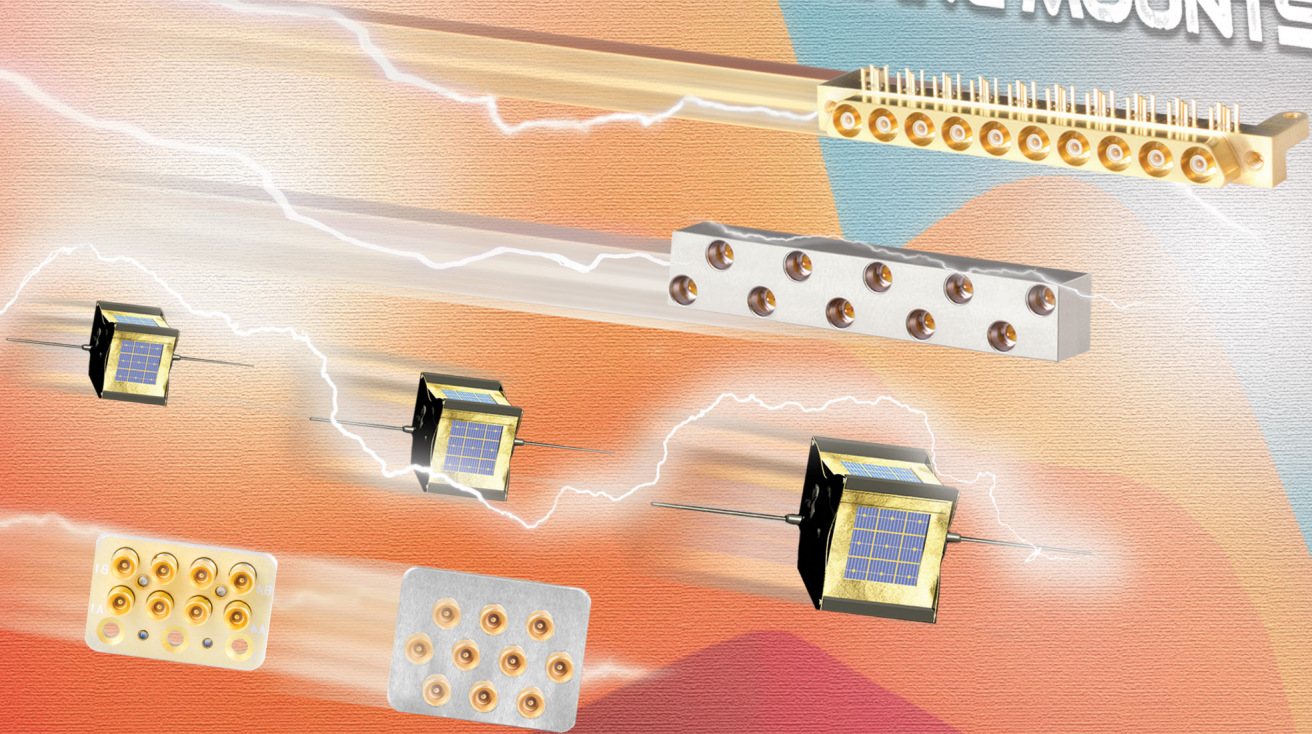




DELTA
Electronics Mfg. Corp.

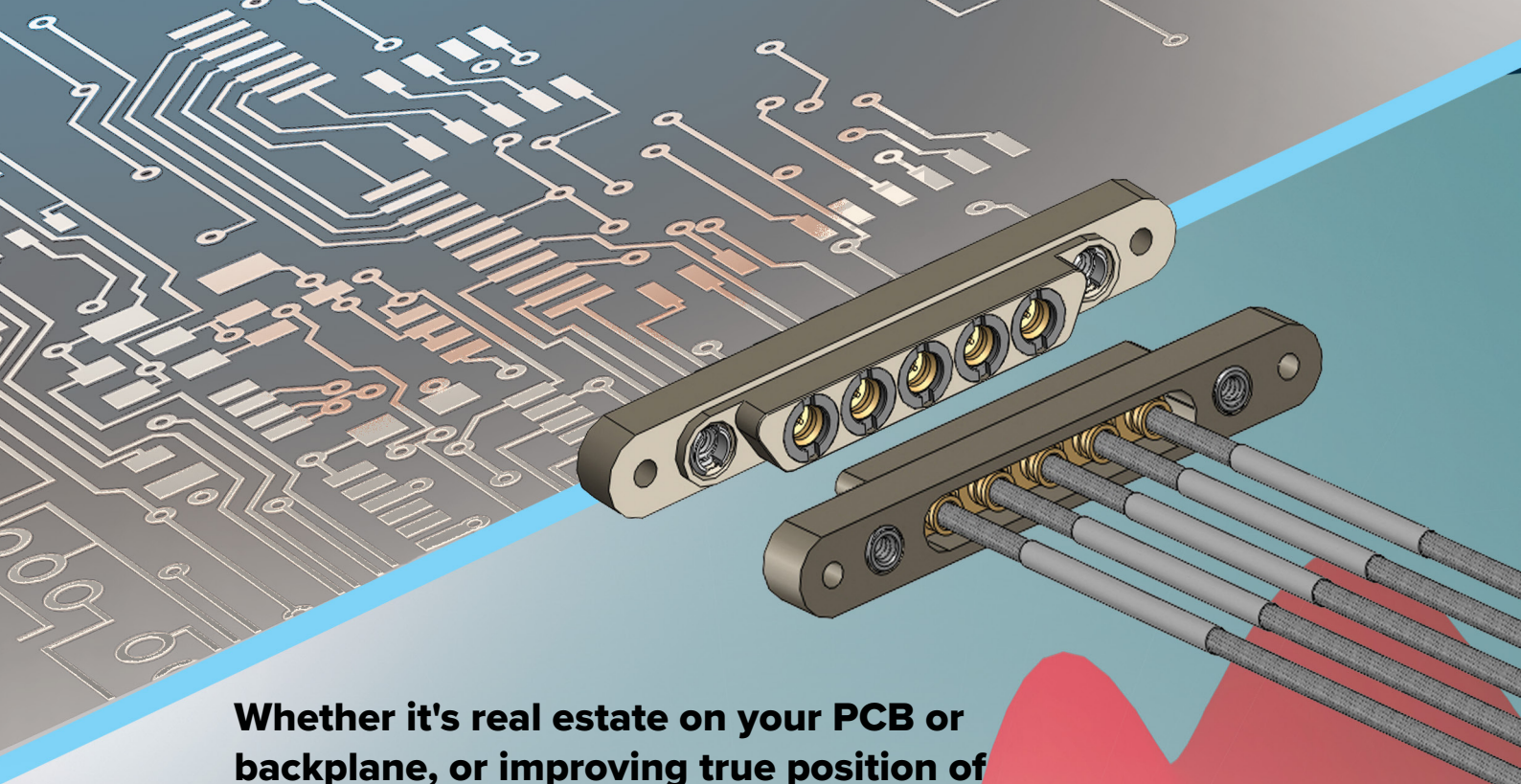
SMP, SMPM, SMP3 GANG MOUNTS



**BLIND MATE RF
GANG MOUNTS**



sales@deltarf.com (978) 927-1060 deltarf.com



Whether it's real estate on your PCB or backplane, or improving true position of blind mate RF Interfaces, Delta's ganged RF design solutions are the answer.

Features and Benefits of SMPM-G Gang Mounts

Ideal for blind mate applications: cable-to-board, cable-to-cable and board-to-board mechanical schemes.

Delta's SMPM-G housings are standardized with 2, 3, 4, 5, 6, 7, and 8 port designs.

SMPM-G housings include female cable mount, male cable mount, male PCB edge mount and male PCB vertical launch. SMPM-G RF connectors are available in both straight and right angle configurations.

SMPM-G housings are keyed to prevent improper mating and port locations are laser marked for proper identification.

Delta's SMPM-G RF connectors and housings are gasketed for extreme weather sealing.

SMPM-G RF connectors accommodate both .047" and .086" semi-rigid cable and the flexible equivalents. Custom cable designs may also be available.

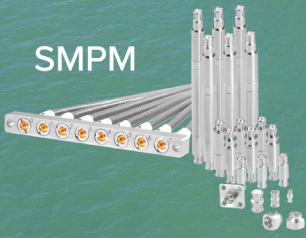
Straight cable mount SMPM-G configurations operate up to 65 GHz, right angle cable mount connectors operate up to 26.5 GHz, PCB edge mount and vertical launch configurations operate up to 40 GHz.

The versatile SMPM-G RF connector interface meets the critical interface dimensions of Mil-STD-348 offering proven blind mate performance, with axial and radial float, assuring proper mating.

SMPM-G GANG MOUNT CABLE & PCB MOUNTS INTRODUCTION



Discover Your SMPM-G Gang Mount Solution



SMPM

Interconnects
that Guide &
Protect us

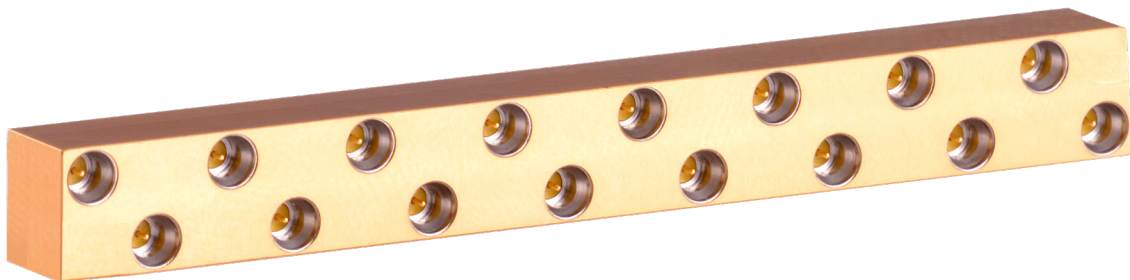
# Ports	SMPM-G Cable Mounts Housings	Part Number	Page #
	SMPM-G General Specifications		
2 Port	Female, Cable Mount with Self Captivating Jack Screws	21-10459-02	6-7
2 Port	Male, Cable Mount with Environmental Seal	21-10460-02	10-11
3 Port	Female, Cable Mount with Self Captivating Jack Screws	21-10459-03	6-7
3 Port	Male, Cable Mount with Environmental Seal	21-10460-03	10-11
4 Port	Female, Cable Mount with Self Captivating Jack Screws	21-10459-04	6-7
4 Port	Male, Cable Mount with Environmental Seal	21-10460-04	10-11
5 Port	Female, Cable Mount with Self Captivating Jack Screws	21-10459-05	6-7
5 Port	Male, Cable Mount with Environmental Seal	21-10460-05	10-11
6 Port	Female, Cable Mount with Self Captivating Jack Screws	21-10459-06	6-7
6 Port	Male, Cable Mount with Environmental Seal	21-10460-06	10-11
7 Port	Female, Cable Mount with Self Captivating Jack Screws	21-10459-07	6-7
7 Port	Male, Cable Mount with Environmental Seal	21-10460-07	10-11
8 Port	Female, Cable Mount with Self Captivating Jack Screws	21-10459-08	6-7
8 Port	Male, Cable Mount with Environmental Seal	21-10460-08	10-11

Gender	SMPM-G Cable Mount RF Connectors	Part Number	Page #
Female	Straight Cable Mount Female for .086" (RG 405) SR or Flex	8808094G003-005	8
Female	Right Angle Cable Mount Female for .086" (RG 405) SR or Flex	8876094G003-011	9
Female	Straight Cable Mount Female for .047" (RG 405) SR or Flex	8808111G003-006	8
Female	Right Angle Cable Mount Female for .047" (RG 405) SR or Flex	8876111G003-007	9
Male	Straight Cable Mount Male for .086" (RG 405) SR or Flex	8801094G003-001	12
Male	Right Angle Cable Mount Male for .086" (RG 405) SR or Flex	8872094G903-004	13
Male	Straight Cable Mount Male for .047" (RG 405) SR or Flex	8801111G003-004	12
Male	Right Angle Cable Mount Male for .047" (RG 405) SR or Flex	8872111G903-000	13

# Ports	SMPM-G PCB Vertical Launch Housings	Part Number	Page #
2 Port	Male, Vertical Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-101	14-15
3 Port	Male, Vertical Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-102	14-15
4 Port	Male, Vertical Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-103	14-15
5 Port	Male, Vertical Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-104	14-15
6 Port	Male, Vertical Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-105	14-15
7 Port	Male, Vertical Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-106	14-15
8 Port	Male, Vertical Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-049	14-15

# Ports	SMPM-G PCB Edge Launch Housings	Part Number	Page #
2 Port	Male, Edge Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-095	16-17
3 Port	Male, Edge Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-096	16-17
4 Port	Male, Edge Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-097	16-17
5 Port	Male, Edge Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-098	16-17
6 Port	Male, Edge Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-099	16-17
7 Port	Male, Edge Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-100	16-17
8 Port	Male, Edge Launch, SB, PCB Mount with 4-40 UNC-2B screws	8869000G91P-048	16-17

SMPM-G PCB Cable Assembly & Tooling	Part Number	Page #
Cable Assembly Options	.040 / .047 / .086 Cable	18-19
More Gang Mount Options	SMP-G / SMP3-G / VITA	20-24
SMPM-G Extras	Bullet Adapters & Tools	25



SMPM-G Electrical Specifications

Operating Frequency - SMPM-G RF Connectors
Straight Cable Mount - DC to 65 GHz
R/ A Cable Mount - DC to 26.5 GHz
Verical Launch PCB Mount - DC to 40 GHz
R/ A Edge Launch PCB Mount - DC to 40 GHz
Impedance
Straight and Right Angle - 50 Ω
Insertion Loss
05 +.04√f in GHz (non hermetic connectors)
VSWR (Voltage Standing Wave Ratio)
1.35:1 Max. thru 26.5 GHz; 1.4 Max. thru 65 GHz
RF Leakage
-80 db to 3 GHz, -65 db to 65 GHz
Insulation Resistance
5,000 megohms
DWV (@ sea level)
500 Vrms

SMPM-G Environmental Specifications

Temperature Range
-65 C to + 165 C
Mechanical Shock
Meets Mil-STD-202, Method 213,
Random Vibration
Meets MIL-STD-202, Method 214, Condition K-I, 46.3 g
Sine Vibration
MIL-STD-202, method 204, 28 g peak
Altitude
Meets Mil-STD-202, Method 105, Condition C
Thermal Shock
Meets Mil-STD-202, Method 107, Condition B
Moisture Resistance
MIL-STD-202, Method 106

SMPM-G Mechanical Specifications

Force to Engage
Smooth Bore • 2.0 lbs Typical
Limited Detent - 3.5 lbs Typical
Full Detent - 5.0 lbs Typical
Force to Disengage
Smooth Bore 1.5 lbs Typical
Limited Detent - 4.0 lbs Typical
Full Detent • 6.0 lbs Typical
Durability
Smooth Bore • 1000 cycles
Limited Detent • 500 cycles
Full Detent - 100 cycles
Contact Retention
1.5 lbs Min
Axial Misalignmnet
.010"
Radial Misalignmnet
+/- .010

SMPM-G Materials & Plating Specifications

Materials - RF Connector
Bodies • Beryllium Copper per ASTM B196 and/or ASTM B 197 or Stainless Steel, type 303, Condition A
Outer & Center Contacts • Beryllium Copper per ASTM B196
Insulators • PTFE Fluorocarbon per ASTM D1710, type 1, grade 1; Torlon per ASTM D-5204 or Ultem per ASTM D-5205
Materials - Housing
Block Housing • Brass per ASTM B16, C36000 Alloy, Temper H02
Gasket - Silicone Rubber per A-A-59588
Hardware - 18-8 Stainless Steel, 316L Stainless Steel
Plating - RF Connectors
Bodies • Gold Plate per ASTM B488, over Nickel Plate, per SAE AMS-QQ-N-290 or Passivated per SAE AMS 2700
Outer Contacts • Gold Plate per MIL-G-45204, over Nickel Plate per SAE - AMS-QQ-N-290
Center Contacts • Gold Plate per ASTM B488, type II, over Nickel Plate, per SAE AMS-QQ-N-290
Plating - Housing
Housing • Nickel Plate per SAE-AMS-QQ-N-290



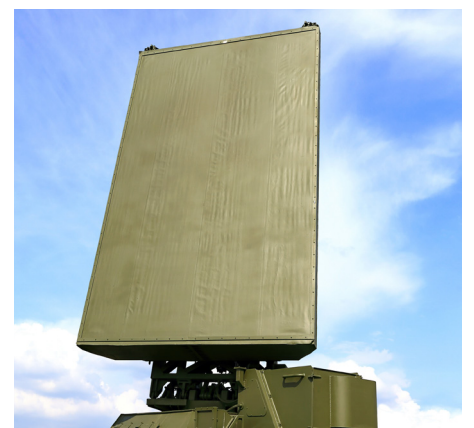
Military



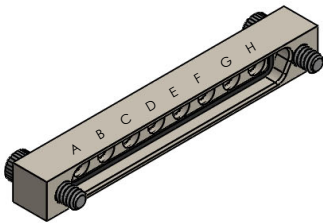
**Launch
Vehicles**



**High Speed
Computing**

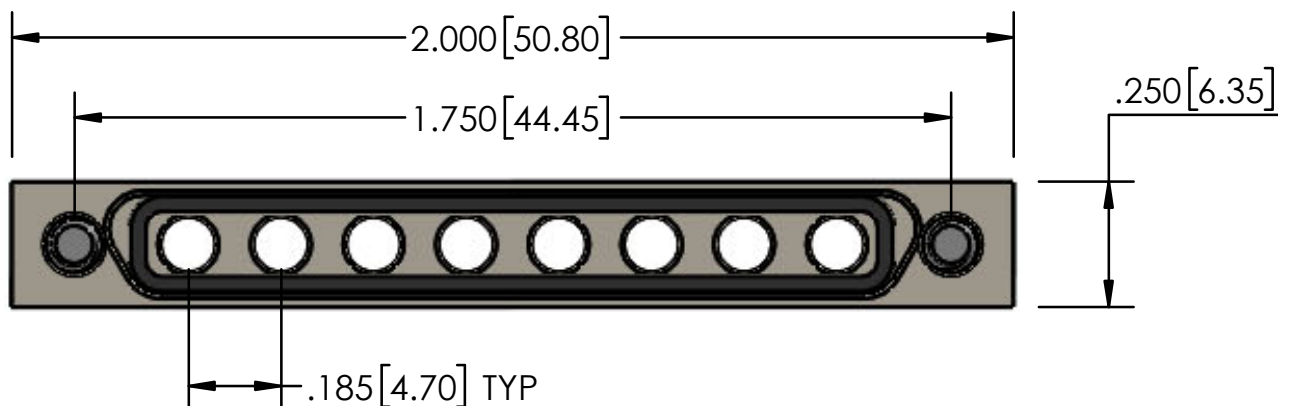
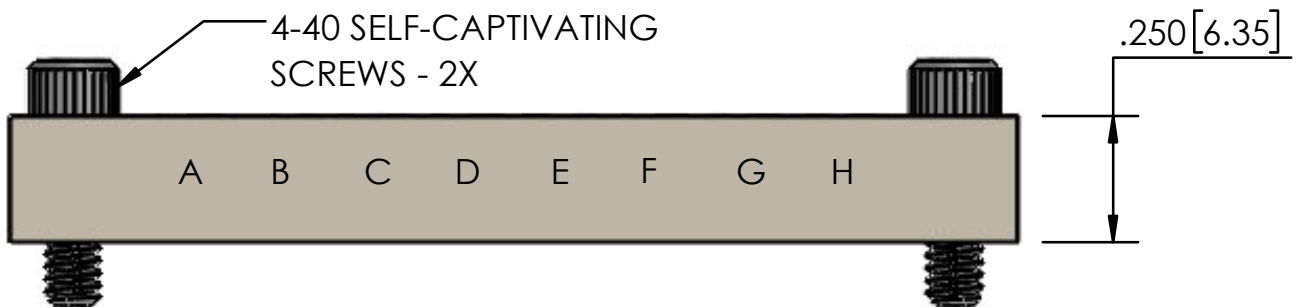


**Radar
Applications**



SMPM-G 21-10459-08 Female Cable Mount
 Straight Cable Mount Female, 8 port, with 4-40
 UNC Self Captivating Jack Screws. Each port
 is laser marked for quick identification and the
 environmentally sealed housing accepts Delta's
 straight & right angle cable mount SMPM connectors

Part Number		Configuration	Cable	Gender	Connectors
21-10459-08		Cable Mount	.047" .086" (RG 405) SR or Flex	Female	Straight & Right Angle
Product Features					
Housing Material	Brass		Interface Seal Material	Silicone Rubber	
Housing Plating	Nickel		Port Identifiers	Laser Marked A-H	
Hardware Material	Steel		Distance Between Ports	.185"	
Hardware Plating	Passivated		Block Height & Width	.250"	



GANG MOUNT SMPM-G FEMALE HOUSING CABLE MOUNT

Dimensions For 2 Port Thru 8 Port

Distance Between All Ports: .185" TYP Height & Width All Blocks .250" TYP

Delta Part #	A	B	Ports	Delta Part #	A	B	Ports
Fig 2 - 21-10459-02	0.890	0.640	2	Fig 6 - 21-10459-06	1.630	1.380	6
Fig 3 - 21-10459-03	1.075	0.825	3	Fig 7 - 21-10459-07	1.815	1.565	7
Fig 4 - 21-10459-04	1.260	1.010	4	Fig 8 - 21-10459-08	2.000	1.750	8
Fig 5 - 21-10459-05	1.445	1.195	5				

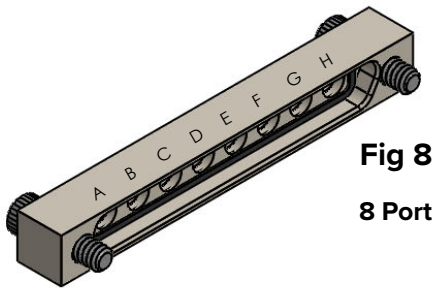
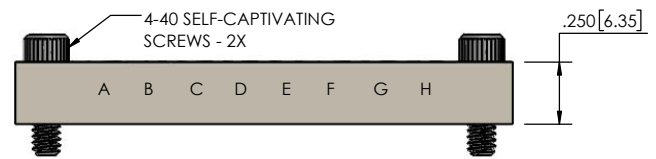
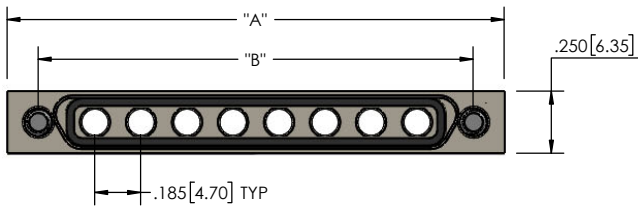


Fig 8
8 Port

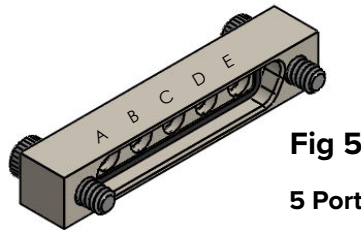


Fig 5
5 Port

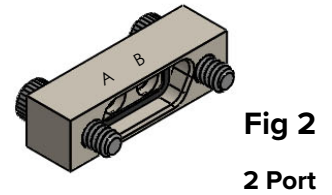


Fig 2
2 Port

**Straight & Right
Angle SMPM-G RF
Connectors
Pages 8 & 9.**

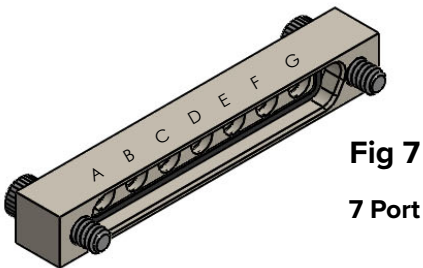


Fig 7
7 Port

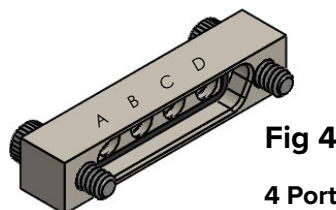


Fig 4
4 Port

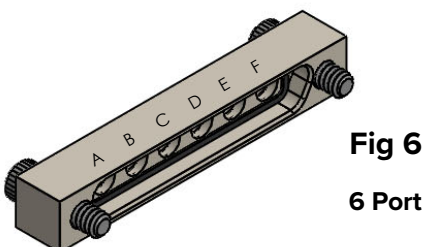
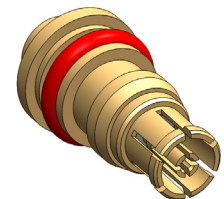


Fig 6
6 Port

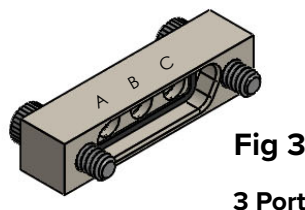
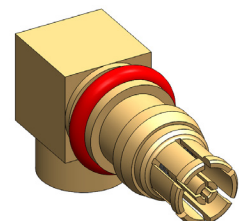
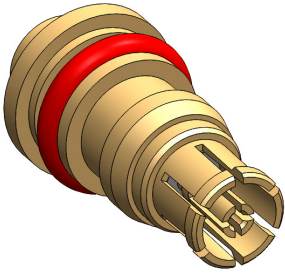


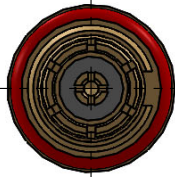
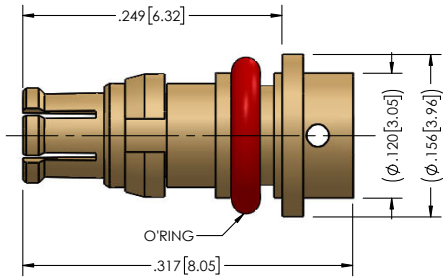
Fig 3
3 Port

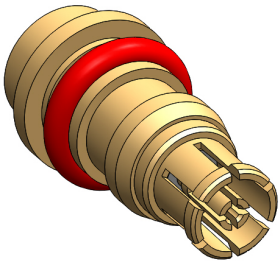




SMPM-G 8808094G003-005

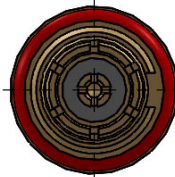
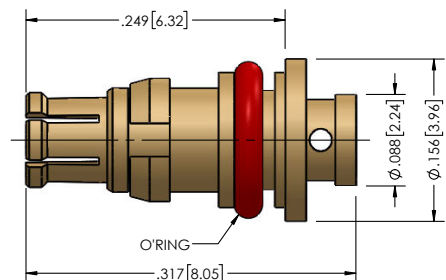
Straight Cable Mount Female for .086" (RG 405) Semi-Rigid or the flexible equivalent, snaps into male cable mount housing, reference Delta housing Part # 21-10459-08

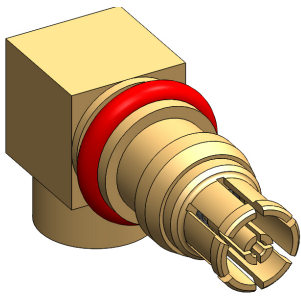
Part Number	Configuration	Cable	CC Termination	OC Termination
8808094G003-005	Straight	.086" (RG-405) SR or Flex	One-Step (solderless)	Direct Solder
Product Features				
Frequency	65 GHz			
CC Gender	Female			
Durability	1000 Cycles			
CC & Body Material	Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
				



SMPM-G 8808111G003-006

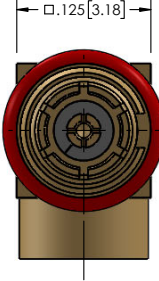
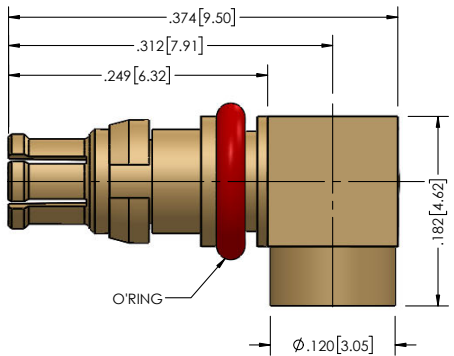
Straight Cable Mount Female for .047" Semi-Rigid or the flexible equivalent, snaps into male cable mount housing, reference Delta housing Part # 21-10459-08

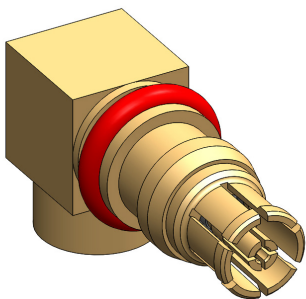
Part Number	Configuration	Cable	CC Termination	OC Termination
8808111G003-006	Right Angle	.047" SR or Flex	One-Step (solderless)	Direct Solder
Product Features				
Frequency	65 GHz			
CC Gender	Female			
Durability	1000 Cycles			
CC & Body Material	Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
				



SMPM-G 8876094G003-011

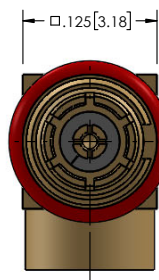
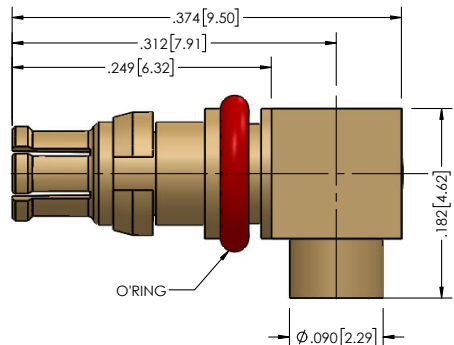
Right Angle Cable Mount Female for .086" (RG 405) Semi-Rigid or the flexible equivalent, snaps into male cable mount housing, reference Delta housing Part # 21-10459-08

Part Number	Configuration	Cable	CC Termination	OC Termination
8876094G003-011	Right Angle	.086" (RG-405) SR or Flex	Solder	Direct Solder
Product Features				
Frequency	26.5 GHz			
CC Gender	Female			
Durability	1000 Cycles			
CC & Body Material	Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
				



SMPM-G 8876111G003-007

Right Angle Cable Mount Female for .047" Semi-Rigid or the flexible equivalent, snaps into male cable mount housing, reference Delta housing Part # 21-10459-08

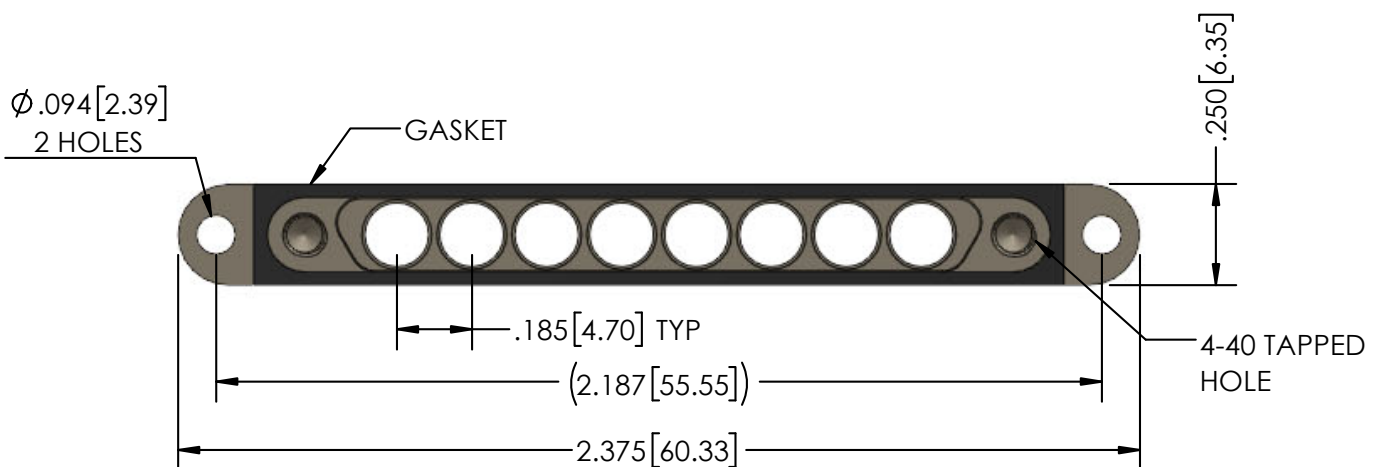
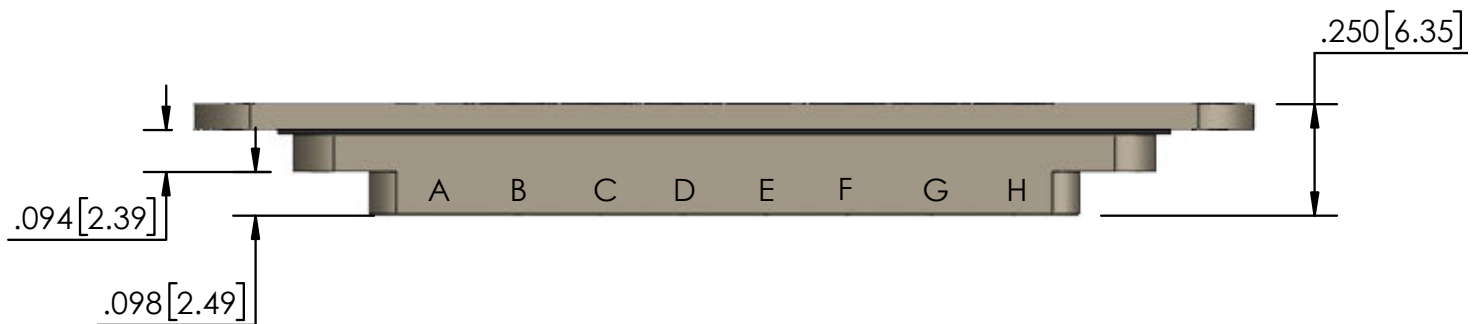
Part Number	Configuration	Cable	CC Termination	OC Termination
8876111G003-007	Right Angle	.047" SR or Flex	Solder	Direct Solder
Product Features				
Frequency	26.5 GHz			
CC Gender	Female			
Durability	1000 Cycles			
CC & Body Material	Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
				



SMPM-G 21-10460-08 Male Cable Mount

Straight Cable Mount Male, 8 port, with 4-40 UNC-2B thread x .100 Deep, 2 places. Each port is laser marked for quick identification and the environmentally sealed housing accepts Delta's straight & right angle cable mount SMPM connectors

Part Number	Configuration	Cable	Gender	Connectors
21-10460-08	Cable Mount	.047" .086" (RG 405) SR or Flex	Male	Straight & Right Angle
Product Features				
Housing Material	Brass	Interface Seal Material	Silicone Rubber	
Housing Plating	Nickel	Port Identifiers	Laser Marked A-H	
Hardware Material	N/A	Distance Between Ports	.185"	
Hardware Plating	N/A	Block Height & Width	.250"	

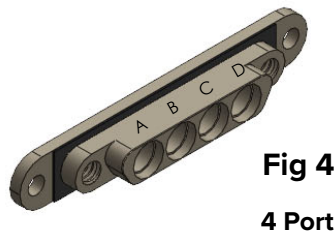
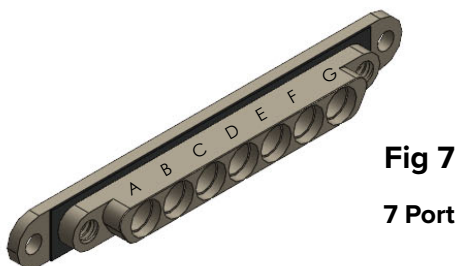
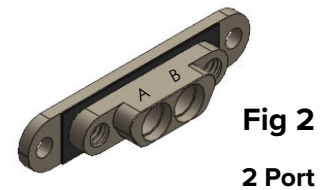
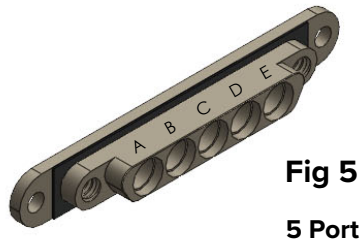
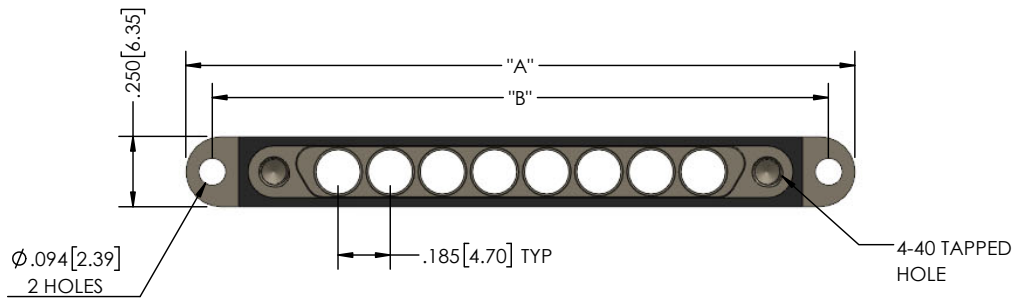


GANG MOUNT SMPM-G MALE HOUSING CABLE MOUNT

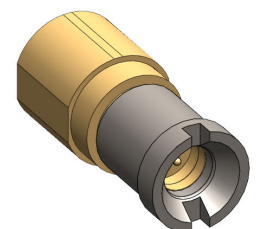
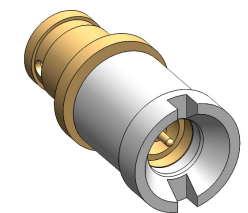
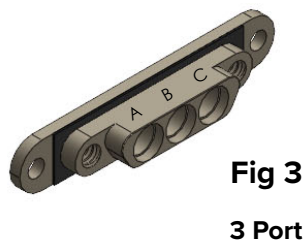
Dimensions For 2 Port Thru 8 Port

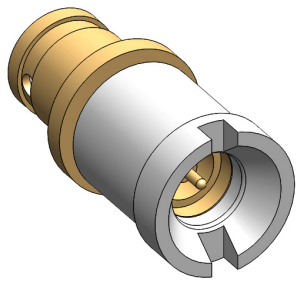
Distance Between All Ports: .185" TYP Height & Width All Blocks .250" TYP

Delta Part #	A	B	Ports	Delta Part #	A	B	Ports
Fig 2 - 21-10460-02	0.890	0.640	2	Fig 6 - 21-10460-06	1.630	1.380	6
Fig 3 - 21-10460-03	1.075	0.825	3	Fig 7 - 21-10460-07	1.815	1.565	7
Fig 4 - 21-10460-04	1.260	1.010	4	Fig 8 - 21-10460-08	2.000	1.750	8
Fig 5 - 21-10460-05	1.445	1.195	5				



**Straight & Right
Angle SMPM-G RF
Connectors
Pages 12 & 13.**

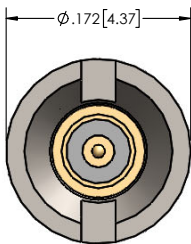
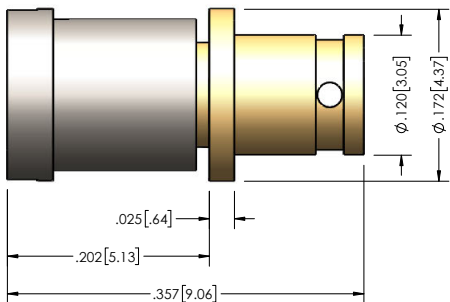


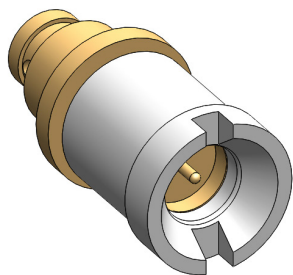


SMPM-T 8801094G003-001

Straight Cable Mount Male for .086"
 (RG 405) Semi-Rigid or the flexible equivalent,
 snaps into male cable mount housing, reference
 Delta housing Part # 21-10460-08

Part Number	Configuration	Cable	CC Termination	OC Termination
8801094G003-001	Straight	.086" (RG-405) SR or Flex	One-Step (solderless)	Direct Solder
Product Features				
Frequency	65 GHz			
CC Gender	Male			
Durability	1000 Cycles			
CC & Body Material	HT Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
Bushing Material	CRS			

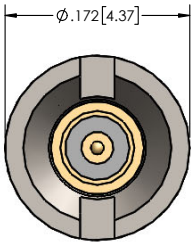
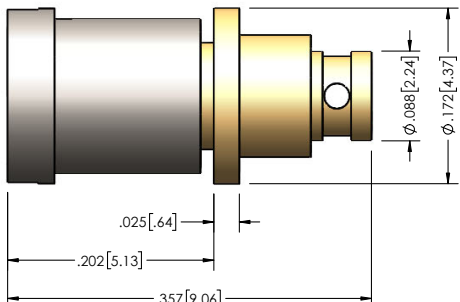



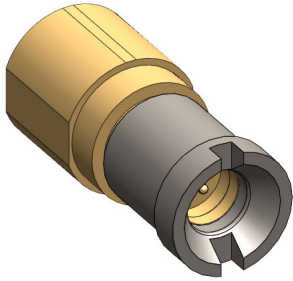


SMPM-T 8801111G003-004

Straight Cable Mount Male for .047"
 Semi-Rigid or the flexible equivalent, snaps into
 male cable mount housing, reference Delta
 housing Part # 21-10460-08

Part Number	Configuration	Cable	CC Termination	OC Termination
8801111G003-004	Right Angle	.047" SR or Flex	One-Step (solderless)	Direct Solder
Product Features				
Frequency	65 GHz			
CC Gender	Male			
Durability	1000 Cycles			
CC & Body Material	HT Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
Bushing Material	CRS			

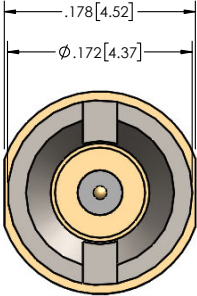
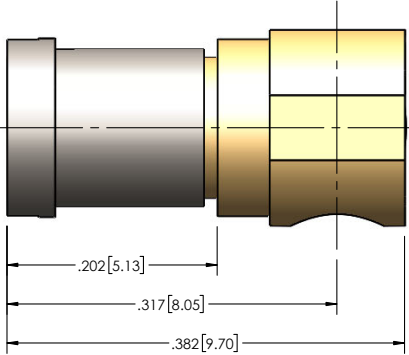



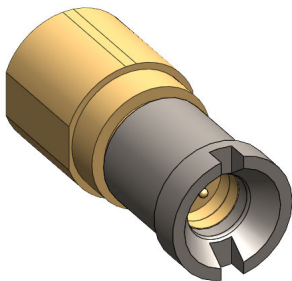


SMPM-T 8872094G903-004

Right Angle Cable Mount Male for .086" (RG 405) Semi-Rigid or the flexible equivalent, snaps into male cable mount housing, reference Delta housing Part # 21-10460-08

Part Number	Configuration	Cable	CC Termination	OC Termination
8872094G903-004	Right Angle	.086" (RG-405) SR or Flex	Solder	Direct Solder
Product Features				
Frequency	40 GHz			
CC Gender	Male			
Durability	1000 Cycles			
CC & Body Material	HT Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
Bushing Material	CRS			

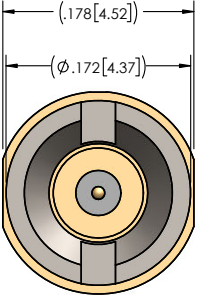
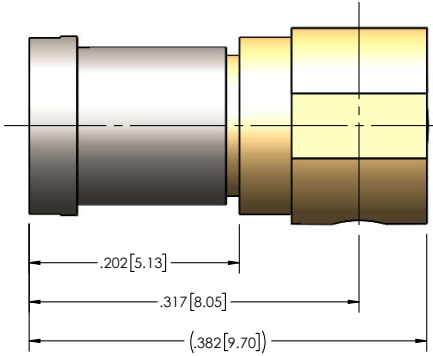



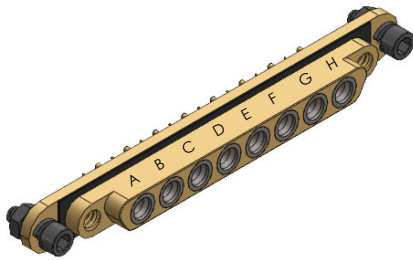


SMPM-T 8872111G903-000

Right Angle Cable Mount Male for .047" Semi-Rigid or the flexible equivalent, snaps into male cable mount housing, reference Delta housing Part # 21-10460-08

Part Number	Configuration	Cable	CC Termination	OC Termination
8872111G903-000	Right Angle	.047" SR or Flex	One-Step (solderless)	Direct Solder
Product Features				
Frequency	40 GHz			
CC Gender	Male			
Durability	1000 Cycles			
CC & Body Material	HT Be Cu			
CC & Body Plating	Gold			
Insulator	PTFE			
Bushing Material	CRS			

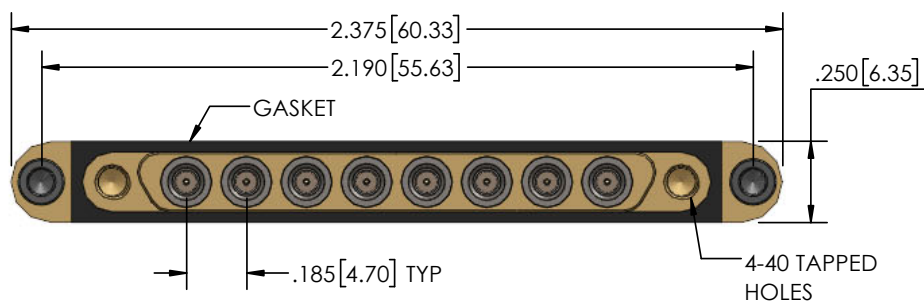
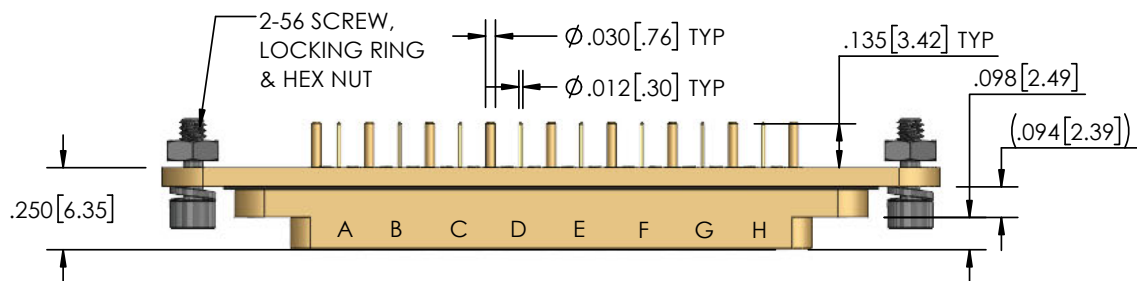





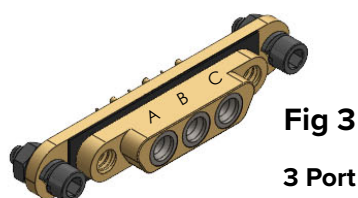
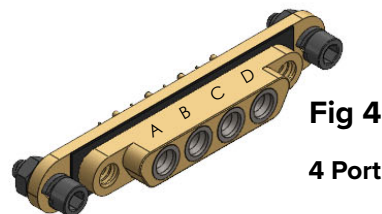
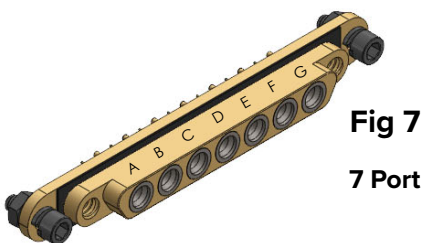
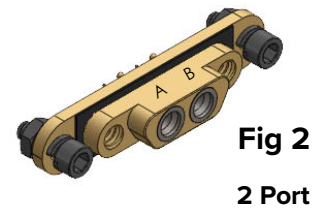
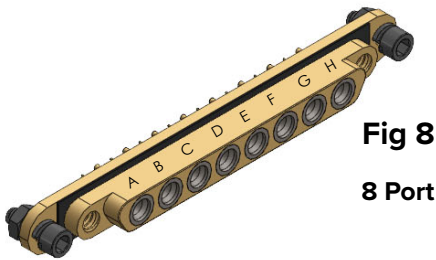
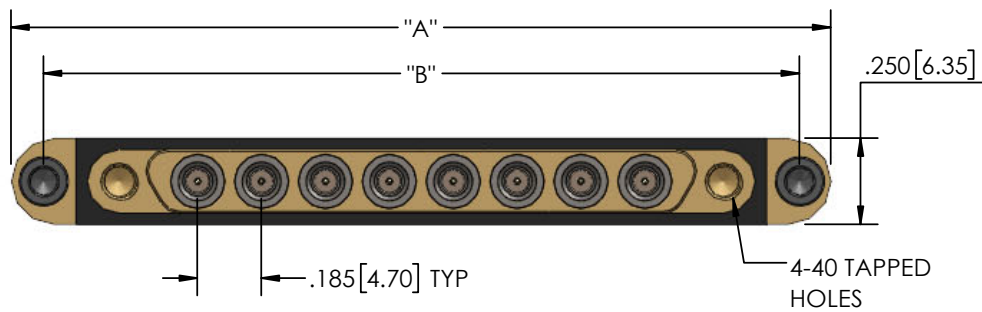
SMPM-G 8869000G91P-049

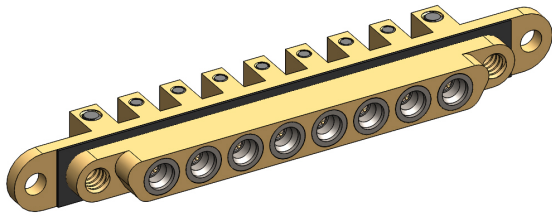
8 Port PCB Mount
 Vertical Launch Male With
 4-40 UNC-2B Screws

Part Number	Housing Configuration	PCB Mount	CC Termination	OC Termination
8869000G91P-049	Staight	Vertical Launch	Thru Hole	Thru Hole
Product Features				
Housing Material	Brass	Interface Seal Material	Silicone Rubber	
Housing Plating	Gold	Port Identifiers	Laser Marked A-H	
Hardware Material	Steel	Distance Between Ports	.185"	
Hardware Plating	Passivated	Block Height & Width	.250"	



Dimensions For 2 Port Thru 8 Port								
Distance Between All Ports: .185" TYP Height & Width All Blocks .250" TYP								
Delta Part #	A	B	Ports		Delta Part #	A	B	Ports
Fig 2 - 8869000G91P-101	1.265	1.077	2		Fig 6 - 8869000G91P-105	2.005	1.817	6
Fig 3 - 8869000G91P-102	1.450	1.262	3		Fig 7 - 8869000G91P-106	2.190	2.002	7
Fig 4 - 8869000G91P-103	1.635	1.447	4		Fig 8 - 8869000G91P-049	2.375	2.187	8
Fig 5 - 8869000G91P-104	1.820	1.632	5					

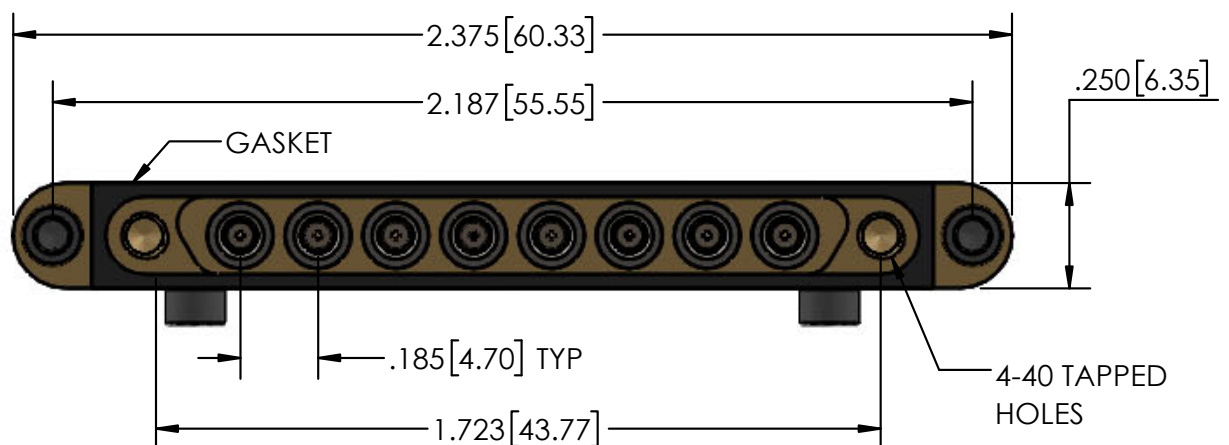
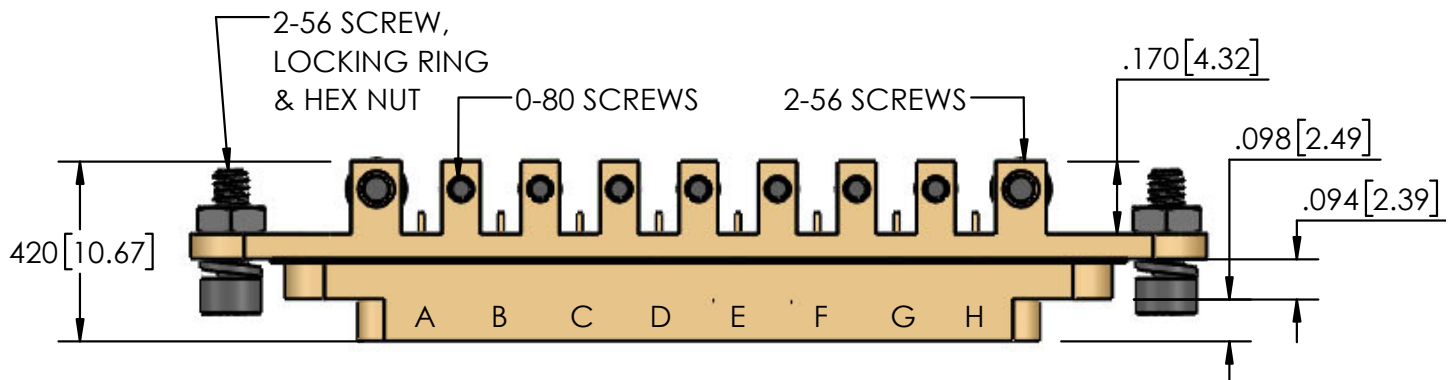




SMPM-G 8869000G91P-048

8 Port PCB Mount
Edge Launch Male With
4-40 UNC-2B Screws

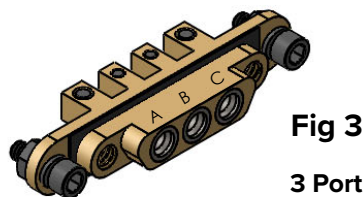
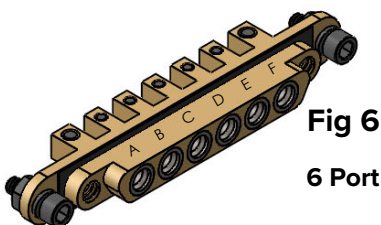
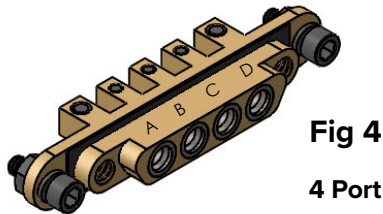
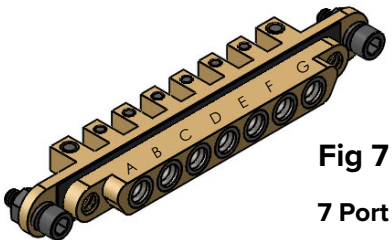
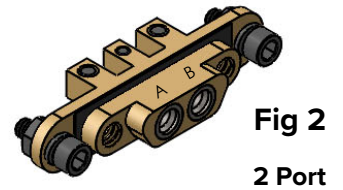
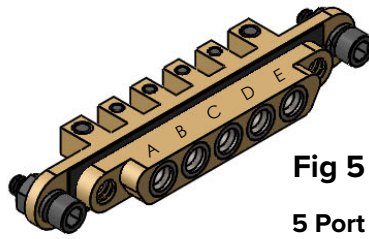
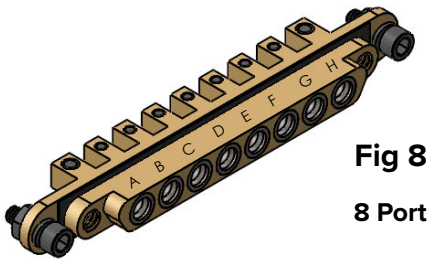
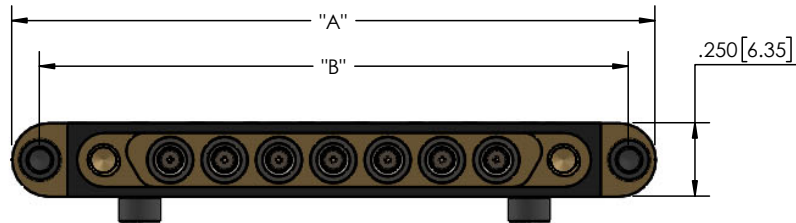
Part Number	Housing Configuration	PCB Mount	CC Termination	OC Termination
8869000G91P-048	Right Angle	Edge Launch	Surface Mount	Surface Mount
Product Features				
Housing Material	Brass	Interface Seal Material	Silicone Rubber	
Housing Plating	Gold	Port Identifiers	Laser Marked A-H	
Hardware Material	Steel	Distance Between Ports	.185"	
Hardware Plating	Passivated	Block Height & Width	.250"	



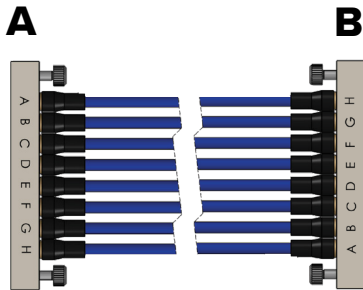
Dimensions For 2 Port Thru 8 Port

Distance Between All Ports: .185" TYP Height & Width All Blocks .250" TYP

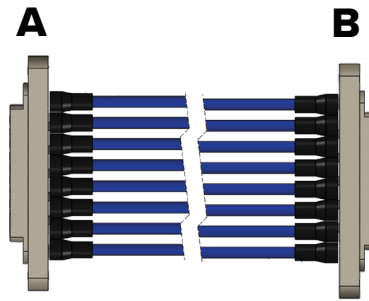
Delta Part #	A	B	Ports	Delta Part #	A	B	Ports
Fig 2 - 8869000G91P-095	1.265	1.077	2	Fig 6 - 8869000G91P-099	2.005	1.817	6
Fig 3 - 8869000G91P-096	1.450	1.262	3	Fig 7 - 8869000G91P-0100	2.190	2.002	7
Fig 4 - 8869000G91P-097	1.635	1.447	4	Fig 8 - 8869000G91P-048	2.375	2.187	8
Fig 5 - 8869000G91P-098	1.820	1.632	5				



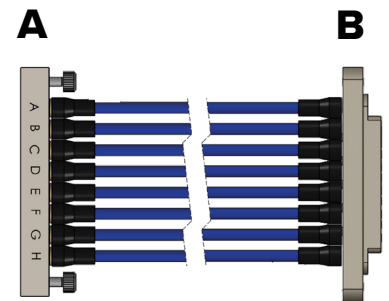
Build Your Own SMPM-G Assembly



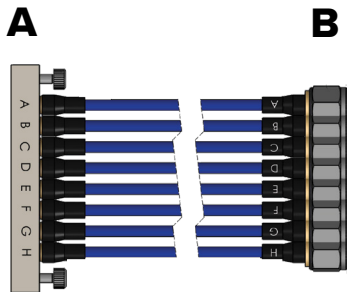
Configuration 1
Female to Female



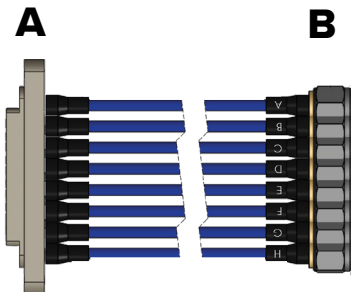
Configuration 2
Male to Male



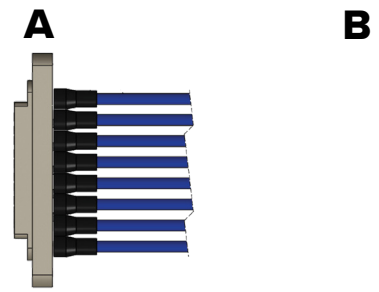
Configuration 3
Female to Male



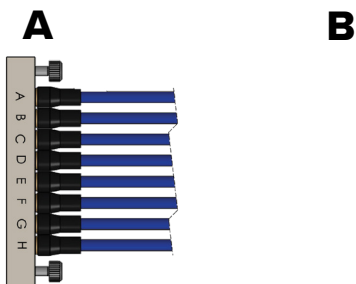
Configuration 4
Female to Discrete RF



Configuration 5
Male to Discrete RF



Configuration 6
Male to Blunt Cut



Configuration 7
Female to Blunt Cut





Build Your Own SMPM-G Cable Assembly

Configuration # _____

Ports Per Housing
 Housing A: ___ B: ___

Begin a Cable Gang Mount ▶▶

Choose Configuration On Left

1. F - F	5. M - Discrete RF
2. M - M	6. M - Blunt Cut
3. F - M	7. F - Blunt Cut
4. F - Discrete RF	

Choose From 2 to 8 Port Housing A & B:

Choose Connector Options

Select Connector Housing A: _____ Housing B: _____

- Straight Female C1
- R/A Female C2
- Straight Male C3
- R/A Male C4
- Other C5

Define length of assembly in inches, from the end of the straight connectors & from the centerline of R/A connectors

Choose Length of Cable

Selects Cable Type _____

Choose Cable Type

- Flex SR
- Semi-Rigid

Choose .047" .086"

Select Cable Diameter _____

Provide Target Return Loss or VSWR Max. Frequency

VSWR

Insertion Loss

Choose Frequency Requirements DC-65 GHz

Shrink Sleeves

Shrink Sleeve Markings

A Delta Finished Customized Gang Mount Cable Assembly ◀◀

Provide Target Insertion Loss or VSWR Max. Frequency

Provide Max. Operating Frequency

Labels & Identification Circle Your Choices		
Connector A Shrink Tubing	Yes - .500"	No Tubing
Add Marking:		
Connector B Shrink Tubing	Yes - .500"	No Tubing
Add Marking:		
Center Label, .750"	Yes - .750"	No Tubing
Add Marking:		

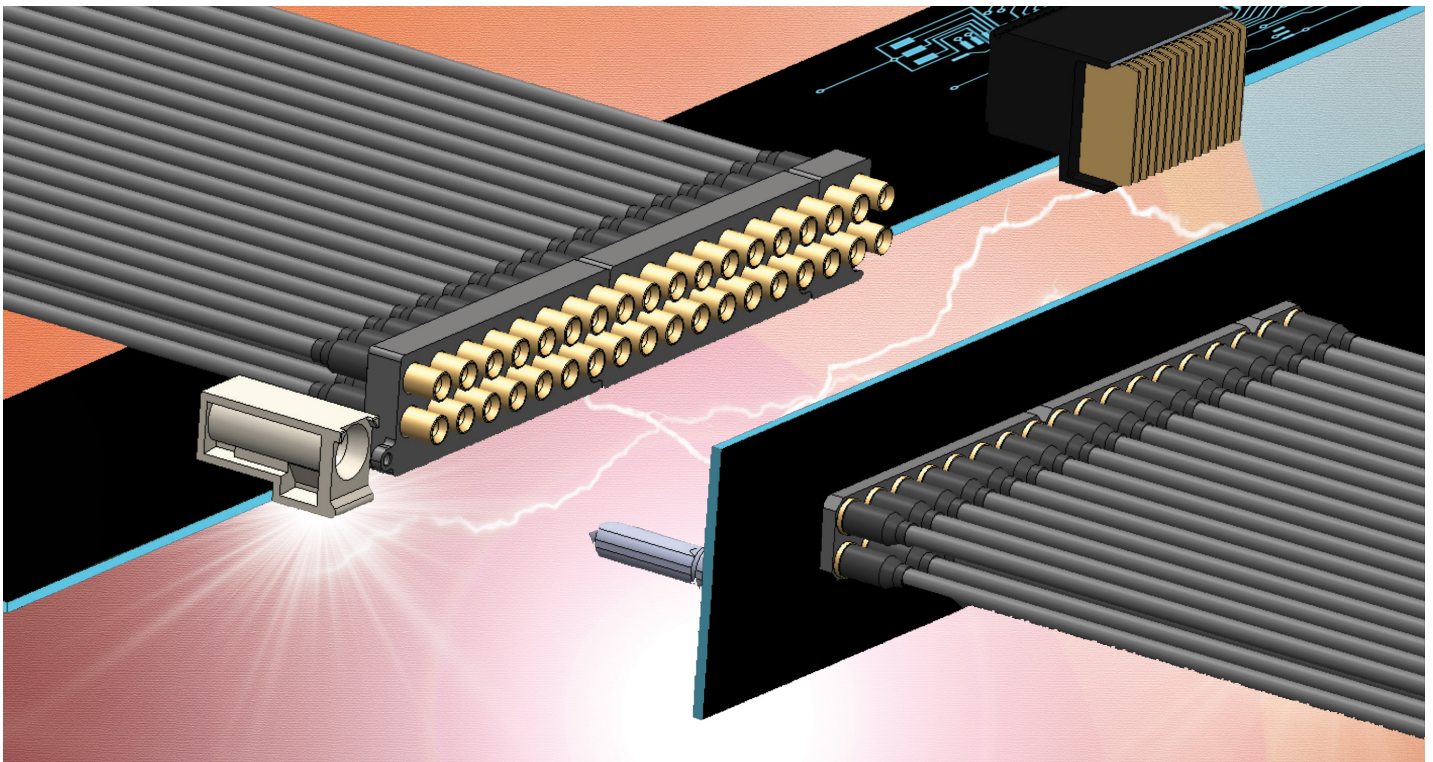
SMP-G, SMPM-G and SMP3-G Cable Assemblies.



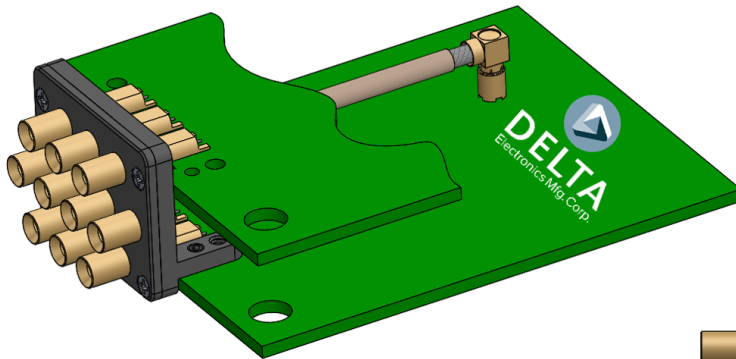
Delta offers custom RF cables with either .047" or .086" semi-rigid or the flexible equivalents. Lower loss cable options, with VoP's up to 83%, may also be available for specific configurations.

Insertion loss, return Loss, phase and delay measurements are available up to 65 GHz.

Delta's cable assembly technicians are trained to IPC-A-620 and J-STD-001 inspection and soldering.

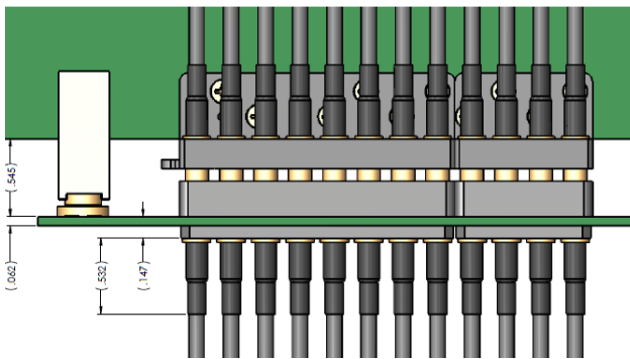
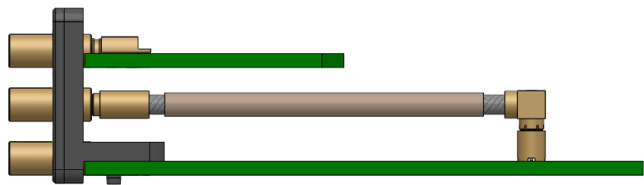


SMP-G, SMPM-G and SMP3-G PCB Board Mounts



VITA 67.3 offers a new design option where you now can launch directly from the Plug-In Connector Module directly to a PCB.

The concept shown includes an example of two PCB options: Direct to PCB using edge launch or cables.



In addition to SMPM-G, Delta provides ganged RF solutions using the SMP and SMP3 interfaces. Housings are standardized with 2, 3, 4, 5, 6, 7, and 8 port designs. Critical interface dimensions meet Mil-STD-348, DSCC 94007, 94008, IEC 61169-60 and IEC 61169-44 industry specifications as applicable.

Custom configurations can be designed for all ganged series including SMP-G, SMPM-G and SMP3-G with up to to four rows and SMP port counts up to 16, SMPM port counts up to 32 and SMP3 port counts up to 64. From a dimensional perspective, the center-to-center spacing of ports for an SMP-G is .240", the SMPM-G is .185" and the SMP3-G is .098".

Delta's hyper-responsive engineering team will customize mechanical layouts for varying board thicknesses, unique footprints, custom cable designs and extreme mechanical, electrical or environmental requirements.

Vita 67.1, 67.2 and 67.3 Housings and SMPM connector designs are also available with many configurations already stocked with Delta's franchised distributors.

SMPM-G Cable Options

Cable Options

Mechanical	.040"	.047"	.086"
Center Conductor	.008"	.011"	.020"
Dielectric	.026"	.036"	.064"
Braid	.034"	.047"	.085"
Outer Jacket	.045"	.056"	.104"
Static Bend Radius	1.6mm	5mm	6.35mm
Dynamic Bend Radius	3.2mm	10mm	12.7mm

Materials	.040"	.047"	.086"
Center Conductor	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper
Dielectric	PTFE	PFA	PTFE
Inner Shield	Flat SPC	Flat SPC	Flat SPC
Outer Shield	Silver Plated Copper	Silver Plated Copper	Silver Plated Copper
Outer Jacket	FEP	FEP	FEP

Electrical	.040"	.047"	.086"
Operating Frequency	110 GHz	50 GHz	40 GHz
Impedance	50 Ω	50 Ω	50 Ω
VoP (%)	71.00%	70.00%	70.00%
Shielding Effectiveness	> 90 dB	> 90 dB	> 90 dB
Attenuation dB/ft			
1.0 GHz	0.60	0.35	0.21
2.0 GHz	0.86	0.53	0.31
8.0 GHz	1.74	1.15	0.66
12 GHz	2.14	1.44	0.83
18 GHz	2.64	1.85	1.06
26 GHz	3.18	2.22	1.34
40 GHz	3.96	2.83	1.73
50 GHz	4.44	3.20	
60 GHz	4.88		

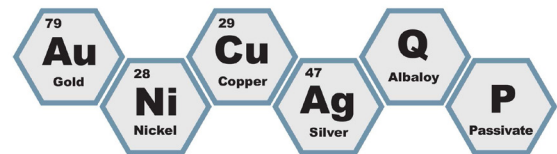
Environmental			
Operating Temp Range	-65° C to + 150° C	-65° C to + 150° C	-55° C to + 125° C

Delta Vertical Integration In-house Automated Precious Metal Plating

Connectors are only as good as their plating, and that's why we decided this important process needed to be on-site. Having our own plating line, yields high quality, low costs, and reduced lead times. Call Delta for your electroplating needs. We also encourage current and potential customers to tour our facility.



Delta Plating Finishes:



Automated Tin/Lead Dipping For SMP-T, SMPM-T & SMP3-T

Our customized automated tin / lead dipping equipment enables high volume processing of our SMP-T, SMPM-T and SMP3-T PCB mount configurations. The finished connector is of high quality, with a consistent tin/lead flowed finish. Experience the Delta Difference!

Spring Loaded Bullets

Feature:

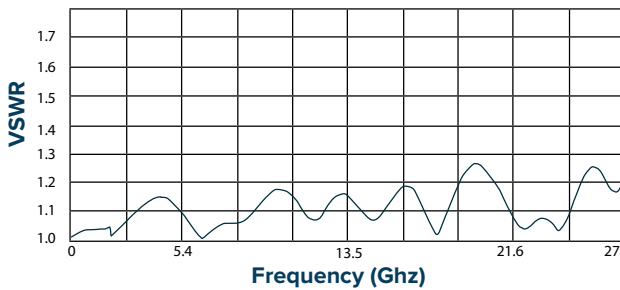
- Increased axial & radial float
- One side has as a low insertion SMP interface
- High compression load on interfaces

Benefit:

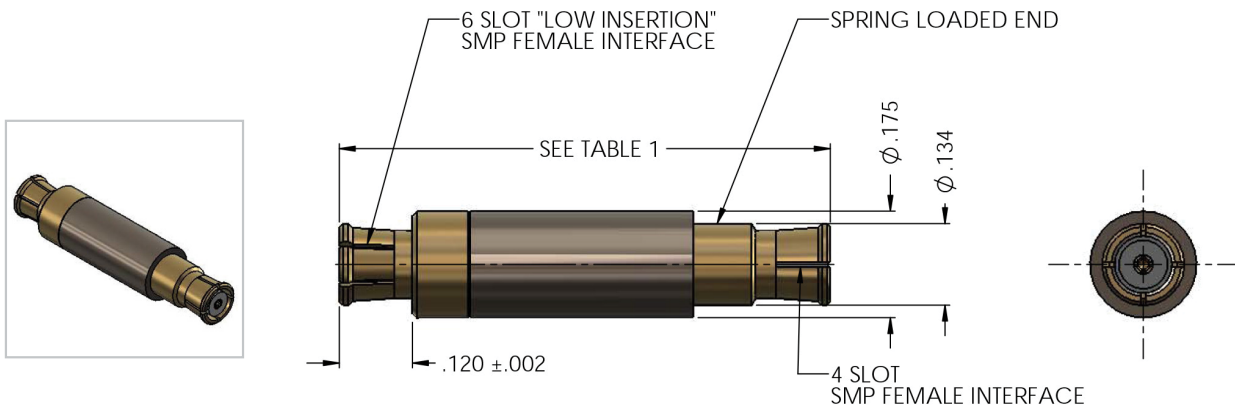
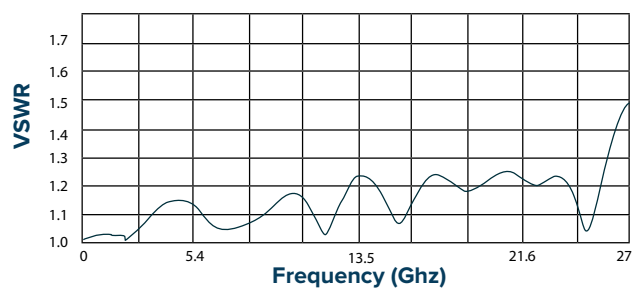
- Enhanced self alignment during mating
- Consistently un-mate from the same end
- Improved VSWR at higher frequencies

VSWR

Uncompressed



Compressed



VSWR: 1.5:1 Max

Frequency Range: DC - 26.5 GHz

Float: Axial .075 / Radial .015

Delta P/N	Uncompressed Length	Fully Compressed Length
8628000G911-005	1.075	1.000
8628000G911-004	.675	.600

Please contact the factory for additional lengths.

8628000G911 - XXX

Spring Loaded Female to Female "Bullet" Adapter

SMP / SMPM / SMP3 Bullets

Delta's Bullet Adapters

Ideal for board-to-board mechanical schemes, Delta's Bullet Adapters make the connections and accommodate varying board-to-board stack heights.

Available in fixed lengths and spring loaded configurations.

Call Delta today to find the perfect fit! 978-927-1060 or email sales@deltarf.com



SMPM-G Tooling



BASE TOOL



T38-88006-01



EXTRACTION HEAD

T33-88001-01



INSERTION HEAD



DELTA
Electronics Mfg. Corp.

BLIND MATE RF GANG MOUNTS



sales@deltarf.com (978) 927-1060 deltarf.com

416 Cabot Street, Beverly, MA 01915