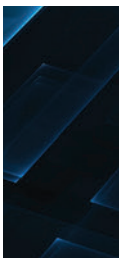


# SMP & SMPM

## RF Interconnect Solutions



**WINCHESTER**  
ELECTRONICS

CONNECTING  
INNOVATION  
TO APPLICATION®

A large orange rectangular block containing the company logo and tagline. The logo features a stylized wave or signal icon above the company name. The tagline is positioned below the name.

Custom  
interconnect  
company servicing  
high-cost-of-failure  
end markets  
and customers

## Markets we serve

Medical  
Military/Aerospace  
Test & Measurement  
Data Infrastructure  
Marine Oil & Gas  
Rail Mass Transit  
Broadcast  
Semiconductor



A broad range of RF, Signal, Power, and Fiber products

## Why Winchester?

- ◆ Global Footprint - World-class Manufacturing Facilities
- ◆ Unparalleled Engineering Expertise
- ◆ World-class Prototype and Test Lab
- ◆ Personalized One-on-One Design & Development Support
- ◆ High Level of Customer Intimacy
- ◆ Customer Service Excellence
- ◆ Global Supply Chain
- ◆ Quality Assurance
- ◆ Custom Solutions Help Reduce Costs without Compromising Quality

## Certifications

AS 7003 - SAE Aerospace Standard for Electronics  
AS 9100 - Aerospace Quality Management System  
ISO 9001 - Quality Management Systems  
ISO 14001 - Environmental Management System  
ISO 13485 - Medical Device Quality Management System  
OHSAS 18001 - Occupational Health and Safety



All cable and wire harness assemblies are built and inspected to IPC/WHMA-A-620B Class 3 Standards

Quality Systems comply with FDA 21 CFR Part 820

# Winchester SMP & SMPM RF Interconnect Solutions

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# Winchester SMP & SMPM RF Interconnect Solutions

## Product Visuals



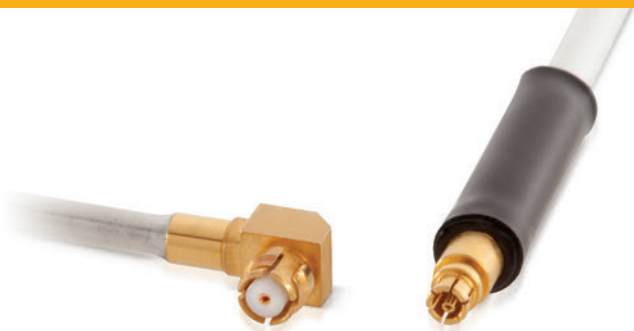
SRC Steel-Flex 405 with SMPM Female Connectors



.047 Low Loss Semi-Rigid with SMP Female Swept Right-Angle Connectors  
and .086 Low Loss Semi-Rigid with SMP Female Swept Right-Angle Connectors



.086 Low Loss Semi-Rigid with SMP Female Swept Right-Angle Connector  
and SRC Steel-Flex 405 with SMPM Female Connector



### CABLE ASSEMBLY ATTRIBUTES

- ◆ Cable assemblies are tested for Insertion Loss and VSWR upon request.
- ◆ Our low loss semi-rigid cable assemblies have lower structural VSWR, which reduces variations in attenuation and phase compared to lower VoP cable assemblies.
- ◆ 50 Ohm SMP to 40.0 GHz and SMPM to 65.0 GHz Semi-Rigid and Flexible Semi-Rigid Cable Assemblies.
- ◆ Bare Copper, Plated Copper, Plated Aluminum, and Formable Semi-Rigid Cable Assemblies available.
- ◆ Assemblies available with flexible alternatives to semi-rigid cable providing good flexibility and easy routing. Hand formable cable also available, which provides easy hand-forming to complex shapes without the use of tooling.
- ◆ CNC bending systems provide repeatable precision custom bent configurations and lengths - submit prints/coordinates to factory.
- ◆ Operating temperatures to +165 degrees C.
- ◆ Cable retention meets DSCC drawing 94008 for SMP and DSCC drawings 10020/10026 for SMPM on semi-rigid cables.
- ◆ Certified soldered cable assemblies per IPC/WHMA-A-620.
- ◆ Connector Interfaces meet the requirements of MIL-STD-348.
- ◆ Connectors meet the environmental specifications of MIL-PRF-39012.
- ◆ Non-Magnetic and RoHS Connectors and Cable Assemblies are available.
- ◆ SMP Connector Mating Durability: Smooth Bore is 1000 mates, Limited Detent is 500 mates, and Full Detent is 100 mates.
- ◆ SMPM Connector Mating Durability: Smooth Bore is 500 mates and Full Detent is 100 mates.
- ◆ Our global engineering team is available to assist with your technical requirements.

### CONNECTOR MATERIALS

- ◆ Outer Contacts: BeCu (Beryllium Copper)
- ◆ Bodies: Brass
- ◆ Center Contacts: BeCu (Beryllium Copper) (female) / Brass (male)
- ◆ Insulators: PTFE
- ◆ Bodies and Contacts: Gold Plated

### AVAILABLE CONNECTOR INTERFACES

- ◆ SMP and SMPM
- ◆ Other industry standard connector interfaces available upon request.

# Winchester SMP & SMPM RF Interconnect Solutions

## .047 OD Cable Specification Sheet



		CABLE SERIES			
ELECTRICAL DATA		LOW LOSS & PHASE STABLE SEMI-RIGID .047 COPPER	SEMI-RIGID .047 COPPER	FORMABLE .047 ALUMINUM	FORMABLE .047 TIN-SOAKED COPPER
Max Frequency (GHz)		65.0	65.0	65.0	20.0
Impedance		50 Ohms	50 Ohms	50 Ohms	50 Ohms
Velocity of Propagation		83.0%	69.5%	69.5%	69.5%
Time Delay (ns/ft)		1.22	1.46	1.46	1.46
Capacitance (pF/ft)		24.5	29.0	29.0	29.0
Attenuation		See Information Below	See Information Below	See Information Below	See Information Below
RF Shielding (dB) to 18.0 GHz		>130	>130	>130	>110
MECHANICAL DATA					
Cable OD (inches)		0.047	0.047	0.047	0.047
Jacket Plating		Bare, Tin, Tin/Lead, Silver	Bare, Tin, Tin/Lead, Silver	Tin, Tin/Lead, Silver	Tin-Soaked Copper
Jacket Material		Copper	Copper	Aluminum	Tin-Soaked Copper
Dielectric		T-PTFE	PTFE	PTFE	PTFE
Minimum Bend Radius (inches)		0.15	0.05	0.05	0.10
ENVIRONMENTAL DATA					
Operating Temperature Range, C		-55 to +165	-40 to +100	-40 to +100	-40 to +165
FREQUENCY (GHz)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)
0.5	0.22	0.24	0.24	0.25	
1	0.31	0.34	0.34	0.37	
5	0.71	0.79	0.79	0.89	
10	1.00	1.14	1.14	1.31	
20	1.43	1.66	1.66	1.92	
40	2.00	2.30	2.30	N/A	
60	3.00	3.50	3.00	N/A	

# Winchester SMP & SPM RF Interconnect Solutions

## .086 OD (RG405) Cable Specification Sheet



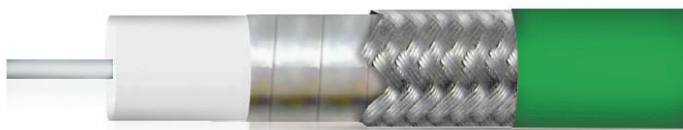
CABLE SERIES				
ELECTRICAL DATA	LOW LOSS & PHASE STABLE SEMI-RIGID .086 COPPER	SEMI-RIGID .086 COPPER	FORMABLE .086 ALUMINUM	FORMABLE .086 TIN-SOAKED COPPER
Max Frequency (GHz)	64.0	61.0	61.0	20.0
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Velocity of Propagation	83.0%	69.5%	69.5%	69.5%
Time Delay (ns/ft)	1.22	1.46	1.46	1.46
Capacitance (pF/ft)	24.5	29.0	29.0	29.0
Attenuation	See Information Below	See Information Below	See Information Below	See Information Below
RF Shielding (dB) to 18.0 GHz	>130	>130	>130	>110
MECHANICAL DATA				
Cable OD (inches)	0.086	0.086	0.086	0.086
Jacket Plating	Bare, Tin, Tin/Lead, Silver	Bare, Tin, Tin/Lead, Silver	Tin, Tin/Lead, Silver	Tin-Soaked Copper
Jacket Material	Copper	Copper	Aluminum	Tin-Soaked Copper
Dielectric	T-PTFE	PTFE	PTFE	PTFE
Minimum Bend Radius (inches)	0.15	0.10	0.10	0.13
ENVIRONMENTAL DATA				
Operating Temperature Range, C	-55 to +165	-55 to +125	-55 to +125	-40 to +165
FREQUENCY (GHz)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)
0.5	0.12	0.13	0.13	0.13
1	0.14	0.20	0.20	0.22
5	0.38	0.46	0.46	0.55
10	0.51	0.68	0.68	0.81
20	0.73	1.00	1.00	1.20
40	1.50	1.80	1.80	N/A
60	1.80	2.10	2.10	N/A

# Winchester SMP & SPM RF Interconnect Solutions

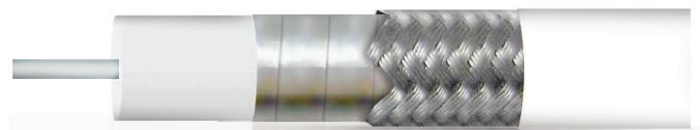
## Flexible Alternatives Cable Specification Sheet



ELECTRICAL DATA	CABLE SERIES	
	H-FLEX 047	SRC STEEL-FLEX 405
Max Frequency (GHz)	40.0	60.0
Impedance	50 Ohms	50 Ohms
Velocity of Propagation	69.5%	69.5%
Time Delay (ns/ft)	1.46	1.46
Capacitance (pF/ft)	29.4	29.4
Attenuation	See Information Below	See Information Below
RF Shielding (dB) to 18.0 GHz	>110	>110
MECHANICAL DATA		
Cable OD (inches)	0.067	0.104
Jacket Color	Green	White
Jacket Material	FEP	FEP
Dielectric	PTFE	PTFE
Minimum Bend Radius (inches)	0.50	0.50
ENVIRONMENTAL DATA		
Operating Temperature Range, C	-55 to +125	-55 to +200
FREQUENCY (GHz)	INSERTION LOSS (dB/ft)	INSERTION LOSS (dB/ft)
0.5	0.25	0.15
1	0.35	0.23
5	0.80	0.52
10	1.30	0.80
20	1.80	1.00
40	2.40	1.65



H-FLEX 047



SRC Steel-Flex 405

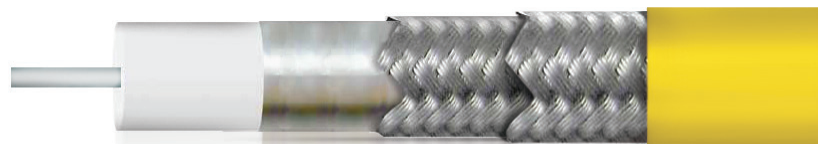


# Winchester SMP & SPM RF Interconnect Solutions

## SRC 316 Triple Shield Flexible Cable Specification Sheet



CABLE SERIES	
SRC 316 TS (TRIPLE-SHIELD)	
ELECTRICAL DATA	
Max Frequency (GHz)	18.0
Impedance	50 Ohms
Velocity of Propagation	71.0%
Time Delay (ns/ft)	1.54
Capacitance (pF/ft)	30.8
Attenuation	See Information Below
RF Shielding (dB) to 18.0 GHz	>110
MECHANICAL DATA	
Cable OD (inches)	0.020
Jacket Color	Yellow
Jacket Material	PVC
Dielectric	X-Linked Polyolefin
Flame Rating	UL 1581
Halogen	IEC 754 Approved
Minimum Bend Radius (inches)	0.30
ENVIRONMENTAL DATA	
Operating Temperature Range, C	-40 to +105
FREQUENCY (GHz)	INSERTION LOSS (dB/ft)
0.5	0.15
1	0.22
5	0.58
10	0.88
18	1.26



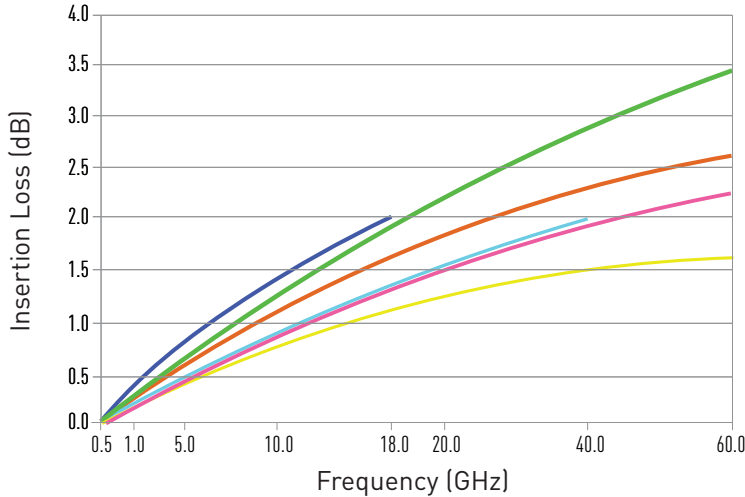
SRC 316 TS

# Winchester SMP & SMPM RF Interconnect Solutions

## Attenuation and Phase vs. Temperature

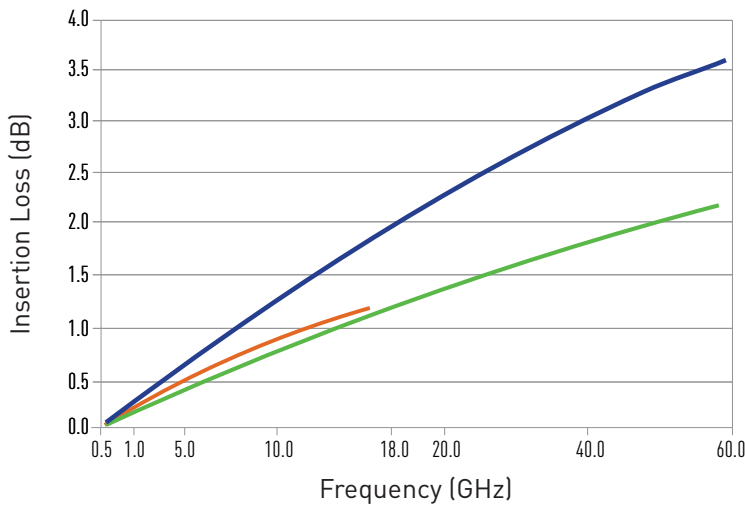


**SEMI-RIGID ATTENUATION IN dB/FT.**



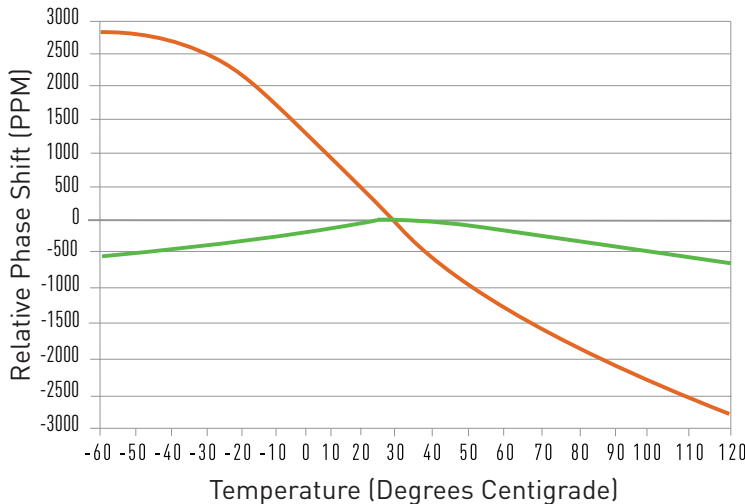
- Low Loss/Phase Stable Semi-Rigid .047 Copper
- Semi-Rigid .047 Copper & Formable .047 Aluminum
- Formable .047 Tin-Soaked Copper
- Formable .086 Tin-Soaked Copper
- Semi-Rigid .086 Copper & Formable .086 Aluminum (RG405)
- Low Loss/Phase Stable Semi-Rigid .086 Copper

**FLEXIBLE CABLE ATTENUATION IN dB/FT.**



- SRC 316 TS (Triple-Shield)
- SRC Steel-Flex 405
- H-Flex 047

**PHASE VS. TEMPERATURE**



- Solid PTFE Cable 69% VoP
- Expanded PTFE Cable 83% VoP

# Winchester SMP & SMPM RF Interconnect Solutions

## Connector Specification Sheet



### COMPONENTS

Bodies	Gold Plated Brass
Bodies (Hermetic)	Aluminum, Titanium, Kovar, and Stainless Steel
Outer Contacts	Gold Plated Beryllium Copper
Center Contacts	Gold Plated Beryllium Copper (female) / Brass (male)
RF Grounding Spring (Hermetic)	Gold Plated Beryllium Copper
Weld Flange (Hermetic)	Aluminum
Male Center Contacts (Hermetic)	Gold Plated Nickel-Iron-Cobalt Alloy
Insulator	PTFE (Polytetrafluoroethylene)
Insulator (Hermetic)	Corning 7070 Equivalent Glass (Matched Seal)

### MATERIAL SPECIFICATIONS

Beryllium Copper	ASTM B196/B196M
Titanium	ASTM B265 OR B348
Nickel - Iron - Cobalt Alloy	ASTM F15
Aluminum Alloy 4047	AWS A5.8
Beryllium Copper Alloy 172/173	ASTM B194
Brass	ASTM B16
PTFE	ASTM D1710

### MECHANICAL SPECIFICATIONS

Corrosion Resistance	MIL-STD-202 Method 101 Condition B
Vibration	MIL-STD-202 Method 204 Condition D
Shock	MIL-STD-202 Method 107 Condition B

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range, C	-65 to +165
Moisture Resistance	MIL-STD-202 Method 106
Corrosion	MIL-STD-202 Method 101

### FINISH SPECIFICATIONS

Gold	ASTM B488
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### CONNECTOR OPTIONS

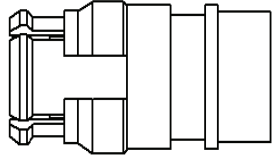
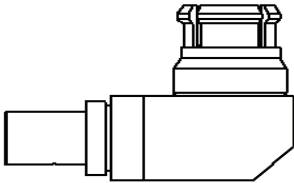
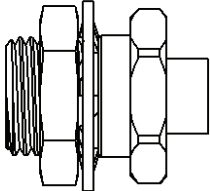
Interface	SMP	SMPM
Mating Cycles - Smooth Bore	1000	500
Mating Cycles - Limited Detent	500	N/A
Mating Cycles - Full Detent	100	100

# Winchester SMP & SMPM RF Interconnect Solutions

## Cable Mount Connector Drawings



### CONNECTOR DIMENSION

Connector Interface	SRC Cable Series	Part Number	Overall Dimension (inches) Length and Height or OD
 <p>Straight SMP Female</p>	.047" Low Loss Semi-Rigid	3615-500-04702H	.140 OD, .250 Long
	.047" Semi-Rigid	3615-500-04701H	.140 OD, .250 Long
	H-Flex 047	3615-500-04701H	.140 OD, .250 Long
	.086" Low Loss Semi-Rigid	3615-500-08502H	.140 OD, .250 Long
	.086" Semi-Rigid	3615-500-08501H	.140 OD, .250 Long
	SRC Steel-Flex 405	3615-500-08501H	.140 OD, .250 Long
	.086" Hand Formable	3615-500-08501H	.140 OD, .250 Long
	Triple Shielded 316	Consult Factory	Not Standard Product
 <p>Right-Angle SMP Female</p>	.047" Low Loss Semi-Rigid	3616-300-04702H	.348 Long x .261 High
	.047" Semi-Rigid	3616-500-04702H	.348 Long x .261 High
	H-Flex 047	3616-500-04702H	.348 Long x .261 High
	.086" Low Loss Semi-Rigid	3616-300-08502H	.348 Long x .261 High
	.086" Semi-Rigid	3616-500-08502H	.348 Long x .261 High
	SRC Steel-Flex 405	3616-500-08502H	.348 Long x .261 High
	.086" Hand Formable	3616-500-08502H	.348 Long x .261 High
	Triple Shielded 316	Consult Factory	Not Standard Product
 <p>Straight SMP Bulkhead Male</p>	.047" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.047" Semi-Rigid	Consult Factory	Not Standard Product
	H-Flex 047	Consult Factory	Not Standard Product
	.086" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.086" Semi-Rigid	3612-599-08501H* 3612-599-08502H** 3612-599-08503H****	.327 Long, with 10-56UNS Thread, Panel Mount, Panel Thickness .091
	SRC Steel-Flex 405	3612-599-08501H* 3612-599-08502H** 3612-599-08503H****	.327 Long, with 10-56UNS Thread, Panel Mount, Panel Thickness .091
	.086" Hand Formable	3612-599-08501H* 3612-599-08502H** 3612-599-08503H****	.327 Long, with 10-56UNS Thread, Panel Mount, Panel Thickness .091
	Triple Shielded 316	Consult Factory	Not Standard Product

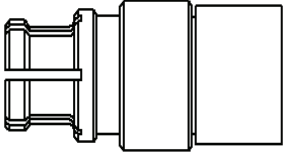
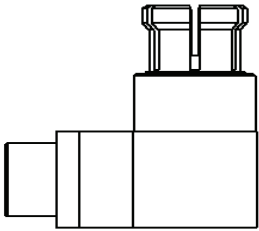

\*Full Detent  
 \*\*Limited Detent  
 \*\*\*Smooth Bore

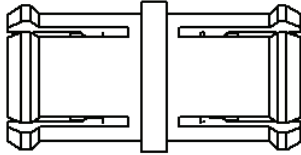
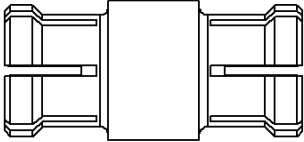
# Winchester SMP & SPM RF Interconnect Solutions

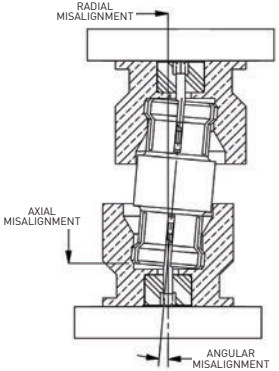
## Cable Mount Connector Drawings

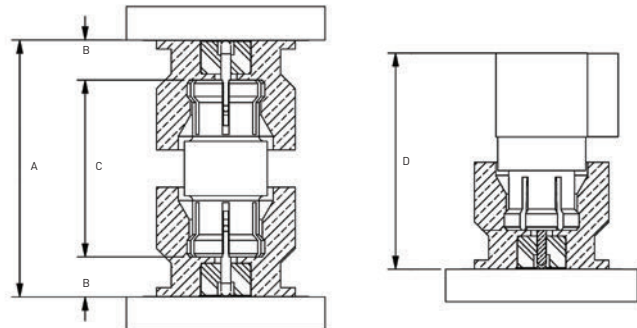


### CONNECTOR DIMENSION

Connector Interface	SRC Cable Series	Part Number	Overall Dimension (inches) Length and Height or OD
 <p>Straight SMPM Female</p>	.047" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.047" Semi-Rigid	3623-500-04701H	.124 OD, .285 Long
	H-Flex 047	3623-500-04701H	.124 OD, .285 Long
	.086" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.086" Semi-Rigid	3623-500-08501H	.124 OD, .330 Long
	SRC Steel-Flex 405	3623-500-08501H	.124 OD, .330 Long
	.086" Hand Formable	3623-500-08501H	.124 OD, .330 Long
	Triple Shielded 316	Consult Factory	Not Standard Product
 <p>Right-Angle SMPM Female</p>	.047" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.047" Semi-Rigid	362D-500-04702H (Swept)	.22 Long x .242 High
	H-Flex 047	362D-500-04702H (Swept)	.22 Long x .242 High
	.086" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.086" Semi-Rigid	362D-500-08502H (Swept)	.22 Long x .242 High
	SRC Steel-Flex 405	362D-500-08502H (Swept)	.22 Long x .242 High
	.086" Hand Formable	362D-500-08502H (Swept)	.22 Long x .242 High
	Triple Shielded 316	Consult Factory	Not Standard Product
 <p>Straight SMPM Female with Retaining Sleeve</p>	.047" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.047" Semi-Rigid	Consult Factory	Not Standard Product
	H-Flex 047	Consult Factory	Not Standard Product
	.086" Low Loss Semi-Rigid	Consult Factory	Not Standard Product
	.086" Semi-Rigid	3623-500-08502H	.160 OD, .385 Long
	SRC Steel-Flex 405	3623-500-08502H	.160 OD, .385 Long
	.086" Hand Formable	3623-500-08502H	.160 OD, .385 Long
	Triple Shielded 316	Consult Factory	Not Standard Product

CONNECTOR DIMENSION		
Connector Interface	Part Number	Overall Dimension (inches)
 <p>SMP Female to Female Bullet</p>	3619-361-00001H	0.254 Long, 0.130 OD
 <p>SMPM Female to Female Bullet</p>	362G-362-00001H	0.21 Long, 0.098 OD

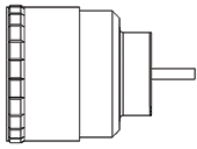
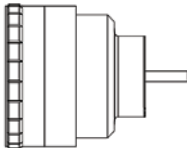
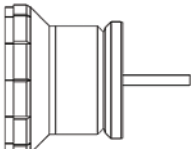
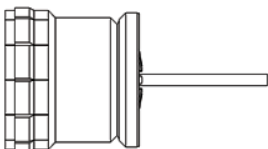
RADIAL & AXIAL MISALIGNMENT TOLERANCES				
		Radial	Axial	Angular
	SMPM		± 0.010	0.000/0.010
SMP		± 0.010	0.000/0.010	8° Max

MATED PAIR HEIGHTS					
		A	B	C	D
	SMPM		0.305	0.048	0.210
SMP		0.434	0.090	0.254	0.358

# Winchester SMP & SPM RF Interconnect Solutions

## Hermetic Feedthrough Drawings



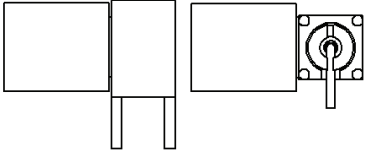
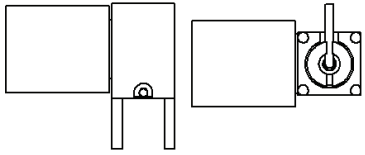
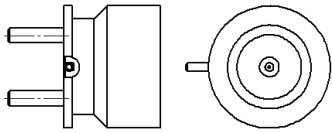
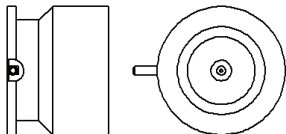
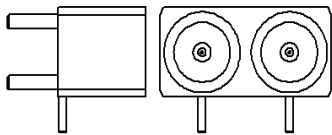
CONNECTOR DIMENSION			
Connector Interface	Description	Part Number	Interface
 SMP Adaptable Male Titanium Feedthrough	Laser Weldable 50 Ohm Feedthrough, .015 Diameter Center Contact, Press-In	SRIFT1020 - SB 130 A R	Smooth Bore
		SRIFT1020 - LD 130 A R	Limited Detent
		SRIFT1020 - FD 130 A R	Full Detent
 SMP Adaptable Male Aluminum Feedthrough	Laser Weldable 50 Ohm Feedthrough, .015 Diameter Center Contact, Press-In	SRIFT1021 - SB 130 A R	Smooth Bore
		SRIFT1021 - LD 130 A R	Limited Detent
		SRIFT1021 - FD 130 A R	Full Detent
 SMPM Adaptable Male Aluminum Feedthrough	Laser Weldable 50 Ohm Feedthrough, .012 Diameter Center Contact, Press-In	SRIFT1007 - SB 130 A R	Smooth Bore
		SRIFT1007 - LD 130 A R	Limited Detent
		SRIFT1007 - FD 130 A R	Full Detent
 SMPM Adaptable Male Titanium Feedthrough	Laser Weldable 50 Ohm Feedthrough, .012 Diameter Center Contact, Press-In	SRIFT1012 - SB 130 A R	Smooth Bore
		SRIFT1012 - LD 130 A R	Limited Detent
		SRIFT1012 - FD 130 A R	Full Detent

SRI Hermetics' laser weldable coaxial SMPM connectors are all available in Stainless Steel, Aluminum, and Titanium. With our explosion welded materials, we can adapt to virtually any material. All RF feedthroughs are made with nickel-iron-cobalt alloy in accordance with ASTM F15. Each contact is individually sealed with Corning 7070 equivalent glass. RF ground springs are BeCu alloy 172/173 in accordance with ASTM B 194.

# Winchester SMP & SMPM RF Interconnect Solutions

## PCB Connector Drawings

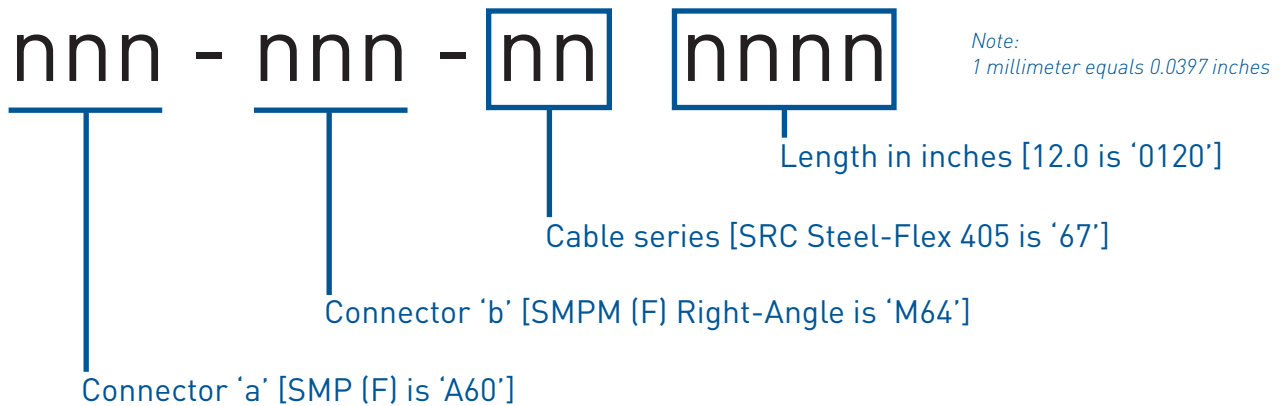
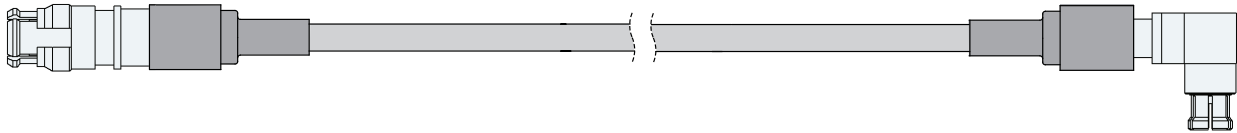


CONNECTOR DIMENSION			
Connector Interface	Overall Dimension (inches)	Part Number	Interface
 <p>Right-Angle SMP PCB Male, 4 Legs, Left Exit SMT Contact</p>	0.320 Long, 0.164 OD, 0.093 from Board to Center Line of Connector, 0.096 Legs with 0.10 Center to Center on Legs	361C-040-00701P	Smooth Bore
		Consult Factory	Limited Detent
		361C-040-00703P	Full Detent
 <p>Right-Angle SMP PCB Male, 4 Legs, Right Exit SMT Contact</p>	0.320 Long, 0.164 OD, 0.093 from Board to Center Line of Connector, 0.096 Legs with 0.10 Center to Center on Legs	361C-040-00702P	Smooth Bore
		Consult Factory	Limited Detent
		361C-040-00704P	Full Detent
 <p>SMPM Straight Male, Right-Angle Contact, PCB Receptacle</p>	0.165 OD, 0.206 High, Including 0.075 Legs	362A-052-00402H	Smooth Bore
		362A-052-00403H	Full Detent
 <p>SMPM Surface Mount Male, Smooth Bore</p>	0.165 OD, 0.127 High	362A-099-00401H	Smooth Bore
		362A-099-00402H	Full Detent
 <p>SMPM PCB Male, 2 Port, 4 Legs, SMT Contacts</p>	0.255 Long, 0.202 High Including 0.075 Legs, 0.130 Center Line to Center Line of Positions	Consult Factory	Smooth Bore
		362A-052-00401H	Full Detent



# Winchester SMP & SMPM RF Interconnect Solutions

## Part Numbering Diagrams



**EXAMPLE PART NUMBER**    A60-M64-670120

### CONNECTOR SERIES PART NUMBERS

SMP (F)	A60
SMP (F) Right-Angle	A64
SMP (M) Bulkhead	A54
SMPM (F)	M60
SMPM (F) Right-Angle	M64
SMPM (F) with Retaining Sleeve	M64R

### CABLE SERIES PART NUMBERS

.047" Low Loss Semi-Rigid	47L
.047" Semi-Rigid	47
H-Flex 047	27
.086" Low Loss Semi-Rigid	78L
.086" Semi-Rigid	78
SRC Steel-Flex 405	67
.086" Hand Formable	98
Triple Shielded 316	SRC316TS

Note: Contact factory for other available connectors (SMA, 2.4 mm, 2.9 mm, etc.)

# Winchester SMP & SMPM RF Interconnect Solutions

## MIL-C-17 Cross Reference Guide



### COPPER 50 OHM

MIL-C-17 #	SRC Haverhill Cable	Outer Conductor Dimension	Description
M17/154-00001	HC20000-1	.034"	Silver Plated Copper Clad Steel Center Conductor
M17/154-00002	HC20000-3	.034"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/151-00001	HC10000-1	.047"	Silver Plated Copper Clad Steel Center Conductor
M17-151-00002	HC10000-3	.047"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/133-RG405	HC70000-1	.086"	Silver Plated Copper Clad Steel Center Conductor
M17/133-00001	HC70000-3	.086"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/133-00002	HC70001-1	.086"	Silver Plated Copper Center Conductor - Non Magnetic
M17/133-00003	HC70001-3	.086"	Tin Plated, Silver Plated Copper Center Conductor - Non Magnetic
M17/133-00006	HC70000-1	.086"	Silver Plated Copper Clad Steel Center Conductor
M17/133-00007	HC70000-3	.086"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/133-00008	HC70001-1	.086"	Silver Plated Copper Center Conductor - Non Magnetic
M17/133-00009	HC70001-3	.086"	Tin Plated, Silver Plated Copper Center Conductor - Non Magnetic
M17/133-00016	HC70000-2	.086"	Silver Plated, Silver Plated Copper Clad Steel Center Conductor
N/A	HC35004-1	.118"	Silver Plated Copper Clad Steel Center Conductor, LD-PTFE
M17/130-RG402	HC90000-1	.141"	Silver Plated Copper Clad Steel Center Conductor
M17/130-00001	HC90000-3	.141"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/130-00004	HC90000-1	.141"	Silver Plated Copper Clad Steel Center Conductor
M17/130-00005	HC90000-3	.141"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/130-00012	HC90000-2	.141"	Silver Plated, Silver Plated Copper Clad Steel Center Conductor
N/A	HC90001-1	.141"	Silver Plated Copper Center Conductor - Non Magnetic
N/A	HC90001-3	.141"	Tin Plated, Silver Plated Copper Center Conductor - Non Magnetic
M17/129-RG401	HC40001-1	.250"	Silver Plated Copper Center Conductor - Non Magnetic
M17/129-00001	HC40001-3	.250"	Tin Plated, Silver Plated Copper Center Conductor - Non Magnetic

### ALUMINUM 50 Ohm

MIL-C-17 #	SRC Haverhill Cable	Outer Conductor Dimension	Description
N/A	HC13000-1	.047"	Silver Plated Copper Clad Steel Center Conductor
N/A	HC13000-3	.047"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/133-00012	HC60000-1	.047"	Silver Plated Copper Clad Steel Center Conductor
M17/133-00013	HC60000-3	.047"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
M17/130-00008	HC80000-1	.047"	Silver Plated Copper Clad Steel Center Conductor
M17/130-00009	HC80000-3	.047"	Tin Plated, Silver Plated Copper Clad Steel Center Conductor
N/A	HC12001-3	.047"	Silver Plated Copper Center Conductor - Non Magnetic

# Winchester SMP & SMPM RF Interconnect Solutions

## Contact Us



Cable Assembly Inquiries:  
**SRC HAVERHILL**

Hermetic Inquiries:  
**SRI HERMETICS**

Connector Inquiries:  
**WINCHESTER ELECTRONICS**



### Santa Rosa, California

- Quick-turn Cable Assembly
- Semi-Rigid Fabrication
- ISO 9001:2008
- 8,500 Sq. Ft.

**707.573.1900 Phone**

### Melbourne, Florida

- Hermetic Connectors
- Hermetic Chassis
- AS 9100, ISO 9001:2008
- 25,000 Sq. Ft.

**321.254.4067 Phone**

### Middlebury, Connecticut

- Design Center, Prototyping
- Light Manufacturing, ITAR Assembly
- AS 9100, ISO 9001:2008
- 20,000 Sq. Ft.

**203.741.5400 Phone**



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6.04.5080810 Fax



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## Brands

