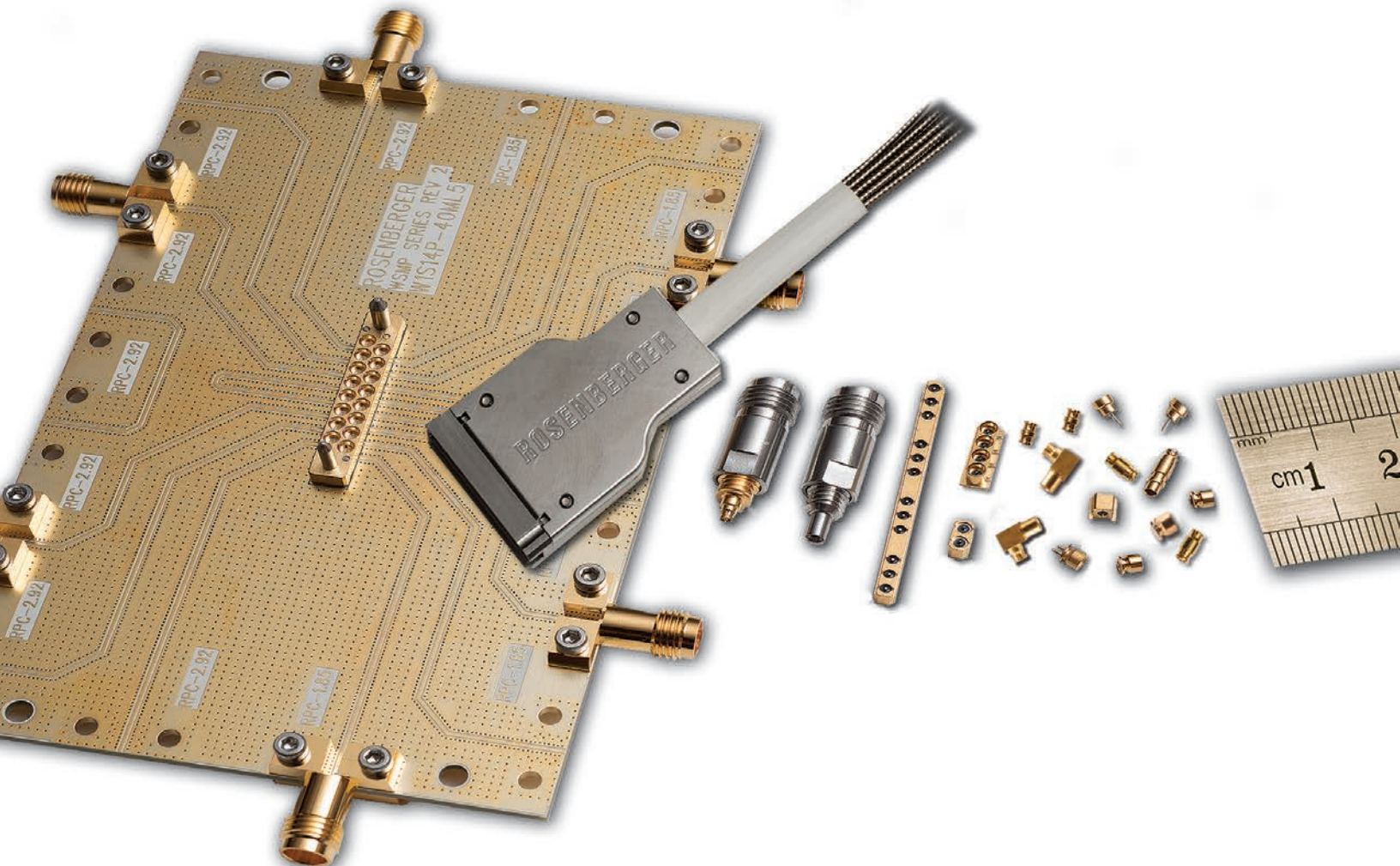


For High Density Applications to 100 GHz

WSMP[®] Coaxial RF Connectors and RF Coaxial Cable Assemblies

ROSENBERGER NORTH AMERICA



WSMP[®] Coaxial RF Connectors and RF Coaxial Cable Assemblies

Provides:

- Signal Integrity to 100 GHz
- Center to Center Spacing 0.085" [2.15 mm]
- Board to Board Height of 0.198" [5.03mm] (0.120" [3.05mm] possible)
- 45% Smaller than SMP; 35% Smaller than Mini SMP (SMPM)
- Custom Footprints for Optimized RF Performance on Your PC Board
- Custom RF Cable Assemblies for Your Application

Company Profile

Rosenberger is one of the worldwide leading suppliers of controlled impedance and optical connectivity solutions, system components for mobile communications networks, data centers and test and measurement as well as high voltage contact systems.

The Rosenberger group operates manufacturing and assembly locations in over 10 countries as well as a global sales network.



Rosenberger North America

Rosenberger Akron is a center of excellence for standard and custom RF cable assemblies and connectors. Our advanced technology, reputation for innovation and commitment to our customers has enabled our rapid-turn production as well as our ability to meet and exceed the demands of the North American marketplace.

Rosenberger North America is ISO 9001 and AS9100 certified.

Quality & Environment

Rosenberger's quality philosophy is not just to optimize components and products, but to continuously improve and optimize all processes to ensure customer satisfaction. From product development, planning, procurement, production, sales, logistics and services to environmental policy. In summary, to offer maximum benefits to our customers all over the world. Our quality responsibility includes being proactive in protecting our environment and natural resources. We endeavour to avoid any environmental pollution, even beyond the requirements of legal regulations whenever possible.



Connectors

Specifications

Interface According to Rosenberger WSMP® Interface standards		Mechanical data Engagement force (typical) Full Detent (FD) 11 N 2.47 Lbs. Smooth Bore (SB) 5.3 N 1.19 Lbs. Disengagement force (typical) Full Detent (FD) 20 N 4.5 Lbs. Smooth Bore (SB) 4.45 N 1.0 Lbs. Axial Misalignment .000-.005 inches [0.00-0.13 mm] Radial Misalignment ±.010 inches [±0.25mm]	
Material and plating Connector parts Material Plating Center contact Kovar® or CuBe Gold Outer contact Kovar® or CuBe Gold Dielectric PTFE, Polyimide, or Corning 7070™ Glass*		Environmental data Temperature range -55° C to +165° C Thermal shock MIL-STD-202, Meth. 107, Cond. B Corrosion MIL-STD-202, Meth. 101 Vibration MIL-STD-202, Meth. 204, Cond. D Shock MIL-STD-202, Meth. 213, Cond. I Moisture resistance MIL-STD-202, Meth. 106, except Step 7B Max. soldering temperature (optional) IEC 61760-1, +260°C for 10 sec. RoHS Compliant Hermetically-sealed to 1 x 10 ⁻⁸ cc/sec On Request	
Electrical data Impedance 50 Ω Frequency DC to 100 GHz Return loss (typical) ≥ 26 dB, DC to 26.5 GHz ≥ 19 dB, 26.5 to 65 GHz Insertion loss ≤ 0.12 x √f(GHz) dB Insulation resistance ≥ 3.5 x 10 ⁹ MΩ Outer contact resistance ≤ 2.0 mΩ Center contact resistance ≤ 6.0 mΩ Test voltage (at sea level) 250 Vrms RF High Potential (at sea level) 150 V rms @ 5 MHz RF-leakage (optional) ≥ -80 dB (typical mated pair)		Tooling WSMP Cable Connector Prybar W1W001-000 WSMP Right Angle Prybar Extraction Tool W1W005-000 WSMP Bullet Insertion/ Extraction Tool W1W002-000	
Mechanical data Mating cycles Full Detent (FD) ≥ 100 Smooth Bore (SB) ≥ 500			

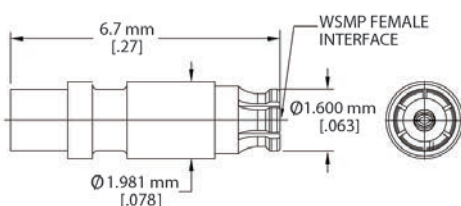
Cable Connectors

Description

WSMP Female Straight for .047 Cable

Part Number

W1K101-270D3

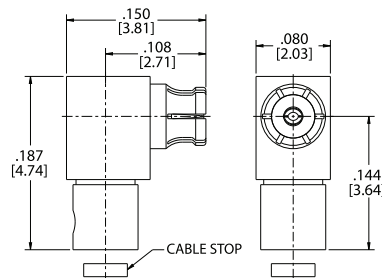


Description

WSMP Female Right Angle for .047 Cable

Part Number

W1K201-270D3

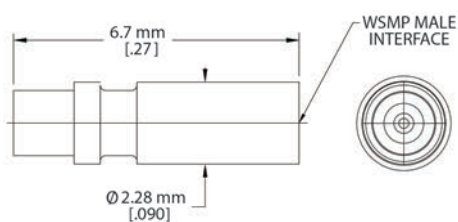


Description

WSMP Male Straight for .047 Cable

Part Number

FD: W1S101-270D3
SB: W1S141-270D3

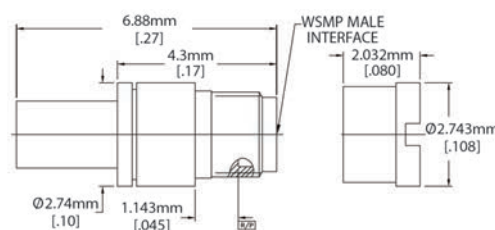


Description

WSMP Male Straight Bulkhead for .047 Cable

Part Number

FD: W1S501-270D3
SB: W1S541-270D3



Connectors

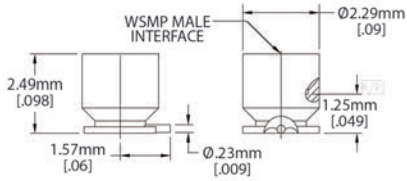
PCB Connectors

Description

WSMP Male PCB, Straight, SMT, J-Lead

Part Number

FD: W1S103-40ML5
SB: W1S143-40ML5

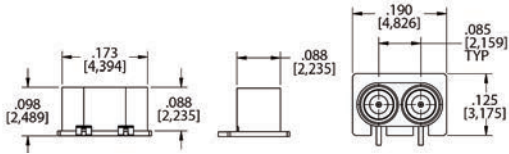


Description

WSMP Male PCB, Straight, SMT, J-Lead, Multiport Arrays

Part Number

FD: 2 Port: W1S12A-40ML5
FD: 4 Port: W1S12B-40ML5
SB: 2 Port: W1S15A-40ML5
SB: 4 Port: W1S15B-40ML5

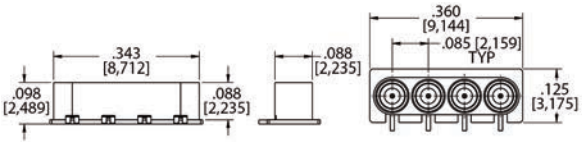
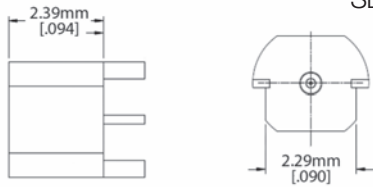


Description

WSMP Male PCB Edge Mount

Part Number

FD: W1S204-40ML5
SB: W1S244-40ML5



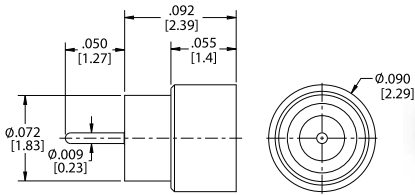
Hermetic

Description

WSMP Straight, PCB plug, solder-in hermetic

Part Number

FD: W1S101-5H0L5
SB: W1S141-40ML5



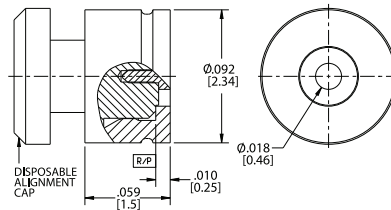
Shroud/Pin

Description

WSMP Straight, PCB plug, pin/shroud kit

Part Number

FD: W1S104-40ML5
SB: W1S144-40ML5



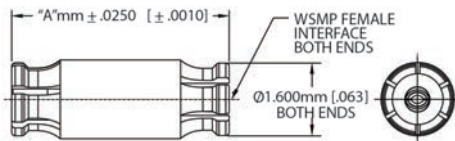
Adapters

Description

WSMP Female Blindmate Interconnect (Bullet)

Part Number

FD: W1K10A-K00D3
FD: W1K10J-K00D3
FD: W1K10C-K00D3
FD: W1K10F-K00D3
FD: W1K10G-K00D3
FD: W1K10H-K00D3
SB: W1K10M-K00D3
SB: W1K10N-K00D3
SB: W1K10P-K00D3



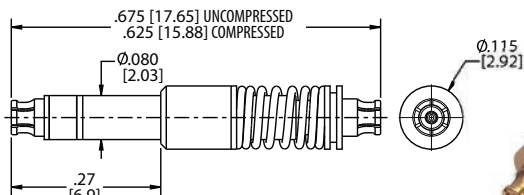
Compressible Adapters

Description

Compressible Bullet, 0.5"

Part Number

W1KF1W1-K03D3



Part Number	A (mm)	A (in)	Part Number	A (mm)	A (in)
W1K10A-K00D3	2.49	0.098	W1K10J-K00D3	7.62	0.300
W1K10C-K00D3	3.18	0.125	W1K10M-K00D3	10.16	0.400
W1K10F-K00D3	3.81	0.150	W1K10N-K00D3	12.70	0.500
W1K10G-K00D3	5.08	0.200	W1K10P-K00D3	15.24	0.600
W1K10H-K00D3	6.35	0.250			

Additional lengths available on request

Connectors

Between Series Test Adapters

Description

WSMP Male Full Detent to
RPC-2.92 Female Adapter
RPC-1.85 Female Adapter
RPC-1.00 Male Adapter
RPC-1.00 Female Adapter

Part Number

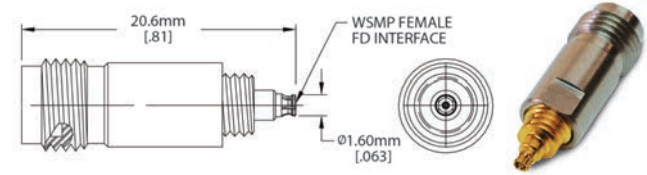
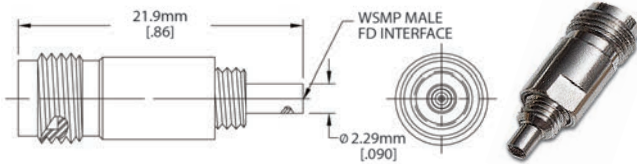
W1S102-K00S3 to 40 GHz
W1S108-K00S3 to 67 GHz
W1S101-S00D3 to 110 GHz
W1S101-K00D3 to 110 GHz

Description

WSMP Female to
RPC-2.92 Female Adapter
RPC-1.85 Female Adapter
RPC-1.00 Female Adapter

Part Number

W1K102-K00D3 to 40 GHz
W1K108-K00D3 to 67 GHz
W1K101-K00D3 to 110 GHz

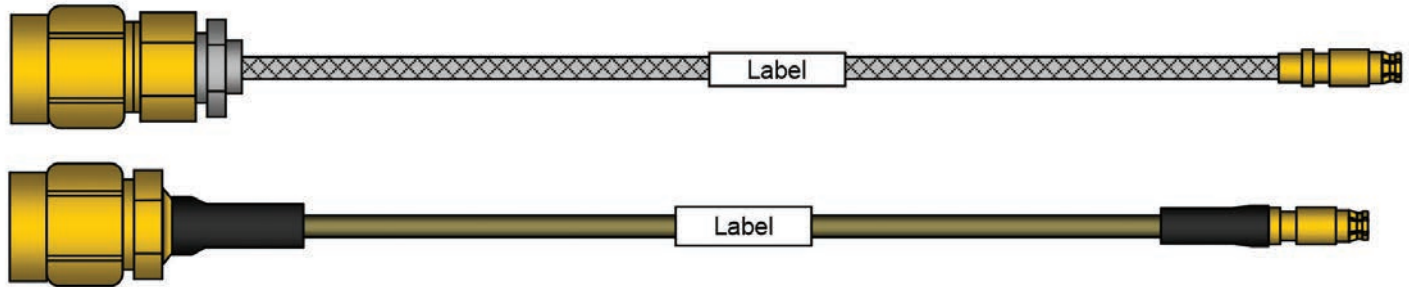


Cable Assemblies

WSMP Cable Assemblies

Description

WSMP on .047 Flexible, Formable, or Semi-Rigid Cable to SMA, RPC-2.92, RPC-2.40, and RPC-1.85



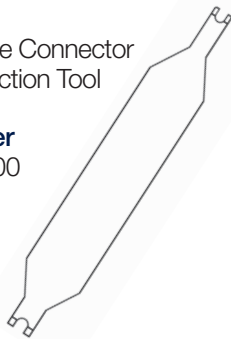
Tools. Custom for your needs

Description

WSMP Cable Connector
Prybar Extraction Tool

Part Number

W1W001-000



Description

WSMP Right Angle
Prybar Extraction Tool

Part Number

W1W005-000



Description

WSMP Bullet Insertion/
Extraction Tool

Part Number

W1W002-000



WSMP 2x8

Description

Straight PCB plug

Part Number

W1S14P-40ML5



Cable Assemblies

Description

2x8 to RPC-2.92 male, 12"
2x8 to RPC-1.85 male, 12"
2x8 to 2x8, 12"

Part Number

H70W-W16-Km-00305
H70W-W16-Vm-00305
H70W-W16-W16-00305

