

2000 Series SMP Connectors

50 Ohm SMP Interconnects



Bomar products, like 2000 Series SMP Connectors, are now sold under the Win™ brand from Winchester Interconnect™

Product Description

The 2000 Series 50 Ohm SMP features a snap-in, blind-mate, vibration-resistant interface in accordance with MIL-STD 348. The series can be designed into a wide range of applications, which include, Telecommunications, Test and Measurement, Security, and Medical.

The SMP Series connectors are blind-mating, quick-connect/quick-disconnect connectors that are easy to mate and un-mate in small spaces. They are designed to accommodate a large variety of flexible and semi-rigid cables.

The Plug Connectors feature a crimp/solder for quick assembly or a solder/solder termination for improved electrical performance.

A full line of printed circuit board receptacles and bulkhead receptacles are available.



Winchester offers a wide variety of surface mount printed circuit board connectors, either edge mount or conventional for stacking.



Printed circuit board connectors are available in right-angle or straight thru-hole designs for standard 0.062 PCBs.



SMP connectors are available in either right-angle or straight for flexible and semi-rigid cables.

 **Winchester**
Interconnect.

We Energize Innovation.

Specifications

Electrical**Impedance**

50 Ohms

Frequency Range

0 – 26 GHz

Voltage

335 VRMS at sea level

Dielectric**Withstanding****Voltage**

1500 VRMS at sea level

VSWR

MIL-PRF-39012

Para 3.14, 1.3 Max

Contact Resistance

Center Contact:

≤ 3 Milliohms

Insulation Resistance

5000 Meg Ohms Min

Mechanical**Durability**

Full Detent 100 Cycles

Limited Detent 500 Cycles

Smooth Bore 1000 Cycles

Mating**Characteristics**

Full Detent 15 lbs. Max

Limited Detent 10 lbs. Max

Smooth Bore 2 lbs. Max

Misalignment

Radial +/-0.010 in.

Axial 0.000/0.010 in.

Engagement Force

15 lbs. Max

10 lbs. Max

2 lbs. Max

Retention

5 lbs. Min

2 lbs. Min

0.5 lbs. Min

Material**Body**

Brass/Black Nickel

Plated

Male Contact

Brass/Gold Plated

Female Contact

Phosphor Bronze/

BECU Gold

Insulator

PTFE

Crimp Ferrule

Copper or Brass/

Gold Plated

Environmental**Temperature Rating**

-65°C to +165°C

Vibration

MIL-STD-202

Method 204, Cond D

Shock

MIL-STD-202,

Method 107, Cond B

Part Numbers

| Part Number | Description |
|----------------|---|
| 2021A504-178 | SMP 50 OHM Right Angle for RG178 and RG196 |
| 2021B504-316 | SMP 50 OHM Right Angle for RG174 and RG316 |
| 2021C504-316RD | SMP 50 OHM Right Angle for RD316 Double Shield |
| 2021D504-405 | SMP 50 OHM Right Angle for RG405 / .086 |
| 2021AE504-047 | SMP 50 OHM Right Angle for RG405 / .047 |
| 2020A504-178 | SMP Straight Plug for RG178 / RG196 |
| 2020B504-316 | SMP Straight Plug for RG174 / RG316 |
| 2020C504-316D | SMP Straight Plug for RD316 Double Shield |
| 2022D504-405 | Direct Solder SMP Straight Plug for .085 cable |
| 2020A504-047 | Direct Solder Straight Plug for .047 cable |
| 2022B504-316 | Direct Solder SMP Straight Plug for RG174 / RG316 |
| 2022C504-316D | Direct Solder SMP Straight Plug for RD316 Double Shield |
| 2020A504-085 | Direct Solder SMP Jack for .085 cable |
| 2062EL10104 | SMP 50 OHM Edge Launch Printed Circuit Board for .062 |
| 2062A510222 | SMP Right Angle Mount Smooth Bore |
| 2062AL10223 | SMP Printed Circuit Board Limited Detent |
| 2062SM10223 | SMP SMT Plug |
| 2032A504 | SMP .254 Bullet |



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