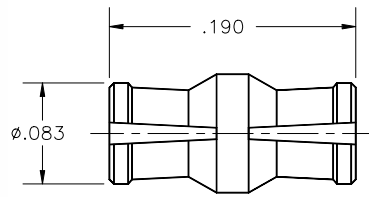


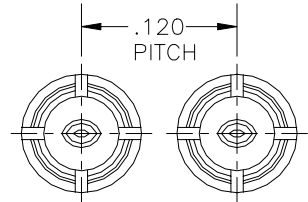


**MICRO-MODE
PRODUCTS INC.**

The Reliable Connection to the Future



MSSS-6110



Limited applications:
.100 pitch can be achieved

MSSS Data Sheet

Materials and Finishes

Center Contacts and Bodies:

Beryllium copper per ASTM B196 and/or B197,
Gold plate per MIL-G-45204, Type I, Grade C, Class 1
over nickel plate

Dielectrics:

PTFE per ASTM D1710, Type I, Grade 1, Class A

Standard Shrouds:

Stainless steel per ASTM A582,
Passivated per AMS-QQ-P-35

Hermetic Housings and Shrouds:

Kovar per ASTM F15 sealed with Corning 7070 glass

Electrical Characteristics

Impedance:

50 ohms nominal

Frequency Range:

DC to 75 GHz

Operating Temperature:

-65°C to +165°C

Corona Level:

Contact Micro-Mode for information

Dielectric Withstanding Voltage:

500 VRMS @ sea level
125 VRMS @ 180,000 ft.

Insulation Resistance:

5,000 megohms minimum

RF High Potential:

Contact Micro-Mode for information

Contact Resistance:

Center Conductor 6.0 milliohms maximum
Outer Conductor 2.0 milliohms maximum

Insertion Loss:

$.001 + .012 * \sqrt{f(\text{GHz})}$ dB maximum

RF Leakage:

-70 dB maximum to 20 GHz

VSWR: reference plane to reference plane (fully mated)

DC to 20 GHz 1.10:1 maximum (1.03:1 typical)
20 to 30 GHz 1.15:1 maximum (1.05:1 typical)
30 to 40 GHz 1.25:1 maximum (1.07:1 typical)
40 to 50 GHz 1.35:1 maximum (1.10:1 typical)

Power Rating:

Average power 30 Watts (sea level)

Mechanical Characteristics

Durability:

100 cycles minimum into a Full Detent shroud
250 cycles minimum into a Limited Detent shroud
500 cycles minimum into a Smooth Bore shroud

Force to Engage:

MSSS Full Detent 4.0 lbs. maximum
MSSS Limited Detent 3.0 lbs. maximum
MSSS Smooth Bore 1.6 lbs. maximum

Force to Disengage:

MSSS Full Detent 1.8 lbs. minimum
MSSS Limited Detent 0.5 lbs. minimum
MSSS Smooth Bore 0.25 lbs. minimum

Radial Misalignment (pre-engage):

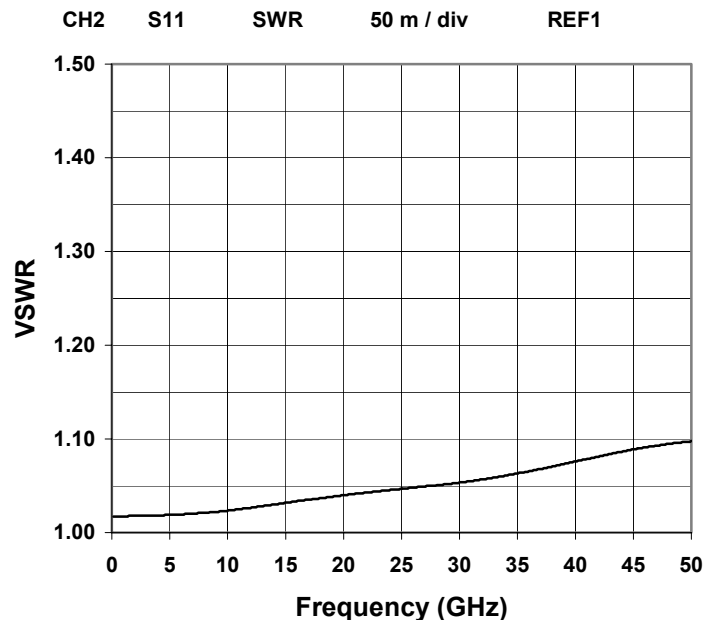
.017" centerline to centerline (with catcher's mitt interface)

Axial Misalignment:

0 to .010"

NOTE:

MSSS is a Space Qualified connector interface.
Electrical characteristics are for Micro-Mode
female-to-female "bullet" part number MSSS-6110.
Performance on other configurations may vary.
Contact Micro-Mode for additional information.



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