

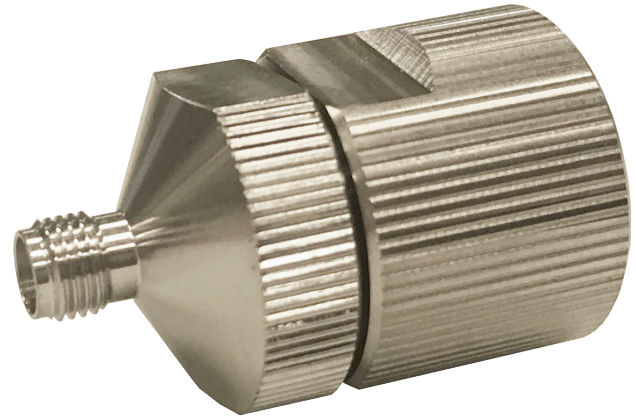
# PNMDF3.5F Adapter

## Materials and Plating

Connector Parts	Material	Plating
Center contact	CuBe	Gold, min. 1.27 $\mu$ m, over chemical nickel
Outer contact	Stainless steel	Passivated
Coupling nut	Stainless steel	Passivated
Dielectric	PEEK	

## Interface

According to	IEC 60169-23
Mechanically compatible with	2.92mm and SMA



## Electrical Data

Impedance	50 $\Omega$
Frequency	DC to 26.5 GHz
Return loss	$\geq 26$ dB (DC - 26.5 GHz)
Insertion Loss	$\leq 0.04 \times \sqrt{f}$ (GHz) dB
Insulation resistance	$\geq 5$ G $\Omega$
Center contact resistance	$\leq 3.0$ G $\Omega$
Outer contact resistance	$\leq 2.0$ G $\Omega$
Test voltage	1000 V rms
Working voltage	335 V rms
RF-leakage	$\geq 100$ dB up to 1 GHz

## Mechanical Data

Mating cycles	$\geq 500$
Center contact captivation	$\geq 27$ N
Coupling test torque	1.70 Nm
Recommended torque	0.08 Nm to 1.10 Nm

## Environmental Data

Temperature range	-40°C to 85°C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Moisture resistance	MIL-STD-202, Method 106
2002/95/EC (RoHS)	Compliant

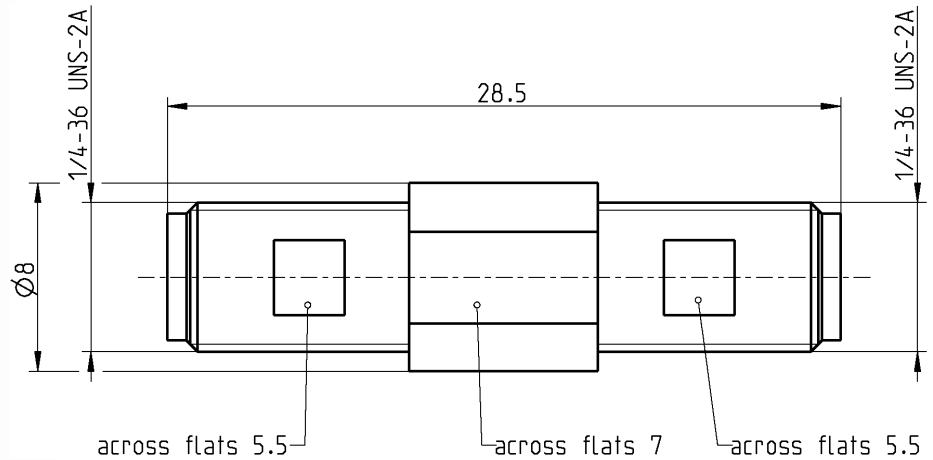
## Packing

Standard	1 piece in box
Weight	37.9 g / piece

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.



# BA3.5FF Adapter



All dimensions are in mm; tolerances according to ISO 2768 m-H

## Materials and Plating

Connector Parts	Material	Plating
Center contact	Beryllium copper	Gold, min. 1.27 $\mu\text{m}$ , over chemical nickel
Outer contact	Stainless steel	Passivated
Dielectric	PS	

## Mechanical Data

Mating cycles	$\geq 500$
Center contact captivation	$\geq 27$ N
Coupling test torque	1.70 Nm
Recommended torque	0.08 Nm to 1.10 Nm

## Interface

According to	IEC 60169-23
Mechanically compatible with	2.92mm, 3.5mm and SMA

## Environmental Data

Temperature range	-40°C to 85°C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Moisture resistance	MIL-STD-202, Method 106
2002/95/EC (RoHS)	Compliant

## Electrical Data

Impedance	50 $\Omega$
Frequency	DC to 26.5 GHz
Return loss	$\geq 26$ dB (DC - 26.5 GHz)
Insertion Loss	$\leq 0.04 \times \sqrt{f}$ (GHz) dB
Insulation resistance	$\geq 5$ G $\Omega$
Center contact resistance	$\leq 3.0$ G $\Omega$
Outer contact resistance	$\leq 2.0$ G $\Omega$
Test voltage	1000 V rms
Working voltage	335 V rms
RF-leakage	$\geq 100$ dB up to 1 GHz

## Packing

Standard	1 piece in box
Weight	6.2 g / piece

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.



# NF50 Adapter

## Materials & Plating

Connector Parts	Material	Plating
Center contact	Beryllium copper	Gold, min. 1.27 $\mu$ m, over chemical nickel
Outer contact	Stainless steel	Passivated
Dielectric	PS	

## Maximum Ratings

Operating temperature	-55°C to 105°C
Storage temperature	-55°C to 105°C
Offset loss	700 M $\Omega$ /s
Electrical delay	83.0 ps
Offset Z0	50 $\Omega$

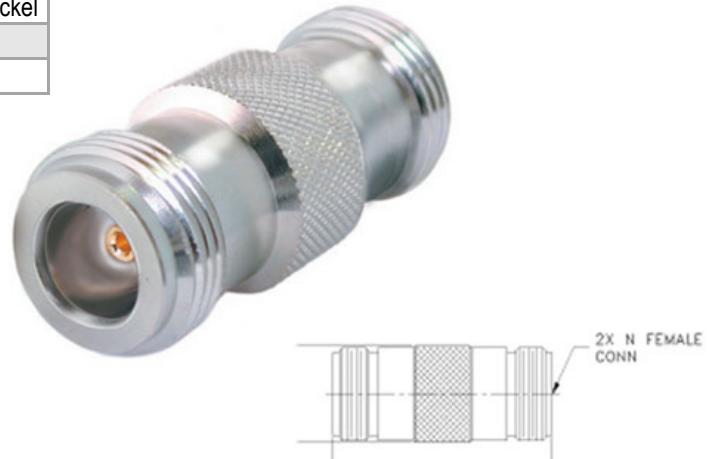
*Permanent damage may occur if any of these limits are exceeded*

## Interface

Frequency	DC - 6 GHz
Insertion loss	0.05 dB, typ. / 0.10 dB, max.
VSWR (:1) Max	
DC - 2 GHz	1.10 GHz
DC - 4 GHz	1.20 GHz
DC - 6 GHz	1.20 GHz

## Electrical Data

Impedance	50 $\Omega$
Frequency	DC to 26.5 GHz
Return loss	$\geq 26$ dB (DC - 26.5 GHz)
Insertion Loss	$\leq 0.04 \times \sqrt{f}$ (GHz) dB
Insulation resistance	$\geq 5$ G $\Omega$
Center contact resistance	$\leq 3.0$ G $\Omega$
Outer contact resistance	$\leq 2.0$ G $\Omega$
Test voltage	1000 V rms
Working voltage	335 V rms
RF-leakage	$\geq 100$ dB up to 1 GHz



## Mechanical Data

Mating cycles	$\geq 500$
Center contact captivation	$\geq 27$ N
Coupling test torque	1.70 Nm
Recommended torque	0.08 Nm to 1.10 Nm

## Packing

Standard	1 piece in box
Weight	6.2 g / piece



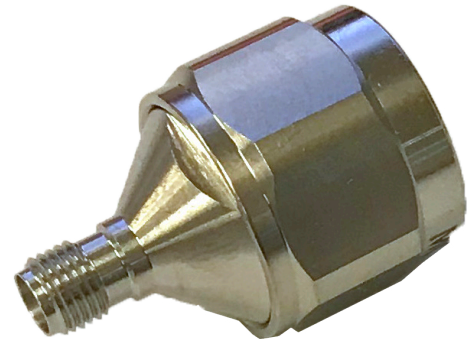
# NM-SF 50 Adapter

## Electrical Specifications

<b>Frequency Range</b>	DC - 18 GHz
<b>Impedance</b>	50 $\Omega$
<b>Insertion Loss</b>	0.1 dB
<b>VSWR</b>	
DC - 8 GHz	1.15 max
DC - 12.4 GHz	1.20 max
DC - 18 GHz	1.30 max

## Mechanical Specifications

<b>Connector</b>	50 $\Omega$ , N-type male and SMA female
<b>Net weight (approx)</b>	33.6 g



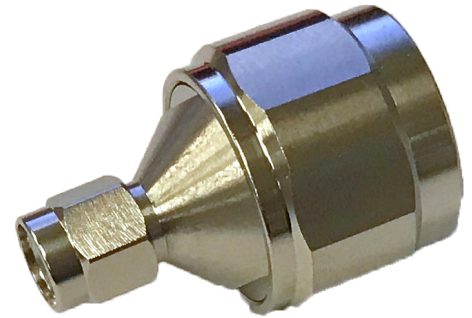
# NM-SM 50 Adapter

## Electrical Specifications

<b>Frequency Range</b>	DC - 18 GHz
<b>Impedance</b>	50 $\Omega$
<b>Insertion Loss</b>	0.15 dB
<b>VSWR</b>	
DC - 8 GHz	1.15 max
DC - 12.4 GHz	1.20 max
DC - 18 GHz	1.30 max

## Mechanical Specifications

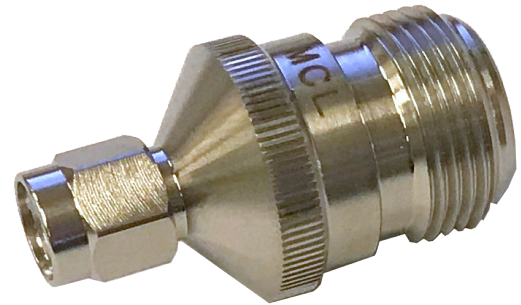
<b>Connector</b>	50 $\Omega$ , N-type male and SMA male
<b>Net weight (approx)</b>	34.6 g



# NF-SM 50 Adapter

## Electrical Specifications

<b>Frequency Range</b>	DC - 18 GHz
<b>Impedance</b>	50 $\Omega$
<b>Insertion Loss</b>	0.1 dB
<b>VSWR</b>	
DC - 8 GHz	1.15 max
DC - 12.4 GHz	1.20 max
DC - 18 GHz	1.25 max



## Mechanical Specifications

<b>Connector</b>	50 $\Omega$ , N-type female and SMA male
<b>Net weight (approx)</b>	27.4 g



# NF-SF 50 Adapter

## Electrical Specifications

<b>Frequency Range</b>	DC - 18 GHz
<b>Impedance</b>	50 $\Omega$
<b>Insertion Loss</b>	0.1 dB
<b>VSWR</b>	
DC - 8 GHz	1.15 max
DC - 12.4 GHz	1.20 max
DC - 18 GHz	1.25 max



## Mechanical Specifications

<b>Connector</b>	50 $\Omega$ , N-type female and SMA female
<b>Net weight (approx)</b>	26.0 g



# 24F-24F Adapter

## Electrical Specifications

<b>Frequency Range</b>	DC - 40 GHz
<b>Impedance</b>	50 $\Omega$
<b>Insertion Loss</b>	
DC - 5 GHz	0.04 dB typ., 0.4 dB max
5 GHz - 10 GHz	0.08 dB typ., 0.4 dB max
10 GHz - 20 GHz	0.11 dB typ., 0.4 dB max
20 GHz - 40 GHz	0.14 dB typ., 0.4 dB max
40 GHz - 50 GHz	0.18 dB typ., 0.4 dB max
<b>VSWR</b>	
DC - 5 GHz	1.01 dB typ., 1.15 dB max
5 GHz - 10 GHz	1.02 dB typ., 1.15 dB max
10 GHz - 20 GHz	1.02 dB typ., 1.15 dB max
20 GHz - 40 GHz	1.02 dB typ., 1.15 dB max
40 GHz - 50 GHz	1.03 dB typ., 1.15 dB max



## Mechanical Specifications

<b>Connector</b>	50 $\Omega$ , 2.4mm female and 2.4mm female
<b>Net weight (approx)</b>	4.0 g

